

**OUR
POWER**



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Cover:
HOCHTIEF acts sustainably because we are convinced that an integrated corporate approach generates added value. We aim to systematically put our goals into action. One example is Quartier 21 in Hamburg. Here, on the site of a former hospital, HOCHTIEF is building a state-of-the-art city quarter that combines urban living with attractive residences catering to several generations.

 **Wherever you see this symbol in the report, you will find links to institutions whose URLs are indicated on the relevant pages.**

HOCHTIEF

140 YEARS

In 1873, the Helfmann brothers founded a small construction business—hoping that it would be a long-term success. In 2013, HOCHTIEF will be celebrating its 140th anniversary. A number of remarkable projects around the globe testify to the company's creativity. Across two centuries, HOCHTIEF has shaped living spaces, built spectacular landmarks, and delivered technically superlative solutions. We moved the temples of Abu Simbel in Egypt, linked Europe and Asia by building a bridge across the Bosphorus, played a role in shaping the Frankfurt skyline, crossed the vast expanses of Australia by road and rail, and helped to construct the Gotthard tunnel in Switzerland.

Today, HOCHTIEF is a publicly traded, world-leading construction group managing operations worldwide from its corporate headquarters in Essen, Germany. HOCHTIEF has been able to weather difficult times precisely because the company has stayed focused on competencies of development, construction, and operation, while at the same time embracing change. HOCHTIEF has always been flexible and adaptive. We find solutions to the challenges of our time and shape the infrastructure for modern societies. In doing so, HOCHTIEF always feels bound by tradition. Even when faced with considerable challenges, there are things that the company is never prepared to sacrifice, above all our amassed expertise. Tradition can be splendidly modern.

If your cell phone supports QR codes, scan the code to view further information on HOCHTIEF's history on our website.



Our Company at a Glance



HOCHTIEF Americas Division

The HOCHTIEF Americas division coordinates the activities of HOCHTIEF's companies in the USA and Canada.

Through our subsidiary Turner, we are the number one general builder in the USA. Turner has long been the leading player in the key market segments for education and healthcare properties. The same goes for sustainable "green" building, where the company ranks among the pioneers and trendsetters in the USA.

The services provided by civil engineering company Flatiron complement our portfolio in North America. The company numbers among the top ten providers in US transportation infrastructure construction and has operations in both the USA and Canada, giving us a presence in North America as a transportation infrastructure provider as well. Through Flatiron, we have also gained a foothold in the growing market for US infrastructure projects on a public-private partnership basis.

The acquisition of E.E. Cruz and Company in 2010 enabled HOCHTIEF to enhance its position in the market for civil engineering infrastructure projects in the New York metropolitan area.

Effective January 1, 2012, our subsidiary Turner purchased a majority stake in Clark Builders, Canada, paving the way for us to benefit even more fully from the positive trend in the Canadian construction market.

*For further information on the HOCHTIEF divisions, please see [www. hochtief.com](http://www.hochtief.com)



HOCHTIEF Aktiengesellschaft Corporate Headquarters (management holding company)*

HOCHTIEF Asia Pacific Division

The HOCHTIEF Asia Pacific division combines the Group's activities in the Australia-Pacific region. HOCHTIEF holds the leading position in the Australian market through our majority stake in the Leighton Group. Leighton focuses mainly on construction, contract mining, operation and maintenance as well as services in the resources segment. Leighton also has a strong presence in infrastructure construction, real estate development, and services.

The Leighton Group's main operational units are Leighton Contractors, Thiess, John Holland, and Leighton Properties in Australia, Leighton Asia in Hong Kong and Southeast Asia, and the Habtoor Leighton Group in the United Arab Emirates. Through these units, Leighton is able to cover the entire construction value chain.

As a leading operator and manager in contract mining, Leighton succeeds in significantly expanding its portfolio of contracts year after year. The Group also ranks among the leading players in the infrastructure sector, more specifically in road construction, for example, as well as in the water and energy sector. Its excellent reputation in its home market of Australia is helping Leighton to gradually establish itself in selected Asian countries as well as the Gulf region.

HOCHTIEF Europe Division

The HOCHTIEF Europe division oversees the Group's business in Europe and selected growth regions around the world. Under the leadership of HOCHTIEF Solutions AG, the HOCHTIEF Europe division designs, develops, builds, operates, and manages infrastructure projects, real estate, and facilities.

Capabilities include building construction together with civil and structural engineering, real estate development, logistics services as well as property and asset management. The division also provides construction-related services in facility and energy management, and develops and undertakes concessions and operation projects on a public-private partnership basis.

HOCHTIEF Solutions focuses on lucrative growth markets where it provides one-stop solutions, such as in transportation and energy infrastructure projects. HOCHTIEF Solutions has already established a leading position in constructing offshore wind farms.

A market and innovation leader in many regions, HOCHTIEF Solutions offers a well-rounded portfolio for infrastructure projects, real estate, and facilities. The combination of outstanding expertise in design, development, construction, and services generates attractive synergies and creates added value for the company and its clients.





Creating Sustainable Value—Embracing Responsibility

HOCHTIEF is one of the leading global construction groups and can look back on a 140-year history. We focus our competencies of development, construction, and operation on infrastructure projects as well as the contract mining business.

Thanks to its global network, HOCHTIEF is on the map in all the world's major markets. We believe in sustainable growth and take on responsibility. Our company's expert staff create value for clients, shareholders, and HOCHTIEF alike. One-of-a-kind ideas and customized solutions set us apart from the competition—and contribute to mastering the challenges of our time.

HOCHTIEF has a tradition of nurturing the relationship between business, the environment, and social responsibility. This is one of the major factors in our long-term success. Our clear commitment to sustainability presents us with very special challenges, as each of our projects is unique. We thus accept great responsibility toward people and the environment—now and in the future.

Foreword

Dear Readers,



HOCHTIEF acts sustainably because we are convinced that a holistic, future-focused approach to business will bring added value to our company.

We believe it is our duty to assume responsibility for everyone we work with.

As a global construction group, HOCHTIEF designs spaces for living. Our activities impact the people who use those spaces and the natural environment that surrounds them. Acting responsibly is our obligation to society, to both present and future generations.

HOCHTIEF made a commitment to the principles of sustainability early on and is considered a construction industry pioneer in this field. We joined the United Nations Global Compact initiative in 2008 and actively support its ten principles in the areas of human rights,

labor laws, environmental protection, and anti-corruption, working to further those principles wherever possible. HOCHTIEF has regularly published environmental reports since 2001 and sustainability reports since 2005.

We intend to continue this longstanding tradition in the future with even higher standards of transparency and quality. Starting in 2013, we will publish a sustainability report each year in order to inform our stakeholders about our activities and the progress we have made in implementing our goals. You will find a description of our goals in our six sustainability focus areas starting on page 53. In this Report, we have once again adhered closely to the Guidelines of the Global Reporting Initiative (GRI).

And, as in the past, parts of this Report have also been appraised by public auditors.

In addition, we succeeded during the reporting period in improving the quality and scope of our sustainability data. The IT-based CRedit reporting system introduced in 2010 represented a major enhancement in this regard. The Group uses this tool to collect quantitative and qualitative indicators on our six focus areas. CRedit already supplies the majority of the information published in this report and represents an important step toward improving internal sustainability monitoring and control.

Key improvements were made to the system during the reporting period, and it was also externally audited in 2012. Our specific target for 2013 is to roll out data collection via CRedit to other companies and business units within the HOCHTIEF Group. We aim to use meaningful performance indicators to render success in the area of sustainability measurable over the long term. To achieve this, Corporate Headquarters will continue to enhance cooperation with the international HOCHTIEF companies and foster even closer exchange.

HOCHTIEF is a global enterprise that, in sustainability as in other areas, has to meet a wide range of param-

ters, expectations, and needs worldwide. We therefore expressly support the initiatives that our subsidiaries and associates, acting independently and on their own account, launch and successfully implement in their countries and regions. These initiatives make up the integrated whole that we refer to as sustainability at HOCHTIEF. In all their diversity, they follow the strategic goals and values laid down Group-wide in the HOCHTIEF vision and guiding principles as well as directives and codes governing specific areas.

It is thus a shared success that the accident rate continued to be at a low level across the HOCHTIEF Group in 2012. Occupational safety and health are a top priority in our Group. The successes we have achieved spur us to maintain our high standards and further step up efforts for the welfare of our workforce.

For only in a working environment where everyone feels safe and secure, both challenged and actively encouraged, can each individual contribute to the full—and that is what makes HOCHTIEF so strong.

We also firmly believe that sustainable action enhances our business success and sustainability-related issues offer huge potential for HOCHTIEF. Examples include the expansion of renewables-based energy infrastructure as well as the field of energy efficiency. Our Group has systematically developed these markets in recent years and we are today well established in them as experts and partners of choice. HOCHTIEF is involved in the construction of North Sea and Baltic Sea wind farms, for example, using its own jack-up vessels to lay foundations and install turbine masts weighing many tons. For our industrial clients, we save energy and thousands of tons of carbon emissions by implementing smart energy solutions and installing efficient technology at their facilities. These are just two instances where HOCHTIEF contributes directly and indirectly to protecting the environment.

We can be proud of what we have accomplished. In my capacity as the new Chairman of the Executive Board,

I intend to work with my colleague on the Board, the managerial staff, and the workforce to continue our Group's successful track record. To this end, we can draw on the vast experience of a company that looks back on a 140-year tradition, as well as the motivation and innovative prowess of every individual.

I am confident that we will successfully implement our sustainability strategy and our shared goals, and will continue to advance HOCHTIEF along our chosen path. As we move forward, we remain in constant dialog with our stakeholders, and are guided by their needs and expectations. We are always pleased to receive your suggestions, comments, and questions on sustainability at HOCHTIEF—please get in touch with us at nachhaltigkeit@hochtief.de.

We have posted a questionnaire for you on our website. Your feedback on our sustainability strategy and activities is invaluable in helping us to go on improving. Thank you in advance for your support.

We will keep HOCHTIEF moving forward, sustainably and successfully. To ensure this, we have set ourselves clear goals—economic, ecological, and social— and will work systematically and with conviction to attain them.



Marcelino Fernández Verdes
Chairman of the Executive Board
of HOCHTIEF Aktiengesellschaft

HOCHTIEF is an
international network.





OUR SPIRIT

Almost 80,000 people work for HOCHTIEF world-wide. Their knowledge, talent, and motivation are the root of our success—and our corporate culture. When you work for HOCHTIEF, you're part of an international team.



Proving the importance of internal values: The Turner-built LEED-Gold certified Helen DeVos Children's Hospital in Grand Rapids, Michigan, USA, is an award-winning "green building." Around the world, HOCHTIEF constructs and certifies properties in accordance with sustainability criteria.



Tested, labeled, and confirmed “green”

Whether it's equipment, apparel, foodstuffs or property, consumers are being inundated with a veritable flood of quality, test, and environmental ratings. Their purpose is to provide information on the content, quality, and sustainability aspects of products, yet they are not always easy to understand—or indeed differentiate. That's where the consultants come in.

In the case of property, such environmental assessments tend to be known as sustainability certificates, and of these there is a handful established around the world. They carry names such as DGNB, LEED, and BREEAM, and behind these abbreviations lie comprehensive rating systems, all of which have a common goal: to provide an indication of how sustainable a building is in terms of its design, construction, and operation. Or: to render a property's internal “green” qualities transparent and measurable.

Sustainability in this case reflects the degree to which economic, ecological, and social aspects have been balanced in the design of the building, its planning, its construction, and its ongoing operations. So it's all about adopting an integrated approach and forming a 360-degree view of the property. Here, the location and the property's integration within its environment are regarded as just important as the materials used in construction, the waste produced during the process, the energy and water consumption that occurs in the in-use phase, or indeed the interior climate created. Some certification systems differ significantly in composition, the weighting they apply to the assessment criteria, and also the appraisal methods used (see also overview on page 13). So who decides which system is to be applied to certify a property? What happens in a certification process? And why does a building need to be certified in the first place?

Part of the package: Wide-ranging experience

HOCHTIEF can answer these questions. As a major construction company, it has gathered experience with all the established building sustainability certification systems. HOCHTIEF ranks among the leading international suppliers in this market segment and has designed, constructed, and accompanied the certification of properties in accordance with sustainability criteria across the globe. In Germany, HOCHTIEF was one of

the founding members of the DGNB—the German Sustainable Building Council—established in 2007, and is thus committed to developing and establishing the Council's seal of approval. HOCHTIEF subsidiary Turner is a founding member of the U.S. Green Building Council and has occupied a leading position in sustainable construction. The company is responsible for more than 570 LEED registered and certified buildings either completed or currently under construction.

However, Turner doesn't just build “green.” Within its ranks, the company also has over 1,380 “LEED Accredited Professionals,” and thus maintains the largest team of experts for the certification system in the American construction industry. In Germany and Europe, HOCHTIEF Solutions pools its know-how and service portfolio in relation to green building and sustainability certification within its “Green Building Management” group. The team boasts four qualified experts covering all aspects of DGNB, LEED, BREEAM, and their various systems.

Advisers and supporters: HOCHTIEF auditors Bernhard Hohmann (left) and Daniel Keppel (right) support their clients throughout the entire certification process. The earlier they are involved, the better.



Green building leader: Michael Deane, Chief Sustainability Officer at US subsidiary Turner, has more than 1,300 “LEED Accredited Professionals” in his team.



These auditors support their clients throughout the entire process—from initial drawings through to certificate award. It’s a varied and not always easy role, played as it is at the interface between the frequently numerous project participants. “A certification process passes through several phases in which the auditor has to perform different duties,” explains HOCHTIEF expert and auditor Daniel Keppel. “At the preparatory stage of a project, the main thing is to join with the client in defining the building’s performance targets and selecting the most suitable certification system. Following a quick check to determine the sustainability potential, we then advise the client with regard to implementing the requisite features of the build and prepare a list of corresponding requirements and resulting specifications.”

The earlier in the planning phase the decision on which certificate is taken, the better, because then the subsequent process can be planned and effectively controlled from start to finish. Later on, the auditor takes care of the registration and data transfer to the certifying body, for example, the DGNB, puts the project team in the picture regarding the requirements involved, provides advice on how to meet the project specifications, documents the process, and audits the documentation.

It’s a demanding job, as Michael Deane, Chief Sustainability Officer at Turner in the USA, can confirm: “Because of our in-depth experience with LEED and the know-how that is thus available to all our team members, managing the certification process has become ‘standard practice’ at Turner.” To ensure a successful process, he says, it is essential that clients be notified in advance of

all the major aspects—the advantages and obligations, likely costs and possible savings—so that they can make an informed decision on the certificate, the associated performance features, and qualities of the building. During construction, one of Turner’s most important roles is to make sure the work is executed according to the project documents and that all appropriate documentation is obtained. “A project may be executed perfectly but if the required documentation is not in place, the certification may not be achieved.”

“Green” sells well

But why do owners have a building certified in the first place? After all, this may involve additional, albeit calculable, expense in terms of time and cost. Surveys and studies show that properties constructed in accordance with sustainability criteria offer several compelling advantages, particularly where the full life cycle of the building has been analyzed. Thanks to their superior ecological standards, they ensure environmental protection and also tend to bring benefits such as high energy efficiency. Utility costs are lower in the case of such buildings than in their traditionally constructed counterparts. Their occupants also benefit from a positive living and working environment.

“These are very attractive arguments for owners and investors. At the same time, they can be favorably deployed in real estate marketing and can increase both renting and selling opportunities,” adds HOCHTIEF’s Daniel Keppel. A glance at the German property market confirms this: Today, there is hardly a real estate development that does not have a sustainability label as part of its marketing mix—particularly in the segment populated by high-quality office and residential properties in the more sought-after conurbation locations where the margins are low and competition is high.

90 percent

of executives surveyed in the USA want to build “green.”

In the USA, too, the trend toward green building is inexorable—as exemplified, for example, by the current Turner study: “2012 Green Building Market Barometer.” Every two years, the American HOCHTIEF subsidiary carries

Certification certificates—an overview

Certification systems evaluate the sustainability of buildings, thus contributing to a holistic assessment of sustainable building practices. For architects and investors, they constitute a tool in planning and implementing sustainability aspects in building projects. Since national and regional differences with respect to legal statutes, building regulations, technical requirements, geography, climate, and culture all have to be taken into account in the assessment process, various certification systems have become established in individual countries. In some cases, these exhibit considerable differences in terms of the selection and weighting of the rating parameters. The following number among the most renowned labels worldwide:

DGNB: This seal of approval was developed by the German Sustainable Building Council (DGNB) in 2008. The main rating criteria are ecological, economic, socio-cultural and functional quality, technical quality, and process and location quality. The focus here is on the ecobalance of the build and its life cycle costs. The certificate is awarded in Bronze, Silver, and Gold.

LEED: The certificate for “Leadership in Energy and Environmental Design” was introduced in the USA by the U.S. Green Building Council in 1998. Its primary issue-related rating criteria are materials and resources, water consumption, energy efficiency, interior air quality, location sustainability, and innovation. It does not carry out an ecobalance assessment or life cycle cost analysis. The LEED scale encompasses the levels Certified, Silver, Gold, and Platinum.

BREEAM: Established in the UK in 1990 as the world’s first certification system for green building, the “Building Research Establishment Environmental Assessment Method” is today the most widely used internationally. The main rating criteria are planning and design, energy use, materials used, water consumption, waste, environmental contamination, health and wellbeing, location quality, and transportation. The life cycle cost analysis carries little weight in the overall assessment. The five-level scale reads Pass, Good, Very Good, Excellent and Outstanding.

Green Star: This certificate was introduced by the Green Building Council of Australia in 2003. The system is based on the British BREEAM and the American LEED versions. The main assessment criteria are management, work climate, water, energy, transportation, building materials, location, emissions, and innovative approach. Up to six stars can be awarded under this scheme. (Please see also page 88 in this connection.)



out an online survey of property owners, real estate developers, and corporate executives to determine their views and plans on the sustainability front. Virtually all of the 715 respondents (90 percent) indicate that green aspects will be taken into account in forthcoming construction projects. In addition to “it’s the right thing to do” (68 percent), the main reasons for green building are the positive impact on brand/reputation (67 percent), and cost savings (66 percent), particularly with respect to energy, operating expense as well as maintenance and repair. Further arguments for investing in a sustainable property include the higher building value (75 percent), improved occupancy rates (74 percent), and the positive effects on the health and wellbeing of the occupants (74 percent).

With regard to the certificates themselves, the following development pattern is interesting to note: Despite a still strong commitment toward green construction, the likelihood of investing in LEED certification is declining (48 percent in 2012 compared to 53 percent in 2010 and 61 percent in 2008). The reasons for opting against LEED cited by the respondents are the costs of the certification process, the time and personnel input, and also difficulties encountered in dealing with the process. Fifty-two percent of those who would not choose LEED prefer their own green building standards, and 41 percent of this group show a preference for a certificate other than the LEED label. Turner Chief Sustainability Officer Michael Deane says: “While LEED is still by far the market leader, these other rating systems are challenging LEED in the marketplace. Future versions of LEED must



“Green Building Market Barometer 2012”: Every two years, Turner surveys market trends relating to green building in the USA.

Certified and satisfied: In October 2012, the DHL DC1 logistics center in Bad Hersfeld received the “BREEAM DE in use” certificate, as one of the first re-developed buildings to be rated by this system in Germany. Daniel Keppel (left) steered the certification process as auditor and is as delighted as the other project participants with the award.



tread a very fine line between pushing the market to be more sustainable and risking loss of market share if they are perceived as being too rigorous.”

Competition promotes diversity and standards

So the rating systems are, to a certain degree, in competition with one another. The fact is that the market for the sustainability certification of real estate remains in a state of flux. New rating systems are coming onto the scene that reflect, for example, the higher statutory requirements and the latest technical developments. As a result, standards are rising and the differences in terms of substance and methodology are declining. However, the regional variations between the systems remain significant.

“Certification is extensively established in the case of new builds. It’s in the certification of existing buildings that the potential lies.”

cant. This is why, in order to be competitive and drive more widespread adoption, the certifiers are developing new variants—for different building types on the one hand and for different countries and regions on the other.

“Certification can be regarded as broadly established in key market segments such as the construction of new office and commercial properties. There is, however, currently potential in other segments—for example, the rating of existing buildings or entire city districts, and the operational side of the building,” explains Daniel Keppel in summarizing the market possibilities. It is a view also shared by Michael Deane with regard to the North American market. He explains that, in the USA, demand is



also increasing with respect to certification for hospitals and school buildings. “Studies show that sustainable buildings enhance the wellbeing of their occupants, for instance, through better air quality, flexible room configurations, and lots of natural light—and therefore also have a positive effect on health outcomes and learning.”

One example of the kind of dynamic trend observed in the certification market is the advent of the “BREEAM DE in use” option. Constituting an adaptation of the traditional British label for existing buildings within the German market, this variant is currently being applied to its first projects in a pilot phase. HOCHTIEF is actively involved in driving this development: Since October 2012, the company has had a seat on the DIFNI (German Institute for Sustainable Real Estate), which bears regional responsibility for the system. “We intend to participate in the work of adapting the BREEAM system to German requirements, optimizing and fine-tuning it, and contributing our wealth of experience in green building and international certification,” assures Bernhard Hohmann, Head of Consult Real Estate Services at HOCHTIEF Solutions and newly appointed council member.

“BREEAM DE in use” is a practical addition to the expertise and service portfolio of HOCHTIEF in the field of sustainability certification—and one from which our international consultancy clients will be able to benefit in the future.”

Stakeholders have their say: Dr. Thomas Beyerle



Dr. Thomas Beyerle,
IVG Immobilien AG,
Managing Director,
Head of CS & Research

Does ecological building also make economic sense?

Definitely—not only in the short and medium term but also in the long term. In the short term because there is currently substantial demand for “green” buildings in conurbations. In the medium term because the value-stabilizing factors of sustainable properties, such as energy efficiency, are becoming increasingly quantifiable and thus controllable. And in long term because an investment cost that may perhaps appear higher initially can be cited as a classic argument for extending the life cycle and thus the value of the build—with this in turn feeding back into current demand. Particularly when analyzing the life cycle costs of a building, the financial advantage of a sustainable approach becomes immediately apparent. Having said that, even the best green property has no economic prospects if the location has been poorly selected. Consequently, the decision as to where and how ecological building and, above all, ecological redevelopment really makes sense must be made on a case-by-case basis. Sometimes, conventional may be better.

What do sustainability certificates say about a property? Are they a value driver, a guide for investment, or a marketing factor?

The certificate per se is merely the culmination of an assessment and documentation process to determine the sustainability credentials—i.e. the economic, ecological, and socio-cultural qualities—of the building. Certificates provide a snapshot assessment per the completion date, and serve as information for consumption by the process participants, occupants, and the public at large. They can also be value drivers. However, such an effect is only short-term because ecoratings merely document the excellent starting position of the build in the ensuing race for takers. Sustainability certificates do not ultimately provide any conclusive information as to how developments are likely to go over the next ten years. What’s more, they are usually not really internationally comparable. These are among the reasons why I regard these certification processes as merely an intermediate step—albeit an important one—within the “green building revolution.” Measurable variables such as the carbon footprint will surely herald the next stage in the evolution of sustainable real estate.

Which label would you say offers the greatest potential in the marketplace?

In relation to Germany, the DGNB certificate is the leader in both quantitative and qualitative respects. Going beyond Germany, however, it quickly becomes apparent that substantially more buildings around the world bear the American LEED and British BREEAM label—not to mention the HQE (Haute Qualité Environnementale) that dominates in many French-speaking countries. An analysis of the market points to one thing in particular: The competition to find the “best” national label has, strictly speaking, already been decided when it comes to properties built primarily with German occupants or purchasers in mind. As soon as international lessees or investors come into the picture, the decision frequently lies between LEED and BREEAM as the more common labels in the global competitive arena. Or, in some cases, dual certification may be pursued, with LEED and DGNB being taken in tandem—although it should be said that such cases are currently few and far between. As the methodologies of the certification systems differ considerably in certain respects, it is unlikely that any specific label will become dominant in the foreseeable future.

How do you see things unfolding in the field of green construction, and are certificates likely to influence the scene?

Every real estate development, whether classic new build or refurbishment, now carries some kind of “green passport,” albeit aligned to different international standards. In other words, the market as it stands today reflects the change in awareness that has come about with respect to the ecological—and thus also the economic—approach both to building construction and facility management. This has become much more than merely a green veneer. Many globally active investors prefer to put their capital in green buildings or sustainability funds. Here, the range available is, of course, still limited, relative to the market as a whole. But there is no doubt that certification helps steer investment capital toward the “right” buildings.



Precision is his middle name: HOCHTIEF Facility Manager Stefan Brucker and his colleagues ensure reliable operation of state-of-the-art facilities for industrial clients, while conserving energy and resources to the greatest extent possible. HOCHTIEF calls this “blueFM.”

It comes down to the **details**

Green buildings contribute substantially to climate protection. But what about existing buildings? A specialist in sustainable energy and facility management, HOCHTIEF Solutions developed blueFM, an end-to-end approach for climate-friendly operation of buildings throughout their entire life cycle.

“Climate protection.” Martin Arneth’s description of his primary responsibility is short and to the point. And he’s not talking about the embattled ozone layer, melting glaciers or rising sea levels. The HOCHTIEF Solutions facility manager is referring to the climate in the research and manufacturing facilities at Siemens Healthcare in Forchheim for which he has been responsible as property manager for the past six years. Here, in Germany’s Franconia region, the company produces the latest generation of x-ray and CT equipment. The technology alone in these specialized medical devices is extremely exacting. But the production environment is also subject to stringent standards. Only when these are met can Siemens ultimately ship this high-tech equipment to customers around the globe.

A key rule is that the temperature in the production cells must always stay between 18 and 28 degrees Celsius with humidity ranging from 40 to 70 percent, 24 hours a day, seven days a week. While the temperature must be hospitable for machines, employees must also be comfortable in the manufacturing facility: the air should not be too warm, or too cool, or too stuffy, and there should be no irritating drafts. In total, 265 pieces of heating, cooling and ventilation equipment are used to create a suitable indoor climate for man and machine alike. And all of them, including the building’s utility and water treatment systems, are the responsibility of Martin Arneth and his team.

The more, the worse

Of course, it is impossible to separate the climate inside Siemens’ production facility from the climate as a whole. Heating, cooling and electricity all affect the environment directly or indirectly due to emissions or resource consumption. So, the maxim here is “The more, the worse.” Worse for the environment, but also for the company’s coffers. Energy is expensive, as is non-compliance with

“Balancing energy conservation with maintaining a comfortable indoor climate for clients is the art and science of our job.”

emission standards or environmental protection regulations. And, keeping in mind that operating costs make up 80 percent of the life cycle cost of a property, it becomes clear that green buildings alone are not the solution. Above all, building and facility operation must be energy efficient: a key goal benefiting both the environment and the company’s bottom line.

blueFM combines these ecological and economic aims into a single approach for an optimal way to attain the common goal of conserving energy. A systematic process, it greatly influences day-to-day operations in facility management.

Siemens produces x-ray and MRI machines at its Forchheim plant. Hundreds of pieces of heating, cooling and ventilation equipment create just the right indoor climate in the research and manufacturing facilities. Here, Stefan Brucker monitors a refrigeration system on the roof.



164,000 t of CO₂:

this is how much HOCHTIEF facility and energy managers helped their clients save in 2012

Stimulus from several directions

Describing blueFM in action is the best way to facilitate understanding of the process. When blueFM's experts arrive at a client's site, they first assess all buildings and facilities for possible improvements and document their ideas in a database. The focus here is on water, heating, ventilation and air conditioning, electricity, office equipment, the building's structure, waste and consumables, and conveying systems. The question is always, "Where can we make adjustments to operate the facility more efficiently and conserve resources?" This collection of data then provides a baseline for day-to-day work in the facility. After all, blueFM is a dynamic process more than anything. At its core are the property managers, who naturally receive the requisite training.

Keeping an eye on the details: Facility Manager Stefan Brucker at work. (Images at right)

Continual dialog: Property Manager Martin Arneth and Ulrich Timm of Siemens Real Estate explain to a Sustainability Report editor how Siemens and HOCHTIEF implement blueFM (picture below).

Inspiration for new ways to save come daily from various sources and are systematically collected in the blueFM process. One factor essential for ensuring smooth functioning of this approach are HOCHTIEF Facility Management's employees: electricians, measuring equipment experts, HVAC specialists. Special training courses raise their awareness of the issues, and they are instructed to point out possible opportunities for conservation and savings. Whether it is an old fan in the ventilation system or inefficient batteries, "I rely on the input I receive from my master tradesmen," Martin Arneth also confirms. "Ultimately, they're the ones dealing with the details every day. They know much more about the condition of the systems than I do."



Another driving force is technical advances and statutory regulations. Martin Arneth gives the following example: According to the Kyoto Protocol, the refrigerant R22 must be replaced with a more environmentally friendly product by no later than 2014. The refrigeration systems at the Forchheim site are around 20 years old, in some cases do not tolerate newer refrigerants and are approaching the end of their useful life. As a result, the HOCHTIEF employees entered the “R22 Exchange” and “Refrigeration System Replacement” projects in the database, kicking off the blueFM process for them.

From first ideas to actual savings

Regardless of the source, once an idea is in the system, the property manager estimates the benefit of a project. Help is provided by a property management primer specially tailored to blueFM. This resource consolidates important energy efficiency facts and tables and enables an initial estimate to be made. After this rough calculation, if the project offers promising potential savings, specially trained energy managers at HOCHTIEF generate more precise calculations of the costs, effects and amortization period of the project. Finally, the engineers' recommendations are forwarded to the client, who decides whether, when and to which extent a project is feasible or not. If a project is green-lighted, it is entered in the business plan according to its priority ranking and carried out.

The refrigeration system project in Forchheim provides an example of how this is done: Gradually, the refrigeration machines at the site were, and are still being, replaced. This was taken as an opportunity to implement systems with a heat recovery feature to conserve heating energy. The new machines are now again being monitored by the facility manager. If additional potential for improvement is discovered during routine maintenance, the systems are again entered as an open project in the blueFM agenda. A continual process.

In other cases, no capital expenditure at all is required. For example, savings can be achieved by adjusting environmental parameters, turning off systems and lights outside of business hours, and striving for compliance with certain rules. “Sometimes we just have to remind people to close the window when the heat is on,” explains Martin Arneth.



blueFM – a vital component of the life cycle

A systematic process, blueFM enhances HOCHTIEF's sustainable construction and professional energy management activities for a climate-friendly building and facility life cycle.

blueFM's objective, and HOCHTIEF Solutions' voluntary obligation, is to protect the climate, use scarce resources responsibly, and act sustainably from an environmental, economic and social viewpoint. We take responsibility, as early as the planning phase: The products we use must be recyclable and manufactured in a climate-friendly manner. Their energy consumption complies with the most recent laws.

In 2011 and 2012, we reduced the CO₂ emissions of our blueFM clients by a total of around 89,000 metric tons per year.

Continual dialog is necessary for blueFM's positive effects to fully unfold. The property manager holds the key here as the interface between the client, the engineers and the technicians. Regular meetings ensure that the overarching goals remain the focus of attention and are not drowned out by the usual bustle of daily activity.



It's essential to keep track: HOCHTIEF's facility management experts manage more than 250 systems at Siemens Healthcare in Forchheim—and continually discover new ways to save energy.

Small change, big impact

What is new since blueFM was introduced? "Well, on the one hand, a lot. On the other hand, not very much at all," says expert Arneth. His sphere of responsibility has remained the same and, of course, resource conservation and energy efficiency had already been on the agenda before. "But the awareness today is com-

pletely different. With blueFM firmly established, recommendations for improvement from this area carry a completely different weight with clients. The program's clear framework makes sustainable facility management an attainable goal." And one producing concrete results: At Siemens Healthcare in Forchheim alone, 11 projects have been implemented since 2010, accounting for annual savings of 345 metric tons of CO₂, the equivalent of the emissions of 27 average households. "But that's just the tip of the iceberg," Arneth comments. The next projects are already in the pipeline.

In the end, it's all the little things that make a big difference.

Stakeholders have their say: Ulrich Timm



Dipl.-Ing. (FH) Ulrich Timm,
Siemens AG
Siemens Real Estate
Asset Management

What is your job, and how do you interface with HOCHTIEF Facility Management?

I'm a property manager at Siemens Real Estate and manage all aspects of several properties, including tenant support, repairs, investments, and space planning with tenants. As a result, I interface with my colleagues at HOCHTIEF quite a bit. Once a month, we meet at the sites and discuss things like blueFM projects.

What were the reasons for Siemens to introduce blueFM?

Siemens is a sustainable company. We have set ourselves climate protection goals and aim to put sustainability into practice, not just talk about it. blueFM offers us the opportunity to gradually optimize our operating environment to improve our carbon footprint.

What sustainable facility management criteria are particularly important to you? What do you keep an eye out for?

We consider it important to use the most environmentally friendly products we can afford and to design processes for maximum energy efficiency. What's nice about blueFM projects is that cost effectiveness and environmental friendliness go hand in hand. That goes a long way toward encouraging acceptance, since Siemens Real Estate is also obligated to its tenants to keep ancillary costs as low as possible.

What has changed since the introduction of blueFM?

Our attitude. We're much more willing to reach into our coffers and invest in environmental protection because the issue is always at the forefront. The regular blueFM meetings on site and maintenance of the database are what helps most in this regard. The effect, and therefore the purpose, of the projects is brought into clear focus by the statistics and comparisons showing savings already achieved. The issue really becomes tangible that way. And the public discussion surrounding Germany's energy transition and global warming just raises awareness even more. The need to be more frugal with resources such as water and energy has been firmly fixed in our consciousness. There is definitely more acceptance, too.

Which measure do you think was most persuasive?

Actually, rather than a single project, it was the entirety of all the little details. Things that you would think initially would have a minimal effect ended up having huge overall potential when looked at more closely. I can see that this is the case when I take a look at the blueFM database, which has grown considerably in the past two years. In the end, there's really a lot there.



Greener pastures: Parts of the Duralie Coal Mine in Australia have been renaturalized with native trees and bushes. The measures are part of a large-scale program HOCHTIEF subsidiary Leighton Contractors is carrying out there in order to protect people and the environment.

Being good neighbors

The platypus, a solitary animal that lives in creeks, rivers, and ponds along Australia's eastern coast. It is shy and rare—and mostly avoids human contact.

Just over two years ago, a juvenile platypus turned up in front of the office building at Duralie Coal Mine near Gloucester, New South Wales. A worker who happened upon the animal quickly notified Beth Viertel, the Leighton Contractor's manager responsible for occupational safety, health, and environmental protection. The platypus was delicately placed into an empty wastepaper basket and released at a watercourse a couple of kilometers away. "It was very cute and a number of people wanted to offer it a home," laughs Beth Viertel, remembering the encounter.

At the Duralie Mine, mine workers, farmers, and the indigenous fauna live peacefully side by side. This happy coexistence only works because the miners do their utmost to be good neighbors—both to their four-legged and, most of all, to their two-legged fellows.

The Duralie mine produces in excess of two million metric tons of coal per annum. A 170-strong workforce is employed by Leighton Contractors, a company belonging to the Leighton Group, HOCHTIEF's Australian subsidiary. The open cut mining operation is owned and operated by Yancoal Australia Ltd.

Challenging neighborhood

Duralie mine is located about 300 kilometers north of Sydney in the midst of gently rolling farmland and a couple of hours from the beautiful Barrington Tops, a strictly protected rainforest nature reserve. The Duralie site poses a number of challenges, frequent rainfall means water often has to be pumped into storage dams on site due to a nil-release obligation for mine-related water. Next, the two main coal seams descend into the rock at about a 45 degree angle, making tricky work of extracting the coal. The facility is traversed by a main power line that supplies the area north of the mine with electricity. Close to the mine are a number of small sites

that are protected because they are sacred to Indigenous Australians. Then there is the fauna. As if the local wildlife wanted to make its presence felt, in the 60 minutes it took to drive around the mine site, our path was crossed by seven kangaroos, a half-meter goanna lizard, and a family each of ducks and swans. Duralie is also home to echidnas—Australia's indigenous spiny anteaters—along with snakes and turtles.

On top of all this, the nearest neighbors live only a kilometer from the mine. The local farmers expect that mine sites contain their noise, dust and lighting at night. There are strict environmental compliance obligations imposed on the mine and regulated by the state and federal governments. Should a mining operation fail to adhere to these strict environmental obligations, then they can be expected to be shut down by the regulators.

More than just a feel-good factor

Yet abiding by the law is not the only reason Leighton Contractors miners care about sustainability. Matthew Joyce, project manager at the mine, himself lives within eyeshot of Duralie. "Many coworkers come from around here and live close by the mine. That's reason enough for us to leave as little impact as possible," he says. As a manager, though, Joyce is not just driven by the feel-good factor. Every outlay on environmental protection and site rehabilitation, he explains, is first and foremost

Source of inspiration and namesake: A platypus that strayed into the Duralie mine and was rescued by workers gave Beth Viertel of Leighton Contractors the idea for the Golden Platypus environmental award.





Nature returns: Beth Viertel is in charge of the broad spectrum of renaturation measures at the mine. The first spoil tips have been planted with native trees and bushes and are today scarcely distinguishable from surrounding land that stayed in its natural state.

a worthwhile investment in respecting the desire of the workforce. “Mining has a certain stigma in Australia as a pretty aggressive industry. Our people are proud that we go about things differently at Leighton, that we care about the environmental impact of what we do and try to keep it as small as we can.”

Col Wheildon, Duralie Mining Superintendent, concurs: “Our workforce here take sustainability personally. It’s more than just part of the job.” One of the many who go the extra mile is Lindsay Ribbons. He operates one of the 16 haul trucks that move coal or overburden from the mine and is a fountain of ideas for making the operation cleaner and more efficient. His latest was a plan to locate the night floodlights in such a location that neighbors would not be in direct sight of the lighting.

“Our workforce here take sustainability personally. It’s more than just part of the job.”

One of his earlier suggestions was to deploy larger and noisier trucks deeper in the mine and smaller and quieter ones higher up near the rim, primarily to minimize nighttime noise levels. He has already twice won the Golden Platypus award—a brainchild of Duralie environmental manager Beth Viertel. “I regularly award it to workers who help make the operation even more sustainable.” The idea came from the platypus that arrived on site, explains Viertel, who also counts animal welfare among her interests outside of work.

One of Ribbons’ workmates won a Golden Platypus for the idea of modifying truck exhausts so they no longer pointed down, because directed at the ground they churned up a lot of dust when the engine fired up and at other times. The exhaust pipes on all mine vehicles now point upward—therefore eliminating potential dust “Someone comes to me with an idea nearly every month,” says Viertel. Environmental protection takes commitment, she believes, and details matter. “The effect of each individual change might seem negligible, but add it all together and the efficient way we operate here makes a huge difference to the environment.” Another example is how workers are trained to drive haul trucks so as to minimize tire wear when the frequent rain events wet the haul roads. This has cut tire wear by at least 15 percent. That not only means less impact, it saves money—especially with tires for the haul trucks costing more than EUR 35,000 a piece.

When it comes to sustainability, there are three key issues for the Duralie management team: protecting surface waters, and avoiding dust and noise. Duralie sits between two rivers—home to the platypus—and is a designated zero water emission site. Rainwater pumped out of the mine is collected in large ponds and reused. In dry periods, it is used to spray the mine to control dust. Another use is to provide water for reforested areas of the site. “Once we are done mining, we spread the overburden back where it came from and plant thousands of native trees and bushes. When we eventually finish altogether, it will look as if there had never been a mine here at all. That is our goal,” explains Beth Viertel. As a result of the rehabilitation work, the earliest spoil tips are scarcely distinguishable from surrounding land that stayed in its natural state.

The weather expert

It is not possible to completely avoid noise altogether in open cut mining, however, as huge machinery is in constant use. The larger of the haul trucks shift 180 metric tons of coal at a time. The excavating machines are as tall as a three-story building. When their engines fire up or their giant buckets dig into the ground, noise is present—even with the noise-suppressed machinery used by the Duralie team.

Other things are easier to rein in—like dust. Bill Arnold has been a Drill and Blast Engineer for 18 years, and at Duralie that experience stands him in good stead. For one thing, to get at the coal in the first place, given how the seams plunge steeply into the ground, Arnold and his team get around this by drilling through them and



blasting from below for minimum coal contamination. To minimize the noise and dust nuisance to neighbors, Arnold's computer models allow him to predict noise and vibration levels. When conditions are not right the blast is delayed. He also keeps a close eye on wind and weather conditions so dust from explosions does not affect neighboring properties. "I have worked in a lot of mines. That means I have something to compare with, and I'm able to say that Leighton Contractors takes environmental protection seriously. Duralie really is a good place to work." And indeed, few who work there want to leave, with workforce turnover marginal.

This gets noticed at headquarters. As Craig Tucker, Group Environment Manager at Leighton Contractors, observes, "When you go to a mine, you pick up the working climate in a matter of minutes. Duralie is orderly—and by that I don't just mean everything appears

Prized brainstormer: Lindsay Ribbons, who drives one of the mine's giant haul trucks, has won the Golden Platypus award not once, but twice for his savvy environmental ideas.

Giants at work: The haul trucks shift up to 180 metric tons of coal at a time.



Australia— the black continent

“Dig up the ground anywhere along the east coast and you’ll find coal.” That is a fairly accurate description of Australia. Each year, the country produces some 470 million metric tons of coal, almost all of it in the two states of New South Wales and Queensland. According to industry statistics, some EUR 21.5 billion have been invested in Australian coal mining, with around EUR 36 billion worth of new projects planned. All of the top buyers of Australian coal, accounting for 88 percent of the total, are in Asia: Japan, China, Korea, India, and Taiwan.

HOCHTIEF subsidiary Leighton, with companies Leighton Contractors, Thiess, and John Holland, is the world’s largest contract miner, with over 30 years in the business. In Australia and Asia, Leighton mainly extracts iron ore and coal, but also metals such as gold, manganese, nickel, and zinc. Leighton’s capabilities include the design, planning, and construction of mines, facilities and their infrastructure; construction management; operation and maintenance; extraction, logistics, technical support, and rehabilitation.

well looked after. You feel the camaraderie in the team. The workforce come from the area and they want to take care of where they live.”

In July 2012, the government in Canberra once again raised the climate change and environmental policy stakes by adopting a tax on carbon emissions. That pushed energy efficiency even further up the agenda, including at Duralie. Floodlights have been fitted with solar panels, programmed timers turn off diesel-powered lighting at daybreak, truck lights have been replaced with LEDs, and all workers are trained in driving to save fuel. Reason enough for Leighton Contractors to award the Duralie team with the company’s internal Excellence Award in the environment category for 2012.

The test comes when visitors leave the mine. The train to Sydney passes within maybe 40 meters of the mine boundary. Yet there is nothing to see, hear, or smell of the operation right alongside. All the better for neighbors like the platypus.



Master blaster and weather expert: Bill Arnold draws on his wealth of experience in keeping dust, noise, and vibrations to a minimum when blasting.

Stakeholders have their say: Craig Tucker



Craig Tucker, Group Environment Manager, Leighton Contractors

“I am especially proud of our Green Champions program. Each year, Leighton Contractors selects a small group of employees to travel to Lord Howe Island. That’s an island of just under 15 square kilometers in size and located 600 kilometers off the east coast of Australia that was declared a UN World Heritage site in 1982. Lord Howe Island has incredible natural beauty and teems with rare flora and fauna.

Leighton employees spend a week on Lord Howe participating in environmental research projects with scientist and rangers and learn about conservation and biodiversity. The essence of the Green Champions project is to immerse our staff in an enriching natural experience to open their eyes to environment values and possible impacts. We then engage with the participants to get recommendations and feedback on how we can better and more practically manage the environment at Leighton Contractors. The experience for all involved is quite profound.”



Well-prepared: The offshore workers trained by HOCHTIEF practice forming a circle in order to increase their visibility in the water in an emergency. Occupational safety exercises such as this one are an extremely important part of the specially developed course.

A strong team of offshore workers

“Brace! Brace! Brace!” comes the call from the loudspeakers. The passengers adopt the crash position in the helicopter fuselage and, with a loud thwack, it hits the water. This penetrates the cabin with increasing speed, washing around the legs of the men, all of whom are tightly strapped in and preparing for the fuselage to capsize.

They press the mouthpieces of the emergency breathing system firmly between their lips as the fuselage begins to sink, pulling everyone below the surface with it. It turns upside down—and so do the passengers. They keep calm, release the emergency window locks, unfasten their belts, and dive out.

Rolls of thunder fill the air and lightning reflects off the life jackets. Legs clasped under one another's shoulders, they have now been strung together in the water for what feels like an eternity. It took them a long time to organize themselves into two groups: a total of nine men, the crew of a transfer helicopter en route to their place of work out in the North Sea. The wind is incessant, lashing their faces with cold spray and sending waves rolling over them. Again and again, they spit out the water that is being forced into their faces. These quite clearly show their efforts and yet convey an almost stoic calm and sense of mutual trust. The kind of trust that can only grow from tough training. Short, sharp orders are heard through the noise: “Just paddle right!”, “Just left”; “Stay together!”

And suddenly—quiet.

The wind has dropped, the waves die down, and all of a sudden it is broad daylight. What was just now a stormy sea becomes a calm pool. The rolls of thunder die down to a quiet murmur from the loudspeakers. An occasional flash of lightning still emanates from the strobes on the wall. The exhausted accident victims swim to the edge of the pool and help one another out of the water.

They are not in a life-threatening situation, but inside a sea survival training center in Bremerhaven, Germany. The nine men are taking part in the training program for offshore workers. In mid-2012, almost 50 specialists were trained here in the construction of offshore wind turbines. These specialists, some with experience at sea and some without, hail from all the professions required in the construction of such turbines, are prepared to work offshore, and meet the necessary health as well as personal requirements.

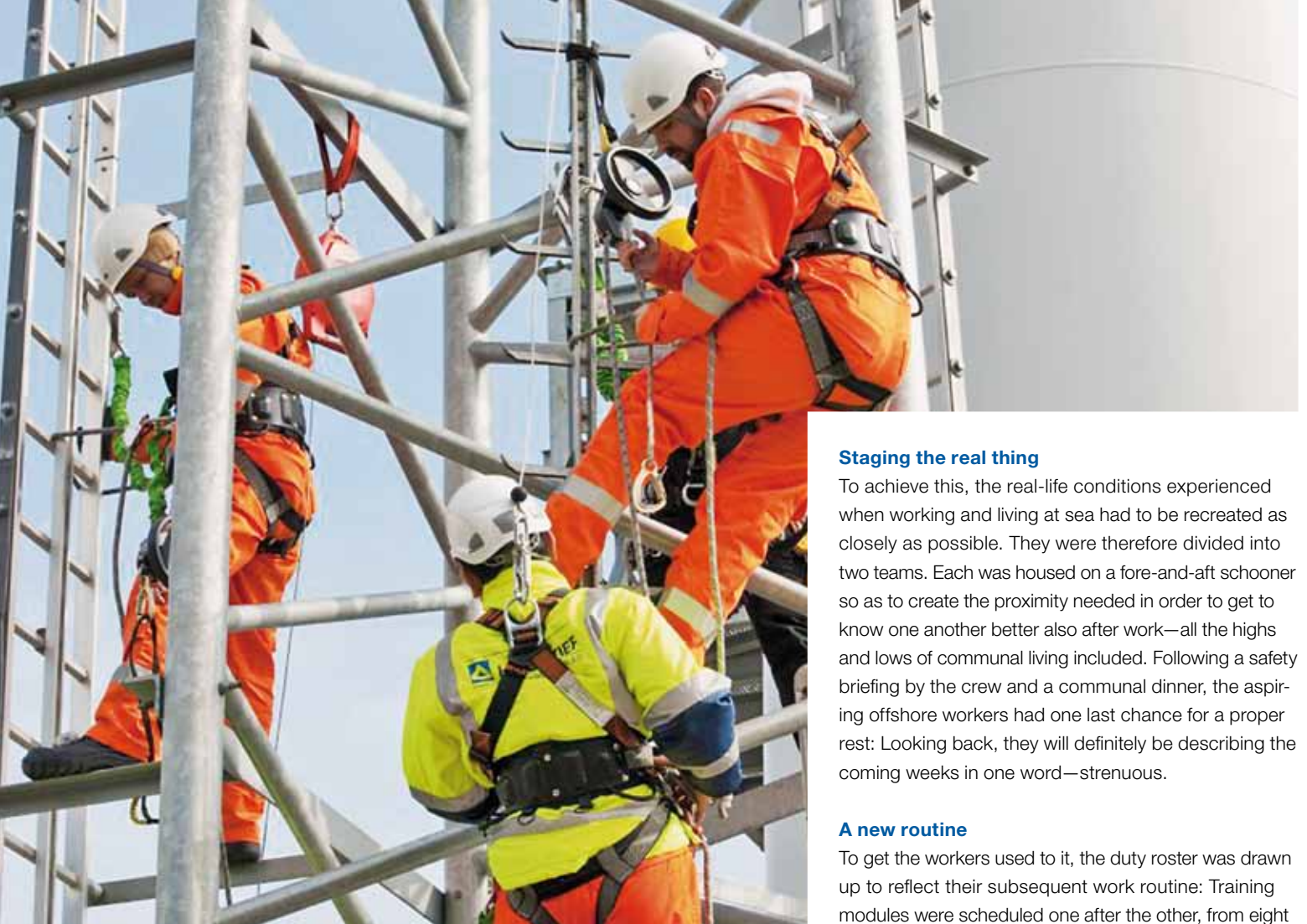
Back to the beginning

Monday, April 2, 2012. They sit in the rooms of the Bremerhaven wind center—25 men, most of them on their first day with HOCHTIEF. They give each other the once-over. They are strangers, but over the next seven weeks and beyond, they will experience a great deal and spend much time together.

For not only during the HOCHTIEF course but also after it, they will be working together closely as a team. They know that they will form the assembly team on the “INNOVATION” jack-up vessel for the construction of the Global Tech I offshore wind farm.

The formula for work offshore: 1/2/12/0/100

Working offshore means one team, two weeks at sea, twelve-hour shifts, almost zero privacy, and total concentration while withstanding the elements. To meet these exacting requirements, HOCHTIEF moved ahead of its time, joining forces with partners to set up the course in 2012. In Bremerhaven, the HOCHTIEF Offshore Crewing staff were prepared for their future work cen-



Working safely at heights: A wind turbine is almost 90 meters high from the surface of the water to the rotor hub. A fire or an accident at this height is always life-threatening. Far removed from the normal rescue services, the offshore workers must know how to help themselves. The “Rescue at heights” training module is therefore compulsory at HOCHTIEF.

trally by taking them through a course that is unique throughout all of Europe. Unique because this kind of coaching did not exist before. It combines extensive specialist training with team building and produces a tight-knit offshore team that is trained on land and at sea.

The general nervousness on this day in April is palpable: Will everything go smoothly? Will the months of planning for the course bring the success they are hoping for? Following a welcome by the wind center team and HOCHTIEF representatives, the budding offshore workers retire to their rooms, or rather to their bunks. The team members not only have to be optimally trained in their field; they also have to be able to get along on an interpersonal level as well as respect and trust one another in any situation.

Staging the real thing

To achieve this, the real-life conditions experienced when working and living at sea had to be recreated as closely as possible. They were therefore divided into two teams. Each was housed on a fore-and-aft schooner so as to create the proximity needed in order to get to know one another better also after work—all the highs and lows of communal living included. Following a safety briefing by the crew and a communal dinner, the aspiring offshore workers had one last chance for a proper rest: Looking back, they will definitely be describing the coming weeks in one word—strenuous.

A new routine

To get the workers used to it, the duty roster was drawn up to reflect their subsequent work routine: Training modules were scheduled one after the other, from eight in the morning until nine at night in some cases. After 14 days’ training, they had three to four days off, before they were back again for another 14 days’ training. The course comprised three phases: “Occupational Health and Safety,” “Rigging and Nautical Science,” and “Installation of Offshore Wind Turbines.”

Safety and environmental protection are a priority at HOCHTIEF. No wonder, then, that the first part of the course dealt with precisely those areas: The offshore workers were trained in both the theory and practice of occupational health and safety and environmental protection management. HOCHTIEF’s specialist staff gave the participants a closer insight into safe, environmentally friendly conduct, the possible causes of accidents, and risk assessment. The offshore workers will be working up to 100 meters above sea level. So besides taking the basic courses in “Rescue at heights” and “Fire fighting”, they had received general safety and emergency training as well.

This was followed by the first baptism of fire for each individual and the team—the “Helicopter Underwater



HOCHTIEF

OFFSHORE CREWING

Offshore workers

Escape Training.” The simulated crash of the transfer helicopter, the appropriate conduct at sea, and the rescue measures were all part of this tough survival course lasting several days. Only those who passed and succeeded in proving their worth on the team were allowed to continue.

“Cast off!”

Although the ships had only been used as accommodation up until this point, the moment had now come for the team to prove itself “at sea.” It was time for four days’ sailing—from Bremerhaven to Helgoland and back—nonstop. Tensions can, of course, arise in such situations. Therefore, the time was used to analyze the individual participants’ team-working experiences with seasoned trainers, develop modes of behavior that foster trust, and nurture the team culture. “When we went on the sailing trip, Michael’s eyes lit up and the sailor in him was awoken,” participant Joris Becker says about his colleague. This brief observation describes the extent to which the new HOCHTIEF employees had already bonded by this point.

A load afloat

The dimensions of an offshore wind turbine are impressive: The 360-metric-ton nacelle measures roughly the same as a duplex house, a rotor blade has the span of a jumbo jet, each of the tower segments is almost 60 meters in length, and sits on a tripod base weighing nearly 900 metric tons. So each installation combines just under 1,500 metric tons of materials in total. What’s even more impressive is that all this fits on the INNOVATION several times over!

The training for HOCHTIEF Offshore Crewing’s first offshore workers was delivered in cooperation with Förderungsgesellschaft Dienstleistungen mbH, Berufliche Bildung Bremerhaven GmbH, and the wind turbine manufacturer Areva Wind. The parties involved pooled their expertise and devised an intensive training program. This covers all key aspects—from engineering through safety and environmental protection to communication. The Bremerhaven wind center offers trainees the best possible coaching environment. They also become acquainted with the installations they will construct at Global Tech I.

“The demands on offshore workers are enormous. Various different skills are required. A high level of training, team skills, and safety are particularly important,” says Gerd Kroll, Managing Director of HOCHTIEF Offshore Crewing GmbH.



First class: In spring 2012, HOCHTIEF and its partners launched the specially developed training course which, over the course of several intense weeks, turned a total of 50 participants into offshore workers.



Impressive dimensions: The deck of the HOCHTIEF jack-up vessel INNOVATION is roughly half the size of a soccer pitch—and a great place for newly trained offshore workers to step into action.

The crew were trained in April and the INNOVATION was put into service in August. How do you practice loading and securing freight on a ship that is not yet in service? You build an imitation deck! Without further ado, the INNOVATION's deck configuration, including the crane, was replicated on a large open space. The manufacturers provided the components, enabling the teams to not only practice handling and attaching the enormous parts at length but also hone their skills and absorb what they had learned.

How do you practice loading a ship? You build an imitation deck!

Ending on a celebratory note

In mid-May 2012, the team then received their course certificates. After one last training session with the manufacturers of the wind turbines and an introduction to the nacelles' sophisticated engineering, the participants can quite rightly claim to have done something special: They are the first—the first extensively-trained offshore workers. They are a team. A team that knows, trusts, and supports one another. They will put to sea feeling safe and secure.

Everything went well. The course ran without a hitch and 50 participants completed it successfully. "This course prepares us for our job very well," says Janis Becker. "We have all gotten to know one another here and are familiar with each individual's strengths and weaknesses. It's like a family."

Since August 2012, they have formed the INNOVATION's permanent construction crew and shared their first goal: to build the Global Tech I wind farm on the high seas—safely and effectively.



Stakeholders have their say: Andreas Nowacki



Andreas Nowacki,
Managing Director of Berufliche
Bildung Bremerhaven GmbH

In November 2011, Berufliche Bildung Bremerhaven GmbH was contacted by Förderungsgesellschaft Dienstleistungen mbH who expressed their wish to jointly organize an offshore training course together for commercial and technical staff at the HOCHTIEF Group. As we have been providing training for the wind power sector since as far back as 2003, we immediately agreed and got down to work.

Working together with HOCHTIEF's project staff and safety officers in a close relationship of trust, we developed a course of a kind not yet introduced anywhere in Europe. We implemented standards no one had heard of before so as to meet the highest possible safety requirements. What was special about it was that both we as the provider and HOCHTIEF were treading new ground and neither of us made any secret of it. Shared expertise was collated and every idea assessed as to whether it could be implemented in practice.

The mutual regard, the determination, and the trust shown in one another were fantastic. The result is a product that made the entire industry sit up and take notice. So, today, it still gives us a feeling of immense satisfaction when we meet former participants or HOCHTIEF staff on the INNOVATION or on other occasions and talk about how successful the training course was. We are always available for further collaboration and would like to thank HOCHTIEF for showing great trust in us.



Expanding horizons—something HOCHTIEF also does in Central Africa. Ten employees worked with non-profit organization Bridges to Prosperity and local residents to build a footbridge in Rwanda. It's an example of HOCHTIEF's long-term social commitment.

Building bridges to the future

There are regions where people can only dream of supermarkets, running water and paved roads. The district of Gatsibo in northern Rwanda, the “Land of a Thousand Hills,” is just such a region. Saturday is market day there and it sees dozens of people travelling along dusty tracks to the nearest village. And so it is today.

The stream of people shows no sign of abating. Men, women, and children balance potatoes, live chickens, or bananas on their heads. Carrying their wares for several kilometers, they first make their way down the hill before crossing the Nyamabare river and then climbing up the hill on the opposite side to the market place in Myange.

On their way, they pass by the HOCHTIEF construction site, where they pause and gaze inquisitively. The new bridge over the river will soon be completed. A young man hangs back and calls to the European workers in good English: “That’s a good project! When will the bridge be finished?” Soon—in just a few days.

Almost one hundred meters long

HOCHTIEF employees, members of Bridges to Prosperity (B2P), and residents from the surrounding villages are building a new bridge here, one hundred kilometers from the capital Kigali. It will be 96 meters long. Right now, they are stretching the steel cables between the towers, which, at just 1.30 meters high, appear rather squat. It’s tiring work, especially in the scorching mid-day heat.

The steady rattle of the chain hoist echoes through the valley, accompanied by the long drawn-out sound of the power drill. Three to four men in the deep and narrow excavation pit tighten the cables around the anchor blocks, which are set in concrete. Others are preparing the cross-beams onto which the two-meter-long wooden planks that make up the bridge flooring will be laid later on. These boards are stacked close by and are being predrilled.

Some of the locals observe this unusual hive of activity. Beneath the cables, the river flows quietly through the green valley. Boys jump exuberantly into the water, some

of them waving at the workers while the women and children wash their clothes on the banks. Today, just like every day at noon, a farmer herds his cattle down to the river to quench their thirst. Now, during the dry season, the water flows smoothly and calmly to the north. But during the rainy seasons, which last from September to December and from February to early June, it is transformed into a raging torrent.

The wooden walkway is flooded

Then the water level rises so high that the small existing wooden walkway is flooded, and, on occasion, even swept away by the current. Many of the 12,000 people in the surrounding area are then cut off from the market, schools, and medical care for weeks at a time.

There is a more reliable crossing some ten kilometers away—but it’s too far for many of the locals. So there’s a good reason for HOCHTIEF and B2P to erect a new structure that will span the river at a height of almost ten meters. It’s high enough to enable people to cross the river safely even during the wet season.

For B2P, it’s the one hundredth project since the non-profit organization was founded around ten years ago—which makes it rather special. Thomas Bang,

Working some ten meters above the ground and well protected: HOCHTIEF employees lay the heavy wooden planks over the cross beams.



who manages the project on behalf of the organization, plans with the utmost care and explains each individual step to the team. As with the majority of B2P structures, this one is also a hanging bridge and is constructed according to a predetermined plan jointly developed by B2P and HOCHTIEF subsidiary Flatiron.

900/day

Some 900 people cross the river every day

It's a hit: Before the new bridge has even been opened officially, the locals try it out for themselves—some slowly and cautiously, others with gusto and enthusiasm. Everyone who lent a hand is proud of "their" structure.

This bridge is also something very special for the HOCHTIEF employees. The fact that they are all working together on "their" project helps them overcome the pain barrier and is turning a group of people who barely knew each other previously into a close-knit team. The four women and six men normally work in different company units and regions from Munich to Moscow. The team includes engineers along with a legal expert and commercial managers. The physical

labor makes an exciting change from their usual office environment—out here, they're learning about the construction business and being introduced face-to-face to a completely different culture.

They work without the assistance of cranes or excavators; there's not even a wheelbarrow to be had. They carry stones, cement, wood, and sand to the building pits, transport the concrete in long human chains, build reinforcement boxes, fit boards and railings on the bridge. And all in just eleven days.

Of the six steel cables measuring over 120 meters in length that are currently being stretched, the lower four will support the wooden planks while the upper cables



will act as handrails. It's now July, the height of the long dry period. The heat is pushing the bridge builders to their limits, not helped by the fact that each cable weighs around 700 kilograms. Finally, the cables are suspended at the correct height and all becomes clear: "Now I can really picture the bridge," says Johannes Keitel, project manager from the HOCHTIEF team, that evening. The other volunteers are also delighted to have completed this important stage.

Cultures come together

Passers-by stop and stare for longer, eagerly awaiting the opening of the bridge. Only a few of the locals speak English or French, which restricts the ability of the bridge builders to engage with them.

An interpreter provided to assist on the construction site is helping the workers slowly get to know each other. Bit by bit, the HOCHTIEF employees are also learning their first few words of the local language, Kinyarwanda, such as "water", "concrete", or "goat". Although armed with a limited vocabulary, the new-found coworkers are still able to understand one another. After all, hand signals can be used to overcome language barriers the world over.

"Mzungo, bye!" shout the children

Here, so close to the Equator, it's already dark by seven o'clock in the evening, so the team members down tools and return exhausted to their accommodation several kilometers away in the nearest large town, Ngarama. As always, the children rush to the roadside, shouting "Mzungo, bye!" to the departing visitors. Out here, they stand out as foreigners and it's yet another unfamiliar experience for them. The fires for preparing the evening meals are already burning outside some of the houses and the smell of smoke fills the car.

It is experiences like these that make the greatest impressions on the European volunteers. Linda Klasen, facility manager from Hamburg, is astonished: "Although people have to make do with very little compared to us, they are still full of the joys of life. They make the best of what they have and greet us every day with a smile." Their good humor is simply infectious.

The HOCHTIEF employees live here for two weeks without home comforts. However, their accommodation still boasts electricity and cold water showers, which is almost luxury compared to what their colleagues from Flatiron must endure. The American HOCHTIEF sub-



A perfect team: Flatiron and B2P

Flatiron, an American subsidiary of HOCHTIEF, has cooperated with Bridges to Prosperity (B2P) since 2009. By the end of 2012, more than 60 employees of Flatiron and of fellow Group companies Turner and E.E. Cruz helped plan and construct seven footbridges in remote areas of South and Central America.

The accumulated know-how of the bridge construction specialists is put to work in every B2P project. This enabled the company to develop a prototype hanging bridge that can be erected in similar form using minimal resources anywhere in the world.

Flatiron is set to erect three bridges per year up to 2017. HOCHTIEF also intends to build on the success of its first project with two further bridge projects in 2013. This unique commitment is expanding into a sponsoring initiative throughout the Group, which may also involve Leighton from Australia.



BRIDGES
TO PROSPERITY



Eleven days' of hard work have been worth it: The new bridge is finished. The HOCHTIEF volunteers have not only seen that a structure measuring almost 100 meters can be erected with limited resources, but have also learned a great deal about foreign cultures and team spirit.

sidiary was the first Group company to cooperate with B2P. In 2012 alone, three teams that included employees from Turner and E.E. Cruz traveled to Nicaragua. Volunteers in El Rodeo were put up in tents close to the construction site, for example, although it didn't dampen their enthusiasm in the slightest.

One of these was Teresa Gunnarsen, business manager for Flatiron in Alberta, Canada: "I worked harder than I'd ever thought I could, met people I never would have otherwise—these two weeks were extraordinary," she says of her experience.

"They make the best of what they have and greet us every day with a smile."

A narrow bridge transforms the lives of many

An awareness of the need to help other people, knowing that this little help makes their lives a lot easier, is

also what inspires the HOCHTIEF employees in Rwanda. Here, they are putting our corporate vision into practice in the truest sense: "HOCHTIEF is building the future.— Along with our partners, we expand horizons, link people and organizations, create new ways to think and act ..."

And so it is in reality: Just five days after the cables are secured, the new bridge sways gently over the Nyamabare. The local residents' quality of life has been made a little better. As hundreds of villagers sing and dance with joy, all the volunteers walk across the bridge for the first time. "This project means less isolation for each and every one of us," stresses Ruboneza Ambroise, mayor of Gatsibo. He is grateful to everyone who worked to deliver a small piece of infrastructure that does so much to overcome barriers.

The HOCHTIEF employees are delighted to have successfully completed their project on time and with such limited resources. They will leave their bridge behind them, but will bring to bear during their day-to-day work their impressions, the experience of strong team spirit, and the motivation gained. However, the bridge will be a permanent fixture; the locals will make sure of that. The past two weeks have shown them how it's done.



Stakeholders have their say: Ken Frantz



Ken Frantz,
founder of the organization
Bridges to Prosperity

“There are more than 580,000 bridges in the USA and even more in Europe. They are the lifeblood of our civilization. Without them, efficient trade would be impossible and people would be unable to access medical care or schools. In the 50 poorest countries of the world, however, more than one billion people live in a society virtually without bridges of any kind. There, rivers are insurmountable obstacles. Of course, these people also lack many other basic services, and there are many other organizations that focus on these needs. B2P, however, focuses entirely on building footbridges.

HOCHTIEF or Flatiron are indispensable in leading and supporting our mission work. As well as providing substantial financial support, they lead in creating new sustainable bridge designs, and send teams to lead bridge construction on these same innovative designs. In doing so, they receive a great deal in return: Team spirit among the workforce is strengthened, as is staff loyalty, and the company's image is improved. Numerous studies have shown that employees today want to do more than simply offer their services for financial reward. They want to be proud of what they do, and feel that they are pursuing a higher purpose. Virtually all volunteers who return from a B2P project have a clearer understanding of the importance of their professional work and purpose in life. With their commitment and their knowledge, the experts from HOCHTIEF and Flatiron are giving those living in extreme poverty the gift of opportunity and a higher quality of life. We are delighted to have them on board as stakeholders and an integral part of our team.”



Proper conduct, both ethically and legally, is of utmost importance for companies and employees alike. An interview with Dr. Thomas Sonnenberg offers a look at compliance at HOCHTIEF and discusses the prospects for the future.

Quo vadis, compliance?

In Dr. Thomas Sonnenberg, HOCHTIEF has acquired a new head of Corporate Governance/Corporate Compliance. What is Dr. Sonnenberg's vision for this area, which has gained massively in momentum over the past 15 years? And what are the first projects on his personal to-do list? The Sustainability Report editorial team spoke with him about these issues.

Dr. Sonnenberg, you have headed Corporate Governance/Corporate Compliance at HOCHTIEF since August of 2012. What aroused your interest in this job?

Both the company and the job itself: HOCHTIEF is a German company rich in tradition that is now broadly positioned internationally. As one of the leading construction groups worldwide, HOCHTIEF has an extensive portfolio of products and services ranging from conventional construction projects all the way to innovative technologies for transforming the supply of energy in Germany. My areas of responsibility are just as varied. I am in charge of managing the Executive Board Secretariat, including the Corporate Legal department, Corporate Compliance, and Corporate Auditing. As well as being able to draw on my previous professional experience, I am also dealing with topics in which I have thus far not been directly involved. For me, this is an ideal mix, and naturally also a challenge.

Which challenges do you see in the area of compliance at HOCHTIEF?

The compliance organization at HOCHTIEF deals with fighting economic crime, especially corruption. HOCHTIEF's international standing alone leads to a number of exciting topics in this regard. It is important that all global companies familiarize themselves with the different anti-corruption laws in the countries in which they operate. Plus, the challenges faced by compliance systems are also growing. In April 2011, the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) published an audit standard on compliance in Germany, which is the first time there has been a systematic representation of the basic elements of compliance management systems in Germany. Our goal at the HOCHTIEF Group is to work even more diligently on a common understanding of the challenges inherent in compliance systems in order to establish comparable standards at

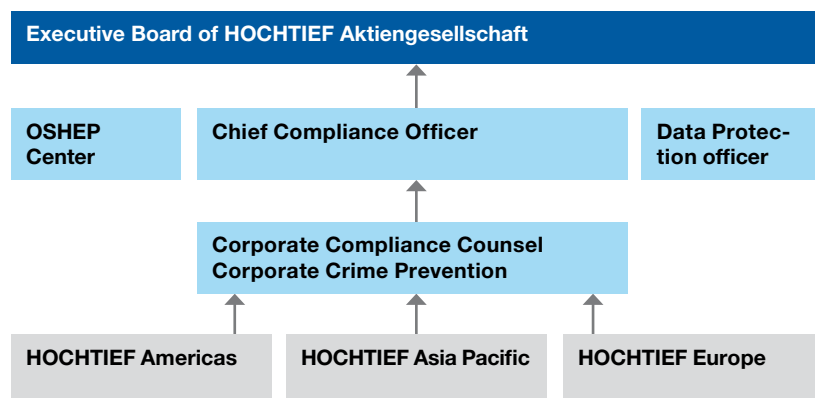
all Group companies. To do so, we must pursue an exchange of information with our foreign companies even more intensely in the future.

In addition, each business segment at HOCHTIEF is, of course, already facing its own special challenges and own risks with respect to compliance. When developing new segments or tapping into regions with different cultures, the main thing for us is to explore them and implement the appropriate measures in response to the situation at hand. Specifically, this means that the project managers—for example, in the case of projects in countries in which HOCHTIEF has not yet gathered any experience—must carefully analyze all risks, together with their contacts in the compliance organization. It is then the task of the persons responsible for the project to communicate the challenges faced by HOCHTIEF to those contacts and request a solution. Possible measures might be, for example, that the project team receive the necessary training or that HOCHTIEF compliance directives be implemented in the project company. However, when clients are public authorities, it may also be necessary to conclude agreements on implementation of the project and to include integrity clauses. Our goal is to extend our standards to all of HOCHTIEF's business operations in a uniform manner.

What is the strategic contribution of compliance to the success of the company?

These days, it is no longer conceivable for an international company not to include topics such as compliance and sustainability in general in its corporate strategy. After all, breaches of compliance represent one of the ten biggest risks for a company.

If you ask about the impact of such a breach, the direct financial consequences are mentioned first and foremost, besides the criminal law consequences for the compa-



ny management and its employees. These include, for instance, high penalties or damage claims. But, of course, indirect damage should not be discounted, either. For example, this may involve damage to a company's reputation, the financial impact of which can hardly be quantified. For a listed company such as HOCHTIEF, damage to our image could lead to a considerable drop in share prices. In the business world, a bad reputation most definitely makes it more difficult to convince partners to enter into transactions. This also goes without saying in connection with funding for companies or projects. Exclusion from public tenders may be a further consequence of compliance violations. Finally, trust may also be compromised. That, in turn, makes it harder to hire new qualified employees, and can induce long-standing employees to leave the company.

Conversely, this means that a broad-based compliance organization represents an advantage in today's world, given that this topic is now increasingly playing a greater role in competition between companies. The fewer compliance risks a partner suspects of existing in a company, the easier it is for that partner to decide to cooperate in a joint venture.

HOCHTIEF made a commitment to compliance very early on. How has the topic of compliance changed in the corporate world in the meantime, and which aspects do you believe will become more important in the future?

It's quite true that HOCHTIEF already committed itself to the topic of compliance in the last millennium, making us a very early adopter in comparison with other companies. This topic has gained fresh momentum in recent years due to the compliance incidents that occurred in

various major corporations, which were followed very closely and made very prominent by the media.

There has been a general recognition of how important behaving with integrity is for a company's reputation, and which criminal and civil law liability risks companies, management, and employees subject themselves to in cases of non-compliance. Along with general awareness, standards also rose. The important thing is that compliance is more than introducing guidelines on gifts along with a code of conduct. It is much more important to create a corporate culture in which each employee questions his or her own behavior at the right time and asks for advice in case of doubt. I am glad that this fundamental awareness exists among our employees. Nonetheless: The best is the enemy of the good—much has been done, and there's still much to do. Our goal must be to anchor compliance even more deeply at HOCHTIEF. For example, we want to use documented processes to make our compliance work even more transparent and also enable review of its effectiveness.

How do you intend to achieve this? How will you introduce this topic in the company?

HOCHTIEF has a variety of communication paths available for the purpose of reaching out to employees and informing them about directives or current topics related to compliance. Along with the information made available on the intranet, these include regular contributions to in-house publications such as our employee magazine. In addition, some years ago we developed a training concept comprising two components—e-learning and on-site training. We combine these two elements because along with providing information, a key element in communication is, of course, personal dialog, which we foster on a continuing basis through on-site training as well as on other occasions.

It is also very important to me that the compliance system be comprehensible and behave consistently. When employees address questions to us, they should be able to approximate the answers themselves. Firstly, because they know and understand the rules and, secondly, because they realize that the same issues will always be handled in the same way.

HOCHTIEF needs employees who go about their business with their eyes open and have the courage to speak to us and report irregularities. It is important to HOCHTIEF

management as well as to me and my team that those who display such courage be protected. It goes without saying that we treat the issues reported confidentially. If someone is nonetheless concerned about being subject to reprisals due to having made a report, it is possible to report issues anonymously. Apart from protecting the person providing the information, we also want to protect those against whom an accusation has been made.

What measures do you take to enshrine values and rules in the minds of your employees?

It is a matter of great importance to me that the compliance system itself is credible and consistent. Furthermore, the job of the Compliance Officer at our subsidiaries is becoming increasingly important. Corporate Compliance can give substantial support here, but as they say in the sports world, "it's what happens on the field that counts." In this respect, the significance of the Compliance Officer and the eight General Compliance Managers appointed at the segment level as well as the 75 Compliance Managers appointed in the branches in 2011 and 2012 cannot be overestimated. They are "on-site compliance" personified. The new organization at HOCHTIEF Solutions AG represents a milestone in terms of enshrining values and rules in the company. This positioning will allow us to offer our employees training that is even broader and more in-depth in 2013.

What are the next projects that you would like to tackle?

First of all, the Corporate Compliance department will have to strengthen its numbers to be able to fulfill tasks more effectively than before. The toughening of anti-corruption laws I already mentioned is increasing the duty of care required for companies, particularly in the selection of business partners. The most ambitious project in this connection will surely be setting up business partner compliance screening on an IT-supported platform. This project will keep us busy in 2013 in preventive compliance. The IT support is intended to better



Dr. Thomas Sonnenberg

Dr. Thomas Sonnenberg, aged 51, has headed Corporate Governance at HOCHTIEF Aktiengesellschaft in Essen since August 2012. In this capacity, he is responsible for the legal and auditing sections as well as the Executive Board Secretariat. He is also the Group's Chief Compliance Officer.

Dr. Sonnenberg studied law at the University of Cologne, where he went on to earn his doctorate in 1989. After completing his studies, he joined the Sal. Oppenheim bank in Cologne. There he was appointed General Counsel for the group's legal and tax division for Germany in 2002 and for Luxembourg starting in 2007. In addition, Dr. Sonnenberg was a member of the management board committee of Sal. Oppenheim jr. & Cie. S.C.A., Luxembourg, until the end of 2008. In March 2010, he accepted a membership on the loan committee and on one additional management board committee at Sal. Oppenheim. His most recent position was as General Counsel for Ferrostaal AG in Essen from 2010 to 2012.

document and standardize the selection process. This will also increase transparency when we contract with business partners. We believe that an improved review of business partners will be instrumental to our efforts to develop compliance both strategically and organizationally.

HOCHTIEF stands for active
**environmental and climate
protection.**





OUR AREA

HOCHTIEF aims to minimize the impact of its operations on the soil, water, air, and climate. Environmental and climate protection—goals we pursue with the latest technologies, tailor-made concepts, and heartfelt commitment.

The Company

For further information on the HOCHTIEF Group, please see www.hochtief.com and the HOCHTIEF Annual Report 2012.

HOCHTIEF is one of the world's leading construction groups. We have been delivering our core competency of construction for 140 years, focusing on complex infrastructure projects in the transportation, energy, social and urban infrastructure segments, and in the contract mining business. Our portfolio also includes developing and operating real estate and facilities. Thanks to its international subsidiaries and associates, HOCHTIEF is on the map in all major regional markets worldwide.

Sustainable strategy

Our forward-looking strategy is all about achieving a sustained increase in our company's profitability and efficiency and making us more competitive. Our skilled staff create value for clients, shareholders, and HOCHTIEF alike.

HOCHTIEF's strategy comprises the following elements:

- **Focus on the competencies of development, construction, and operation, particularly infrastructure projects:**

HOCHTIEF offers tailored solutions and, through its competencies, makes a key contribution to meeting the challenges faced by modern societies. On complex infrastructure projects in particular, HOCHTIEF is a sought-after partner and source of expertise. The Group carries out projects in the transportation, energy, social and urban infrastructure segments, and in the contract mining business for private and public-sector clients worldwide. In addition to mainstream construction, we also provide upstream and downstream services for real estate and facilities, such as energy and facility management. Our clients benefit from our end-to-end approach and the projects' holistic perspective.

- **Optimize financial fire power:**

(For further information, please see page 47 of the HOCHTIEF Annual Report 2012.)

- **Improve risk management:**

The focus of our risk management system is on selecting the right markets, project size, target projects, and partners, as well as qualified employees, appropriate financial and contractual structures, and effective control and management mechanisms (see also page 60).

- **Achieve differentiation through unique solutions:**

HOCHTIEF stands for technical excellence and innovative edge. Our one-of-a-kind solutions give us a competitive advantage and make us a partner of choice, notably on complex projects (see also page 72 et seq.).

- **HOCHTIEF: Best place to work:**

Our employees' capabilities are a key factor in HOCHTIEF's business success. This is why it is important to attract and retain the right workforce for our company (see also page 62 et seq.).

When it comes to implementing our strategy, sustainability is a key aspect and therefore a guiding principle enshrined in our corporate strategy. It opens up numerous opportunities for HOCHTIEF to achieve its business goals. A vision and guiding principles, codes of conduct as well as management systems and tools have been established within the Group so that we can balance economic, environmental, and social considerations in our decision-making processes and assess and appraise the effects, risks, and opportunities associated with our business activities (see also the following sections).

A big-picture approach delivers one-of-a-kind solutions

HOCHTIEF's solutions are unique. For each of our projects, it is necessary to develop a separate production process, taking into account both the client's individual requirements and the overall parameters. Our approach is fundamentally sustainable: HOCHTIEF offers services spanning the entire infrastructure project, real estate, and facility life cycle. On many projects—particularly those that we carry out on a public-private partnership basis—we provide services throughout all phases, from the initial idea right through to completion, from commissioning to revitalization. HOCHTIEF views projects from a holistic perspective. From long before the construction phase begins, we work in close partnership and dialog with clients and others involved, and plan well ahead to factor in sustainability considerations such as energy efficiency and project life cycle assessments. Our 360-degree perspective enables us to produce top quality from end to end—and offers advantages for the client, HOCHTIEF, and the environment alike.

Open dialog with stakeholders

HOCHTIEF shapes living spaces. Our business activities therefore impact on the people who live in, work on, and use our projects. As a global company, we operate in a variety of different legal and cultural environments and employ almost 80,000 people worldwide. This is reflected in the many stakeholder groups HOCHTIEF has (see list on page 51 et seq.). We seek to engage in purposeful dialog with them and, in doing so, attach utmost importance to transparency. Our policy of providing open, timely information enables stakeholders to form a picture of the company and reach decisions. In return, this active dialog with stakeholders lets HOCHTIEF take their requirements, wishes, and expectations on board in its business activities and continue to selectively develop its products and services.

The various stakeholder groups naturally differ greatly with regard to issues and perspectives. HOCHTIEF is careful to address the respective challenges discerningly and develop solutions on a case-by-case basis. Within the Group, there are therefore various different approaches to and tools for stakeholder dialog. HOCHTIEF presents its capabilities to clients at numerous trade shows, conferences, and other events and actively participates in industry discussions. As and when the need arises, HOCHTIEF companies and units carry out customer satisfaction analyses and surveys, such as the "Green Building Market Barometer 2012" conducted by our US subsidiary Turner (see also the article starting on page 10). A regular image survey enables HOCHTIEF to learn about how the company is perceived in the public eye and identify development potential.

Journalists who cover HOCHTIEF in the media are furnished with regular, timely, and transparent information—on request, through informal background briefings—and at regular events such as press conferences. Likewise, analysts and investors can obtain up-to-date information specifically tailored to their needs from our website* at any time. In addition, our investor relations (IR) team and the Executive Board provide information in one-on-one meetings as well as at regular roadshows and conferences. In late 2012, our IR team conducted an online survey among analysts, current and potential investors, and those interested in HOCHTIEF shares in order to even better tailor the information offering to users' needs. This survey asked for views on the website, the quality of the publications and personal communication, and the relevance of modern information technologies and media. The feedback was mostly good and, where possible, action is taken to implement specific wishes, such as the request for certain key figures to be included or specific effects to be explained in detail. There is currently no demand for social media to be used.

***For further information, please see www.hochtief.com/investor-relations.**

Key figures

Extract from the Five Year
Summary in the HOCHTIEF
Annual Report 2012

		2008	2009	2010	2011	2012
New orders	EUR million	25,284	22,473	29,627	25,368	31,488
Of total: domestic		2,549	1,919	2,524	2,286	2,127
international		22,735	20,554	27,103	23,082	29,361
Work done	EUR million	21,620	20,566	23,234	25,790	29,693
Of total: domestic		2,820	2,284	1,804	2,017	2,129
international		18,800	18,282	21,430	23,773	27,564
Order backlog at year-end	EUR million	30,961	35,374	47,486	48,668	49,794
Of total: domestic		3,603	2,996	3,726	4,048	3,991
international		27,358	32,378	43,760	44,620	45,803
Employees (average for year) Total	Number	64,527	66,178	70,657	75,449	79,987
Of total: domestic		11,004	11,135	10,821	10,331	10,111
international		53,523	55,043	59,836	65,118	69,876
External sales	EUR million	18,703	18,166	20,159	23,282	25,528
Increase/(decrease) on prior year	%	13.7	-2.9	11.0	15.5	9.6
Materials	EUR million	14,273	12,563	13,764	15,572	17,312
Materials ratio	%	74.7	69.0	67.8	67.3	67.6
Personnel costs	EUR million	3,266	3,501	4,081	4,864	5,536
Payroll ratio	%	17.1	19.2	20.1	21.0	21.6
Depreciation and amortization	EUR million	392	501	679	783	919
Profit from operating activities	EUR million	287	525	715	626	595
Net income from participating interests	EUR million	306	227	223	(585)	186
Net investment and interest income	EUR million	(96)	(155)	(181)	(168)	(235)
Profit before taxes	EUR million	497	597	757	(127)	546

New orders by region



100% = EUR 31.49 billion

Work done by region



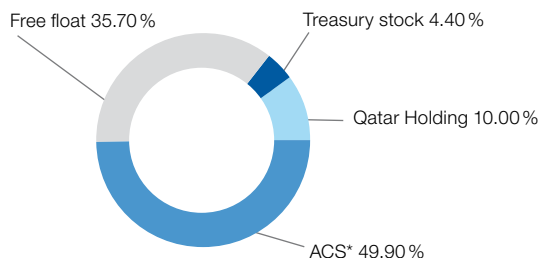
100% = EUR 29.69 billion

Order backlog by region



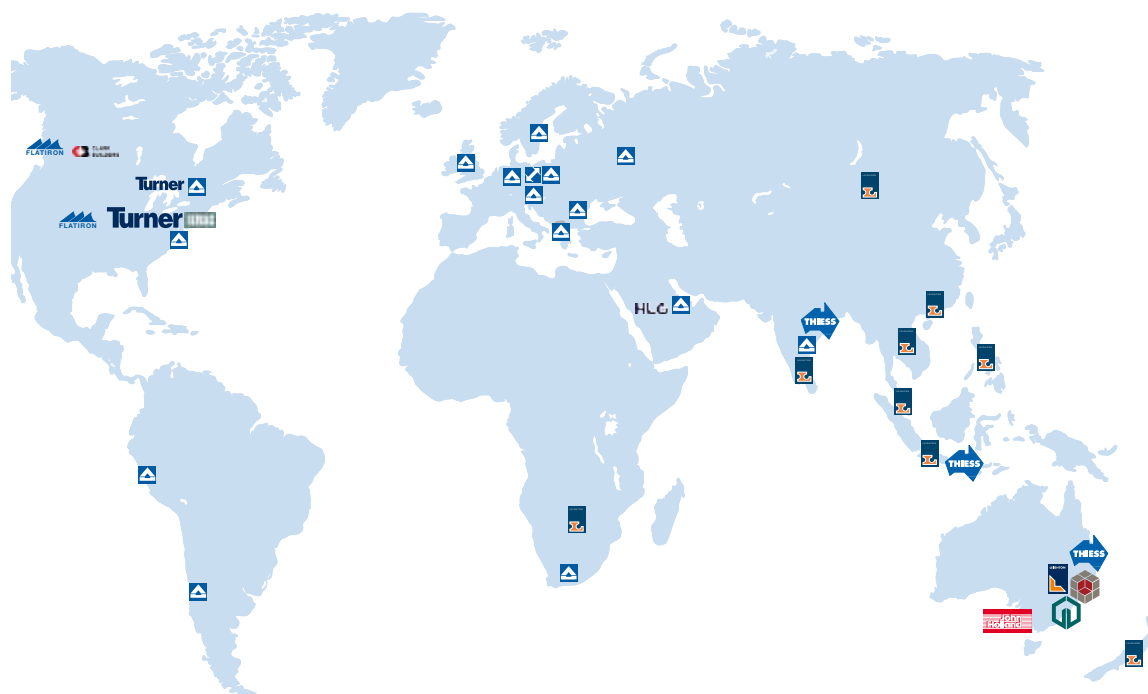
100% = EUR 49.79 billion

Ownership structure (as of December 31, 2012)



*ACS ACTIVIDADES DE CONSTRUCCIÓN Y SERVICIOS, S.A., Madrid

HOCHTIEF around the world



HOCHTIEF around the world: A selection of the many companies in our divisions shows HOCHTIEF's global presence. For further information, please see www.hochtief.com

Corporate Headquarters (management holding company)

HOCHTIEF Americas

Turner (USA)
Flatiron (USA, Canada)
E.E. Cruz (USA)
Clark Builders (Canada)

HOCHTIEF Asia Pacific

Leighton Holdings (Australia)
Leighton Contractors (Australia, Botswana, New Zealand)
Thiess (Australia, India, Indonesia)
John Holland Group (Australia)
Leighton Properties (Australia)
Leighton Asia (Cambodia, Hong Kong, India, Indonesia, Laos, Macau, Malaysia, Mongolia, Philippines, Singapore, Taiwan, Thailand, Vietnam)
Habtoor Leighton Group (Oman, Qatar, Saudi Arabia, United Arab Emirates)

HOCHTIEF Europe

HOCHTIEF Solutions
(Abu Dhabi, Austria, Bahrain, Bulgaria, Chile, Czech Republic, Denmark, Germany, Greece, Hungary, India, Ireland, Luxembourg, Peru, Poland, Qatar, Romania, Russia, Serbia, South Africa, Sweden, Switzerland, Turkey, UK)
HOCHTIEF ViCon (Germany, Qatar)
Streif Bauglogistik (Austria, Germany, Poland, Qatar, Russia, Ukraine)
HOCHTIEF Property Management (Germany)
aurelis Real Estate (Germany)
HOCHTIEF Energy Management (Germany)
HOCHTIEF PPP Solutions
(Canada, Chile, Germany, Greece, India, Ireland, UK, USA)

Distribution of value added

	2010		2011		2012	
	EUR million	%	EUR million	%	EUR million	%
Employees	4,078.4	80.3	4,860.3	97.5	5,537.2	86.8
Lenders	245.8	4.8	249.2	5.0	297.6	4.7
Minority shareholders	258.2	5.1	(7.6)	-0.2	227.5	3.6
HOCHTIEF shareholders	147.1	2.9	0.0	0.0	73.6	1.2
Public authorities	210.3	4.1	40.9	0.8	160.8	2.5
HOCHTIEF	140.9	2.8	(160.3)	-3.2	84.5	1.3
Net value added	5,080.7	100.0	4,982.5	100.0	6,381.2	100.0

Value added analysis shows how HOCHTIEF generates added value for the economy and how it is distributed to the various stakeholder groups.

Sustainability Strategy



HOCHTIEF is well aware of its responsibility toward society and the environment. We act with an eye toward the future, which is why we have made sustainability—the relationship between business, the environment, and social responsibility—one of the guiding principles of HOCHTIEF's Group strategy. Sustainability guides our work in many areas of operation and presents new opportunities for us to reach our business goals.

Our commitment to sustainability has a long tradition at HOCHTIEF and is part of our corporate vision:

"HOCHTIEF is building the future.—Along with our partners, we expand horizons, link people and organizations, create new ways to think and act, and continually enhance the values entrusted to our care."

Our guiding principles* help implement the HOCHTIEF vision. They are based on four main areas and fully cover the Global Reporting Initiative criteria:

- Client-oriented service spectrum
- Successful employees
- Sustainability
- Value-oriented strategy

As early as 2000, we became the first construction company in the world to sign on to the standards of the International Labor Organization (ILO)  aimed at enabling women and men the world over to work in conditions of freedom, equity, security, and human dignity. In 2008, HOCHTIEF joined the United Nations Global Compact . In addition, we put our commitment to sustainability on record in 2010 by signing the Code of Responsible Conduct for Business, giving our voluntary pledge along with 42 other corporate groups to sustainability, social partnership, merit, and fair competition.

Taking economic, ecological, and social concerns into balanced consideration—that is the challenge we are faced with every day. We firmly believe in the benefits and in the efficiency of sustainable services and development. In many areas, we are registering rising demand for responsibly implemented projects—from development to construction and operation.

Sustainability strategy and focus areas

In the process of developing our CR/sustainability strategy, we examined the current and future challenges faced by modern societies and the contribution HOCHTIEF can make on the basis of its competencies. This ground-work led to the definition, in 2008, of our six overarching sustainability issues:

- Sustainable products and services
- Active climate protection
- Resource protection
- Attractive working environment
- Corporate citizenship
- Compliance

These areas form the basis of our CR strategy and the resulting objectives and measures (see "CR program" starting on page 53). They are relevant to all of our segments and help us in delivering on our social responsibility. As part of the CR directive introduced in 2011, these areas are applicable to all Group divisions.

Materiality analysis

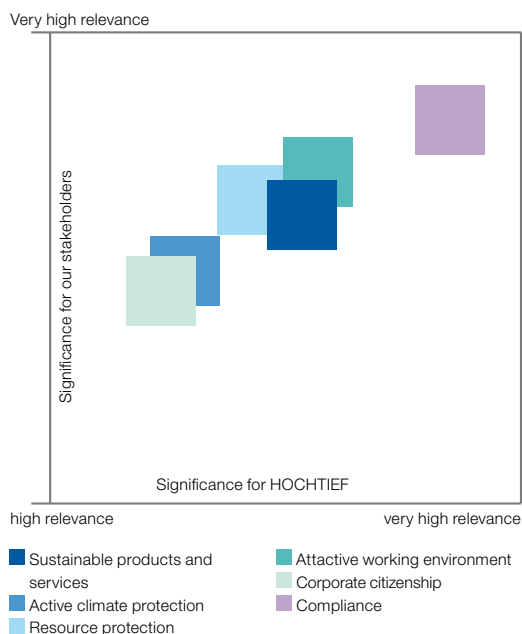
In 2012, we initiated an Internet survey to review the validity of our sustainability areas along with how they are prioritized and how significant they are for our stakeholders. A total of 215 individuals from HOCHTIEF's various stakeholder groups took part in the survey. The results were compiled to form a materiality matrix comparing the different areas and their significance for our stakeholders and for HOCHTIEF. According to the results, all six areas continue to be highly relevant. We see this as confirming the direction we have taken with our sustainability strategy. Based on the information gathered, we will now work on developing the individual aspects of these areas.

*For further information, please see www.hochtief.com/sustainability.

 www.ilo.org

 www.unglobalcompact.org

Materiality analysis



CR Organization

Management of sustainability issues is performed by the CR function within HOCHTIEF Corporate Development. In this way, we also ensure that our organization incorporates sustainability into strategic development and the shaping of innovation processes. Established in 2007, the CR Committee is in charge of ongoing development of the HOCHTIEF sustainability strategy. It also translates that strategy into targets and action items, and then initiates and monitors their implementation. In its work, the Committee makes use of the Group's management systems and the compliance organization, which will be introduced in the following pages. The CR Committee reports directly to the Executive Board, providing advice and making recommendations. The Committee meets on a quarterly basis. In 2008, the sustainability excellence team was founded. It is comprised primarily of employees in the operational units. The sustainability excellence team translates strategic ideas into sustainable products and services and brings those products and services to market.

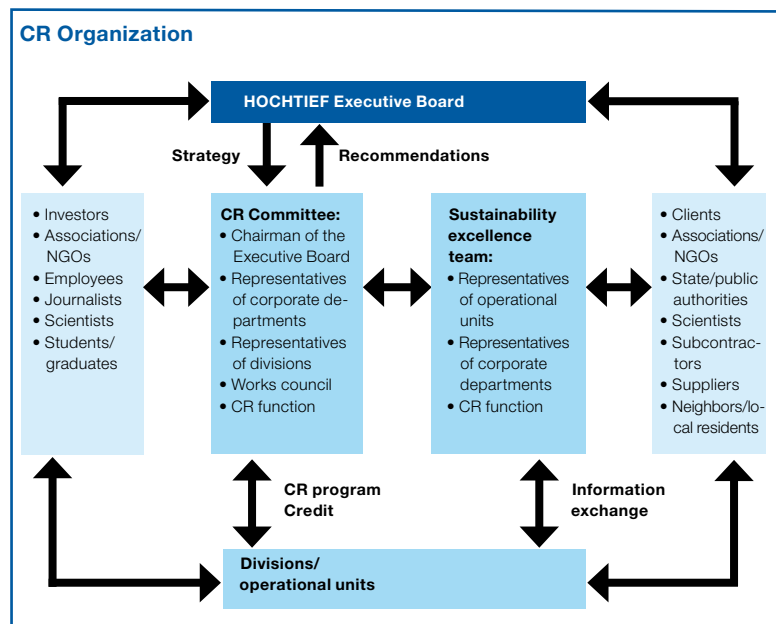
Exchanges with stakeholders

Sustainability topics are often complex and require the cooperation of various representatives of industry, government, and society. We have identified our stakeholders as those groups that significantly impact the economic, ecological, and social welfare capability of HOCHTIEF today and in the future as well as those groups that are significantly affected by the economic, ecological, and social welfare capability of our Group and that could continue to be affected in the future. In identifying our stakeholders, we drew in particular on the experience gained from our longstanding customer relationships, our project activities, our communication work, and regular market surveys.

HOCHTIEF's stakeholders are:

- Employees
- Clients: decision makers from industry and politics
- Government and public authorities
- Investors, shareholders, analysts
- Journalists
- Associations and organizations, NGOs
- Neighbors and local residents
- High school and college/university students, recent graduates
- Universities, colleges, and scientific institutions
- Subcontractors and suppliers

CR Organization



The composition of our central decision-making CR bodies reflects the rigorous alignment of our activities to stakeholder interests. HOCHTIEF attaches great importance to a transparent approach in all our dealings with stakeholder groups. To support them in gaining an understanding of our company, we supply our stakeholders with information openly and promptly, tailoring contents specifically to each target group. This in turn gives HOCHTIEF the opportunity to identify and differentiate the requirements of its stakeholders and to take these into account in its corporate action.

CR data compilation and quality

We endeavor to improve the quality and comprehensiveness of our CR data. The aim is to make success in the area of sustainability measurable using meaningful performance indicators. Since 2010, we have been working with a HOCHTIEF-developed IT-based reporting system called "CRedit". CRedit collects quantitative and qualitative indicators on our six focus areas. Standardized definitions, systems and processes ensure high-quality data. CRedit already supplies the majority of the information published in this report and represents an important step toward improving internal sustainability monitoring and control. During the reporting period, key improvements were made to the system, and it was also externally audited in 2012.

*For further information, please see www.hochtief.com/investor-relations.



Sustainability indexes*

In 2012, HOCHTIEF qualified for the renowned **Dow Jones Sustainability Index Europe** for the seventh time in succession and still as the sole German construction services provider. The DJSI lists companies that implement and track ecological and social as well as financial criteria. In February 2011, HOCHTIEF's existing listing—dating back to 2007—in the **Ethibel Sustainability Index Excellence Europe** was renewed. We are one of four European companies from the construction industry and the only German construction company to be listed. The index, published by an independent consulting company for socially responsible investment, ranks listed companies according to their performance on a range of issues such as the environment, treatment of employees, corporate governance, and social responsibility.

HOCHTIEF is also the sole German construction group represented in the **MSCI World ESG Index 2012/2013**, which lists companies that are highly committed to environmental, social, and governance (ESG) issues. We are also the only German industry representative in the **Advanced Sustain-**

ability Performance Index (ASPI) Eurozone and one of 120 top companies in the euro zone that are valued using a best-in-class method.

In 2010, the **Carbon Disclosure Project** for the first time included HOCHTIEF in the Carbon Disclosure Leadership Index of the DACH region (Germany, Austria, and Switzerland). The project involves testing the 350 largest companies in each region for transparency in their carbon emission reporting. HOCHTIEF was again included in the Leadership Index in 2012, ranking No. 31. This put us in Carbon Performance Group C. These results confirm that climate change is of sufficient importance to HOCHTIEF and that relevant action and initiatives are built into our corporate strategy.

As these index listings demonstrate, the capital market honors our sustainability approach.

They mean that HOCHTIEF shares are also suitable for investors who align their portfolios to strict sustainability criteria.

CR Program

Corporate responsibility

Overarching objective: We aim to be a responsible corporate citizen and set standards in our industry. We nurture the interrelationship in our company between business, the environment, and social responsibility and we engage in open dialog with stakeholders.

Goal	Action to 2015	Status December 31, 2012
Improve organizational structure and processes in CR management	Intensify cooperation with the divisions: Establish a CR Steering Committee	Plans to organize and staff the committee underway
Increase transparency in sustainability management	2013: Submit a compliance declaration with the German Sustainability Code	CR Committee resolution on complying with the German Sustainability Code passed
Improve CR data quality	Implement a web-based version of the CREDIT data entry system throughout the Group	Integration in existing IT landscape concluded, reporting and valuation process created and implemented, external audit successfully concluded
Intensify and structure stakeholder dialog	Introduce regular stakeholder surveys	First Internet-based survey in October 2012; 215 participants
	Conduct regular image/reputation surveys	Most recent HOCHTIEF image survey in November 2011

Sustainable products and services

Overarching objective: We aim to lead the global market for sustainable projects in the construction and construction-related services segments. We are therefore adding to our range of services spanning the infrastructure project, real estate, and facility life cycle.

Goal	Action to 2015	Status December 31, 2012
Develop new sustainable products and services along the life cycle	Continue sustainability excellence team activities	16th meeting in August 2012
	Decentralize and internationalize ideas management	15 web-based "Ideas Rooms" for employee ideas established; new software introduced; plans to integrate Turner underway
Increase HOCHTIEF involvement in sustainable construction worldwide	Increase the number of certified buildings with HOCHTIEF involvement	311 LEED-certified projects 298 LEED-registered projects 1,390 LEED-accredited auditors 14 DGNB-certified projects 15 DGNB-registered projects 6 DGNB-accredited auditors 26 Green Star-certified projects 3 Green Star-registered projects 34 Green Star-accredited auditors 3 BREEAM-certified projects 1 BREEAM-registered project 1 BREEAM-accredited auditor Other certificates: HafenCity: 1; minergie: 1 Group sales in the green building segment: EUR 4.49 billion
Increase customer satisfaction	Increase the number of external ISO 9001 certifications	89 percent of all corporate units certified

Active climate protection

Overarching objective: We aim to save carbon emissions together with our clients.

Goal	Action to 2015	Status December 31, 2012
Lower internal carbon emissions at HOCHTIEF	Define new climate change mitigation targets Group-wide	Conceptual planning started
	Cut business travel kilometers by using web and video conferences	HOCHTIEF in Germany: Business travel kilometers per employee per year reduced by 29 percent (reference year: 2008); new video conference systems installed in Essen, New York, Boston, and Sydney
Improve data quality on carbon emissions and energy consumption in the Group	Implement carbon monitoring at Flatiron and Leighton Asia; external validation of Group carbon emissions	Carbon emission coverage in the Group: 85 percent of all corporate units (see page 71); HOCHTIEF again included in the Carbon Disclosure Leadership Index (DACH region: Germany, Austria, and Switzerland)
Lower carbon emissions for clients	Use energy contracting solutions to reduce clients' carbon emissions	2012: 118 thousand metric tons of carbon saved
Expand services in the strategic area of energy infrastructure	Expand offshore wind energy activities	HOCHTIEF participation in six wind farms in the North and Baltic Seas; launch of the HOCHTIEF-developed "Innovation" jack-up vessel; HOCHTIEF entry into wind farm development; innovative process for establishing offshore wind farms in cooperation with Herrenknecht in trial phase
	Develop and implement efficient and innovative electricity storage devices	Research project underway on using hollow spheres on the sea floor as storage; planning started for first pumped storage power plant in Lower Saxony

Resource protection

Overarching objective: We aim to conserve natural resources and optimize the use and protection of resources.

Goal	Action to 2015	Status December 31, 2012
Avoid damage to the environment	Ensure implementation of the 2012 directive, conduct regular training for employees and partners	No Category 1 environmental damage was reported in any of the HOCHTIEF divisions in 2012. (see page 70)
Improve organizational structure for environmental protection	Standardize environmental protection processes and increase number of external certifications	HOCHTIEF Europe division: Percentage of environmental protection certifications (ISO14001, EMAS, SCC) (measured in terms of staff headcount): 80.0 percent
Improve quality of environmental data in the Group	Increase coverage for relevant environmental data	Water consumption coverage: 68 percent Waste coverage: 75 percent (see page 70)

Attractive working environment

Overarching objective: We aim to further boost our position as a sought-after employer and, over the long term, establish ourselves among the most attractive employers in the industry.

Goal	Action to 2015	Status December 31, 2012
Avoid work-related accidents involving HOCHTIEF employees, partners, and subcontractors	Conduct regular training measures	Accident rate within the HOCHTIEF Group: 1.74 accidents per million man-hours (see page 67)
Improve organizational structure for occupational safety	Standardize occupational safety processes and increase number of external certifications	66.3 percent of Group certified for occupational safety (OHSAS, ISO18001, SCC)
	Revise Group-wide crisis reporting system	Process initiated
Increase employee satisfaction	Conduct regular, systematic employee surveys	Europe: employee survey in spring of 2012, USA (Turner): end of 2011
Train employees	Expand continuing education as needed and increase number of continuing education hours per employee	Please see pages 63, 84, 92 et seq., 103.
Ensure future supply of specialist and managerial employees	Further expand HOCHTIEF's internal processes for top management employee development	Group-wide Executive Development Program initiated in 2012

Corporate citizenship

Overarching objective: We aim to get involved in the community wherever our company is at work.

Goal	Action to 2015	Status December 31, 2012
Improve organizational structure in corporate citizenship	Revise directive on donations and sponsorship	Process initiated
Promote projects in line with main Group sponsorship activities	Continue involvement with Bridges to Prosperity (B2P) and expand to entire Group	HOCHTIEF: first project implemented in Ruanda, Turner/Flatiron/E.E. Cruz: three projects implemented in Nicaragua; Flatiron: cooperation and strategic partnership with B2P extended until 2017
	Continue involvement in fostering education and young talent and identify new projects	Germany: participated in "Ideas Park 2012" engineering and innovation show; USA: Turner School of Construction Management with over 1,000 participating companies at 31 locations in 2012; Australia: awarded grants worth approximately EUR 306,000 to young Indigenous Australians in 2012
Support populations in disaster areas	For example: donation drives and provision of personnel, equipment, and materials in accordance with current needs	No action on this goal during the reporting period.

Compliance

Overarching objective: We aim to set standards with our principles of conduct.

Goal	Action to 2015	Status December 31, 2012
Promote awareness and application of the HOCHTIEF Code of Conduct	Expand training programs on Code of Conduct and compliance	More than 7,000 employees trained in Germany and the US
	Improve internal communication on compliance	Various articles published in internal communications media
Demand and encourage sustainability and ethical responsibility in subcontractors and joint venture partners	Increase proportion of prequalified and validated subcontractors	60 percent of procurement value prequalified and 73 percent validated HOCHTIEF Europe division: 4,525 prequalified suppliers and subcontractors
	Introduce self-disclosure on compliance for potential joint venture partners on basis of HOCHTIEF Code of Conduct	In preparation

Compliance

We are confident that our business ethics and our integrity contribute significantly to our credibility. Our commitment to managing HOCHTIEF using a value-oriented strategy is anchored in our guiding principles. Since HOCHTIEF, as an international company, operates in a variety of political systems and legal jurisdictions, we have introduced a compliance system aimed at meeting this commitment.

Compliance organization at HOCHTIEF

Established in 2008, the compliance organization is headed by the Chairman of the Executive Board of HOCHTIEF Aktiengesellschaft. The Chief Compliance Officer reports regularly to the Chairman or, in urgent cases, immediately. He also submits a yearly report to the Supervisory Board's Audit Committee. The Chief Compliance Officer is supported in his duties by a committee (the Corporate Compliance Counsel) and a lawyer specializing in criminal law at the holding company of HOCHTIEF Aktiengesellschaft. In the divisions, compliance officers have assumed responsibility in this regard and act as interfaces with the compliance organizations of the individual divisions. They report directly to the Chief Compliance Officer of HOCHTIEF.

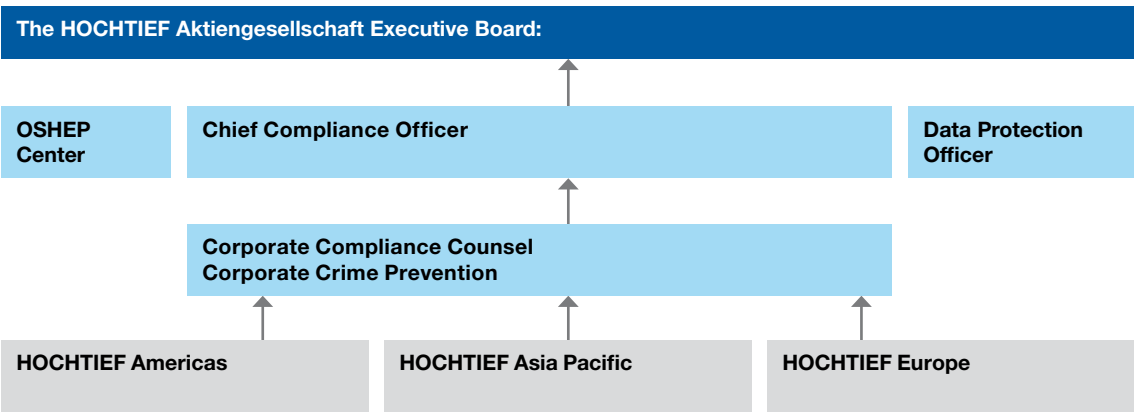
In the HOCHTIEF Europe division, for instance, general compliance managers (segment level) and compliance managers (business unit/branch level) make compliance a part of the everyday workday. They serve as on-site contacts and provide for the necessary exchange of information within the organization. The compliance managers are also tasked with employee training. The system is similar at Turner and Flatiron, our US subsidiaries in the HOCHTIEF Americas division, which have had their own compliance committees since 2008. Leighton, our Australian subsidiary in the HOCHTIEF Asia Pacific

division, has also implemented a compliance program. An Ethics and Compliance Committee acts as the exchange platform between the Leighton subsidiaries.

The aforementioned organization is directly responsible for all compliance matters relating to fighting corruption and economic crime. Areas such as occupational safety, health, and environmental protection are allocated to a separate competence center (the OSHEP Center) (see page 66). A data protection officer is in charge of data protection (see page 61).

Clear commitment

We established sustainable action and value-oriented strategies early on as part of our corporate guiding principles. Back in 2002, HOCHTIEF published a behavioral code that today is anchored in our corporate culture in the form of the HOCHTIEF Code of Conduct. Whether we are competing in the market, awarding contracts, or conducting regular business activities, we attach great importance to fairness, honesty, objectivity, and transparency. We are continuously working to refine and improve the compliance system within the company to avoid the risk of criminal or civil liability along with the damage to our reputation and competitive disadvantages that would ensue from non-compliance.



In 1999, we became the first construction group provider to join Transparency International as a corporate member. In 2000, again as the world's first construction industry company, we promised to uphold the standards of the International Labor Organization (ILO). The ILO is an agency of the United Nations with the objective of promoting decent and productive work, in conditions of freedom, equity, security, and human dignity. In 2007, HOCHTIEF was a founding member of Netzwerk Compliance, a German compliance network undertaking to combat dishonest business practices. We are also a member of the international "Partnering Against Corruption Initiative" of the World Economic Forum. In 2008, we undertook to adhere to and promote the ten rules of the UN Global Compact, an international initiative brought by representatives of the private economy, the United Nations, civil society, and workers.

Code of Conduct and directives

We have a tradition of combining corporate action with ethical principles. The HOCHTIEF Code of Conduct reflects these corporate principles and outlines rules for responsible action. It sets forth binding regulations for internal dealings within the company as well as for external relations with business partners, subcontractors, and public authorities. The HOCHTIEF Code of Conduct is now available in ten languages. Its contents can be divided into the following five areas:

- dealing with antitrust issues, business partners, and conflicts of interest such as bribery and corruption, donations, and sponsorship
- dealing with information, insider knowledge, confidentiality, and data protection
- health, safety, and environmental protection
- company assets, including documenting transactions, dealing with company-owned property and company assets as well as insider rules
- principles of social responsibility such as respecting human dignity, rejecting child labor and forced labor, equal opportunity and bans on discrimination, the right to organize, and the right to collective bargaining

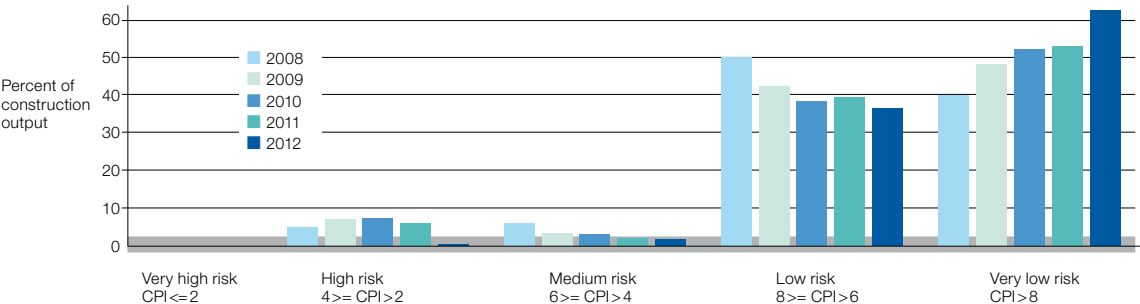
The HOCHTIEF Code of Conduct for Business Partners was created in 2011 on the basis of the Code of Conduct for Subcontractors and successfully implemented in the period under review. It conveys our values to all parties with which we have a contractual relationship, whether clients, business partners, or suppliers—all of whom we expect to likewise adhere to compliance standards. The HOCHTIEF Code of Conduct for Business Partners is now available in ten languages.

Internally, Group directives further clarify the contents of the HOCHTIEF Code of Conduct. For example, the Executive Board of HOCHTIEF Aktiengesellschaft enacted two Group directives on dealing with donations in December 2011. The first was a revision of the existing client event directive, and the second entailed a new donations directive clarifying the principles for giving and accepting gifts or invitations in everyday business life. Both Group directives aim to help our employees differentiate between legal customer care and corruption that is punishable under criminal law and to conduct themselves within the bounds of the law in their daily business activities.

Whistleblower system

Since our credibility and our reputation rest on our business ethics and integrity, we are very interested in discovering when employees or business partners do not comply with existing rules. All employees are therefore encouraged to notify HOCHTIEF of any irregularities. In situations in which employees suspect that rules have been violated, reports should be made first and foremost to the employee's direct superior. If the employee is not able to turn to his or her superior, the compliance organization should be the point of contact. Information may also be reported to Corporate Auditing. In addition, employees can use internal and external whistleblower hotlines for reporting violations. The internal hotline puts the reporting individual in contact with a Group compliance officer, and calls to the external hotline are taken by an independent law firm specializing in criminal law. The divisions have similar hotlines for reporting violations, and they exchange information with Corporate Compliance on a regular basis. Alterna-

Corruption risk



Measured on Transparency International's Corruption Perception Index (CPI) from Transparency International, HOCHTIEF mostly operates in countries with low or very low corruption risk.

www.transparency.de

tively, employees may report to Corporate Compliance via e-mail. All information is treated confidentially as a matter of course, and it is important to us to protect the reporting individual. Information may also be reported anonymously.

Responses to violations

We handle all reports of violations with great care and use all means at our disposal to clarify the situation. We respond with full rigor to infringements, while also acknowledging the danger of anonymous whistleblowing resulting in individuals being falsely accused. In-house investigations of compliance cases are carried out by Corporate Auditing, if necessary with the support of external consultants. For matters involving violations of criminal law, Corporate Crime Prevention is called in. Finally, suggestions for action in cases of compliance infringements are put forward by the Steering Committee, which comprises members from the Auditing, Communications, Legal, and Human Resources departments along with the Corporate Compliance Counsel. Responsibility for taking the action, which can go as far as dismissal, lies with the relevant superior or the management of the corporate unit in question.

Training and communication

HOCHTIEF uses various tools to make employees aware of compliance issues and inform them of the applicable regulations. The company intranet plays a key role in this. A separate area has been set up in which all employees have access to internal directives and information on the compliance program and con-

tact persons. Classroom training and e-learning programs are conducted on the basis of a detailed concept. Online training courses, such as on combating corruption, under-the-table work, and illegal employment, take practical examples from everyday life, and the courses familiarize participants with the existing legal situation besides offering suggestions on how to act in compliance with the regulations. All managerial staff are required to complete the learning programs. In addition to the online course offerings, on-site classes are offered in the departments and branches. We distribute circulars with information about new developments, in addition to which the various internal and external corporate publications regularly include articles on this topic.

The training programs on compliance and communications on this topic are structured similarly in the divisions. Our US subsidiary Turner offers video recordings on compliance topics that are available on the intranet, for example, in addition to on-site training courses.

In 2012, Corporate Compliance began by training the compliance officers and general compliance managers on both general and current issues. This was followed by training for newly appointed compliance managers in the HOCHTIEF Europe division aimed at familiarizing them with their tasks and enabling them to train the employees in their units themselves. The objective is to establish an annual compliance conference in order to enhance the exchange of information and practical experience between the divisions.

Risk Management

HOCHTIEF's global business naturally involves risks. But only undetected and hence unmanaged risks pose a real potential threat. Risks include all developments that can negatively impact the attainment of qualitative and quantitative business goals, including sustainability targets. Our risk management system reduces this potential to a minimum through proactive risk control and therefore plays a major part in securing the company's future and successful onward development as well as in enhancing our earning power.

Risk management at HOCHTIEF encompasses all organizational processes and instruments designed to detect risks at an early stage as well as to develop and implement suitable countermeasures in time. Sustainability and risk management are therefore comparable, complementary concepts: We apply structured processes and deploy defined control tools and processes to prevent future threats to the company.

Organization of risk management at HOCHTIEF*

Our Group-wide early warning system is an integral part of management and of the planning, control, and reporting system. In this way, we ensure that all material risks are regularly surveyed, assessed, and communicated. A Group directive formulates principles, states the components, describes the structure and procedures of risk management, and lays down the Group-wide framework for our corporate early warning system. This directive is supplemented with further directives as well as with working and organizational instructions specific to the activities of each division.

The system comprises the following elements that dovetail to control business risk at all levels:

The **early warning system** supports managers in all units with timely risk detection, analysis, control, and monitoring.

The **risk controlling system** improves risk transparency with regular reporting to divisional management teams, the Executive Board, and the Supervisory Board. The recipients are thus provided with the current risk status together with a commentary on changes arising in the risk landscape.

The **internal control system** supports managers in organizing activities so that processes are goal-driven and efficient and unnecessary risks are avoided.

The **internal audit system** uses process-independent, systematic audits to supervise the effectiveness and cost-efficiency of the installed systems and processes.

The central decision-making body for the early warning system is the Risk Management Steering Committee, which is composed of divisional and corporate department risk managers and chaired by the Head of Corporate Controlling at HOCHTIEF Aktiengesellschaft. The Steering Committee meets at least three times a year before forecasts are finalized. At these meetings, risks reported on a regular or ad-hoc basis by divisions and corporate departments and classified by Corporate Controlling are comprehensively appraised and discussed, and, where appropriate, countermeasures initiated. The risks are subsequently compiled into a Group risk situation that is reported to the Executive Board as part of forecasting and planning. A member of the HOCHTIEF Executive Board serves as coordinator with overall responsibility for risk management in the Group.

The make or break factors in risk management are the sensitivity and experience of our workforce. For this reason, we have created a risk culture at all levels that is supported by organizational processes, systems, and communications and is constantly being refined and improved.

*For detailed information, please see www.hochtief.com/riskmanagement.

IT and Data Protection

Data protection is afforded great significance in our Group. That is why this topic has been included in the HOCHTIEF Code of Conduct. We have made a commitment to our employees, business partners, and clients to safeguard their privacy and protect their personal data. In cooperation with our service providers, the Group's Data Security Officer ensures that personal data is only processed in accordance with the requirements of the German Federal Data Protection Act and that the right of individuals to determine how their personal data is used is respected.

The Data Security Officer is integrated into our compliance organization and reports to the responsible member of the Executive Board of HOCHTIEF Aktiengesellschaft (see chart on page 57).

IT security

Data protection is closely related to the topic of IT security. HOCHTIEF relies on modern information technology, both within the Group and in communications with clients, partners, and suppliers. Challenges to IT security result from the comprehensive use that IT systems are put to in order to perform operational tasks. To meet these challenges, we take continuous measures to consolidate and further expand our already high degree of IT security. A standardized system and coordinated process landscape with a uniform shopping cart serve to simplify operations and reduce the risk of downtime. HOCHTIEF addresses risks from the Internet by having its firewall systems regularly checked by external specialists. The deployment of modern hardware and software combined with digital and physical access controls ensure the availability of data and protect data from unauthorized access. This involves placing the data in physically separate data centers that are certified in accordance with ISO 27001. Moreover, the use of encryption technology guarantees the confidentiality and the accuracy of the digital information.

We counter IT risk by working closely together with competent service providers. Our IT security directive, which applies to the HOCHTIEF Europe division as well as to the HOCHTIEF Americas division with respect to security aspects, is continuously refined in consultation with experts. Business processes are implemented on the basis of reliable and modern ERP systems to ensure up-to-date, forward-looking corporate management.

The contribution of IT to increased sustainability

In 2012, we initiated a project targeted at analyzing HOCHTIEF's printer landscape in Germany, Austria, and Luxembourg and subsequently making gradual optimizations and enhancing uniformity. We expect a more modern and standardized printer fleet to bring cost savings along with numerous positive effects in terms of sustainability and health. The focus is on the environmental sustainability of the equipment as well as energy consumption and CO₂ savings potential.

Using modern, mobile communication tools enables our employees to take advantage of flexible working time models such as "Home Office". In this manner, IT is contributing to a better work-life balance.

We have succeeded in reducing travel activities with the help of our web conferencing service, which we further optimized during the period under review. Within the HOCHTIEF Group, our employees are able to link up with each other via their monitors using the Internet. This additionally promotes cooperation across various time zones and regions. In 2012, the number of meetings held online using the conferencing tool increased from 379 to 704 per month.

Our initiatives on building information modeling have reduced both risk and the error rate in project implementation and in the subsequent operation of the buildings. We use a 3D model to continuously track and compile building data during the entire lifetime of a project. Planning, analysis, and adaptation are first undertaken on the computer prior to execution. This saves time and resources. HOCHTIEF is one of the market leaders in virtual construction, implementing this method across the globe in its projects.

Employees

HOCHTIEF has almost 80,000 employees and is responsible for several thousand employees of subcontractors worldwide. A major Group-wide goal in human resources management is to create the best possible working conditions for our employees as well as to further strengthen and expand on our position as a sought-after employer. After all, our employees and their performance are a key factor in HOCHTIEF's success.

One of the four cornerstones underlying our corporate guiding principles is dedicated to our successful employees. Vital elements are skilled, committed specialists and managerial staff, an efficient workforce structure, and a high degree of employee identification with the company. To that end, HOCHTIEF has made it a goal to train and support employees as well as to foster their loyalty. Effective processes and dialog on all levels are the foundation on which our sustainable human resources management is built. As a globally operating Group, HOCHTIEF draws on the expertise in its various divisions and encourages intensive exchange.

Human resources management at HOCHTIEF

The strategic orientation of human resources management is chiefly the responsibility of the Corporate Department Human Resources. In cooperation with the Executive Board of HOCHTIEF Aktiengesellschaft and the heads of the divisions, it defines long-term goals and measures based on the Group's strategy.

Key tasks for strategic human resources management are:

- Development of managerial staff
- Optimizing our workforce structures
- Employer branding
- Deriving and analyzing key figures
- Guiding human resources management processes

The strategy is implemented in a process based on partnership with the HOCHTIEF Americas, Asia Pacific, and Europe divisions. The three divisions and their regional service segments are responsible for operating human resources activities.

Human resources management topics

Human resources management at HOCHTIEF comprises six key areas: Employee rights, recruiting, employee loyalty policies, personnel development, diversity, and occupational safety and health protection.

Employee rights

The basic principles of human resources management throughout the HOCHTIEF Group are based on human and employee rights as well as the German Corporate Governance Code. In addition, the HOCHTIEF Code of Conduct, our code of behavior, obliges all our employees to treat colleagues, business partners, and clients respectfully and in compliance with the law (more on page 58). HOCHTIEF also attaches utmost importance to cooperation with employee representatives based on trust. The Management expressly approves of employees' right to form unions. Works Council members are represented on the Supervisory Board and participate in Occupational Safety and Health Committee meetings.

In cases of restructuring, HOCHTIEF always first explores opportunities for placing employees in other corporate divisions or Group units. Should employment termination be unavoidable for compelling business reasons, we provide counseling services and training.

Recruitment

In a labor market characterized by internationality and a shortage of specialist staff, one of HOCHTIEF's key goals is to find well-trained employees, facilitate their smooth entry into the company, and cultivate their lasting loyalty to HOCHTIEF. We use a variety of activities to underpin and increase the attractiveness of the HOCHTIEF employer brand:

- Cooperation with chairs at college and university faculties and schools in the form of presentations, discussions, excursions, scholarships, and awards for students
- A diverse range of internships, work-study placements, and career training options
- Incorporating new media into the recruitment process
- “Employees Recruit Employees” programs
- Entry, mentoring, and trainee programs
- Alumni and intern retention programs

Online media are growing in importance at HOCHTIEF as fast, economical, and interactive tools, especially in the application process. We also attach great importance to personal contact with potential candidates. This is reflected in particular by the high rate of interns being offered contracts and the ever improving quality of applications submitted through the “Employees Recruit Employees” programs.

The awards we have received in Germany and internationally during the period under review are testimony to HOCHTIEF’s appeal as an employer. For example, Flatiron was named one of 50 large employers named “Best Workplaces in Canada.” Turner was named an “Ideal Employer” in a 2012 Universum Communications study, and the research institute trendence placed HOCHTIEF among Europe’s top employers for engineers.

Opinions in-house confirm this positive picture: Employee surveys in the various divisions regularly reveal high job satisfaction.

Employee loyalty policies and personnel development

Attracting skilled employees and ensuring their loyalty to the company in the long term is vital for our lasting success. Development potential is one key element of job satisfaction and loyalty. HOCHTIEF works continuously to maintain the ideal environment for individuals to unlock and develop their potential. What’s more, we guarantee fair compensation and foster an atmosphere of open communication as well as identification with

HOCHTIEF by providing ways for employees to have their say. One such program is Ideas Management (see page 72).

We conduct the majority of our training activities in-house, for example, in our own programs such as the HOCHTIEF Academy, the Turner University, and the Flatiron Construction University. Throughout all divisions, we offer a wealth of on-site and online seminars. Options range from soft skills training to specialist seminars through to state-recognized degrees such as a Bachelor of Facility Management.

Talent management at HOCHTIEF is conducted through various national and international talent pools and programs. The Executive Development Program is designed for top management. Additional talent pools for specialists and managerial staff ensure long-term personnel development. The annual skills assessment for specialists and managerial staff is the basis for national and international succession planning.

Open dialog

Structured employee interviews for all staff and feedback for the managerial staff help us foster ongoing open dialog. This is also a forum for evaluating and initiating personal development opportunities. In addition, internal media such as the intranet and the staff magazine “One Roof” report on relevant issues in the company. Used as a medium in all the divisions, webcasts increase the presence of the Executive Board and Senior Vice Presidents, which has a positive impact on employees’ trust in the management.

Compensation and retirement plans

HOCHTIEF’s compensation policy is characterized by economy, appeal, competitiveness, and fairness. It adheres to globally uniform standards for fixed and variable components and is reviewed against annual benchmarks.

Attractive retirement plans are in place worldwide, each adapted to the conditions in each country. These include the option of deferred compensation and various insurance options.

Work-life balance

HOCHTIEF is aware that the balance between a career and personal life is becoming an increasingly important factor in both the choice of an employer and employees' motivation on the job. That is why we promote a good work-life balance, with measures including flexible working time models such as part-time employment and the option of teleworking. We also provide various services and counseling options.

Diversity

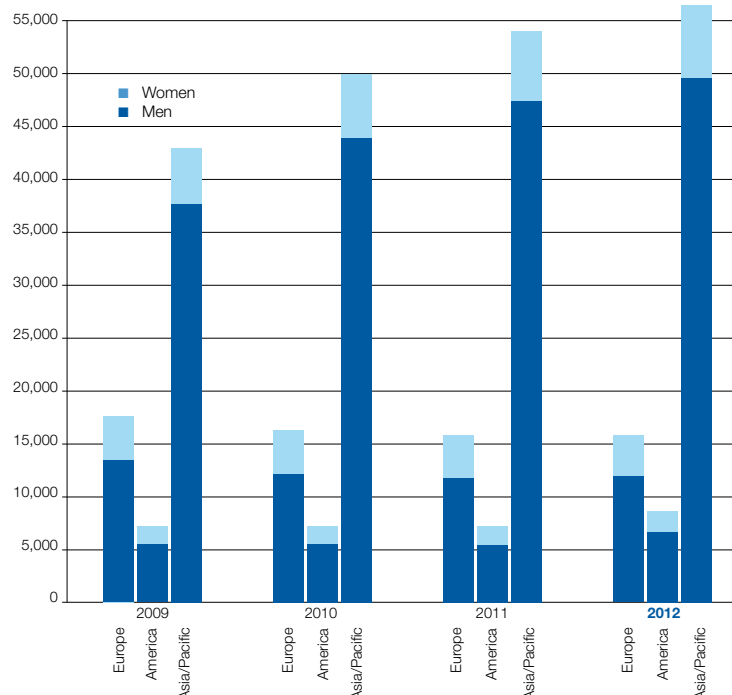
Diversity plays a major role in the HOCHTIEF Group, with different culture-based focal areas in the various divisions. In Australia and the USA, for example, special emphasis is placed on hiring people of various ethnic origins. We take the key megatrend of demographic change into account in all our projects and processes within human resources management. This includes actively involving older employees, for example.

Occupational safety and health

Occupational safety and health are a top priority in the HOCHTIEF Group. Within the organization, it falls under the aegis of the competence center for occupational safety, health, and environmental protection (OSHEP) (see page 66).

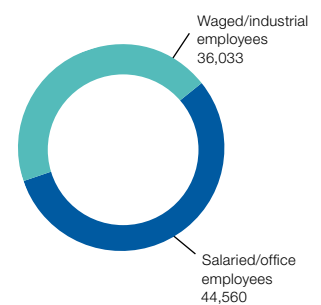
Key Figures

Key figures on employees in the HOCHTIEF Group

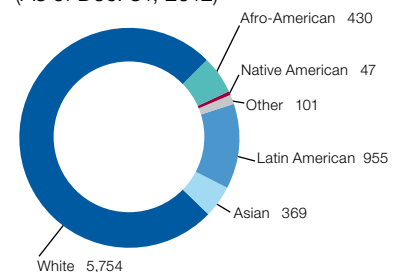


The **proportion of women** in the Group workforce as a whole was 15.5 percent in 2012 (2011: 15.8 percent).

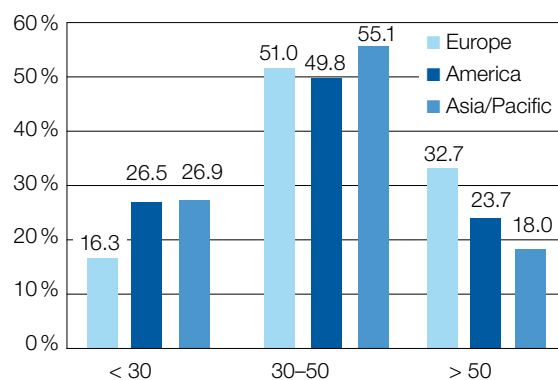
Workforce structure (As of Dec. 31, 2012)



Employees by ethnic group in North America (As of Dec. 31, 2012)

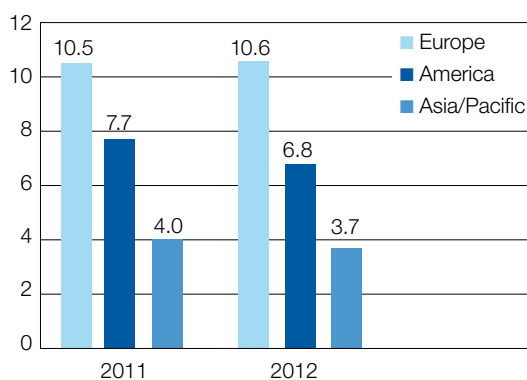


Age structure in the HOCHTIEF Group in 2012 (in years)



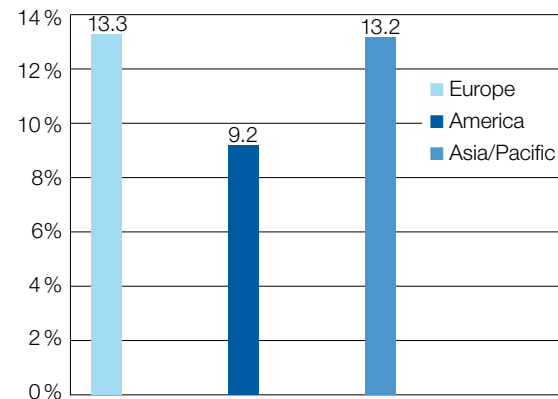
As of Dec. 31, 2012

Tenure of employment in the HOCHTIEF Group (in years)



As of Dec. 31

Women in management positions in the HOCHTIEF Group in 2012 (in percent)



As of Dec. 31, 2012

HOCHTIEF Europe division

There were a total of 2,468 terminations in the HOCHTIEF Europe division in 2011. This figure was 2,626 in 2012.

HOCHTIEF in Germany

People with severe disabilities comprised 4.10 percent of the HOCHTIEF workforce in Germany as of December 31, 2012. As this is below the statutory five percent quota, HOCHTIEF pays a compensatory levy.

The **proportion of employees** in Germany who **return to work** after parental leave rose from 67.1 percent in 2011 to 79.8 percent in 2012.

The **proportion of HOCHTIEF employees** in Germany who work **part-time** likewise increased in the reporting period, from 7.2 percent in 2011 to 8.6 percent in fiscal 2012.

The number of **trainees** at HOCHTIEF in Germany decreased from 402 in 2011 to 351 in 2012 (as of December 31 each year).

Occupational Safety and Health

At HOCHTIEF, the health and safety of our employees is of the highest priority. Therefore, assuming responsibility for those employees represents a key principle of sustainable corporate action for us. Our goal is to create a working environment in which job-related illnesses and accidents have been eliminated to the highest degree possible and in which our employees stay healthy. It is also important to us that our business partners implement such working conditions.

Clear commitment to occupational safety and health

In both our corporate guiding principles and the HOCHTIEF Code of Conduct, we have undertaken to actively pursue occupational safety and health. As a representative of German industry, we signed the Seoul Declaration on Safety and Health at Work in June 2008. HOCHTIEF was at the same time representing a sector in which it is exceptionally challenging to establish occupational safety and health.

To attain our high standards, we set forth minimum requirements for occupational safety and health in a Group directive. The directive was revised in 2012. It applies to all divisions of the HOCHTIEF Group and those Group companies over which HOCHTIEF has significant influence. Moreover, our employees are expected to adhere to all statutory and regulatory requirements regarding occupational safety and health as well as to implement the risk minimization measures identified in the hazard assessments.

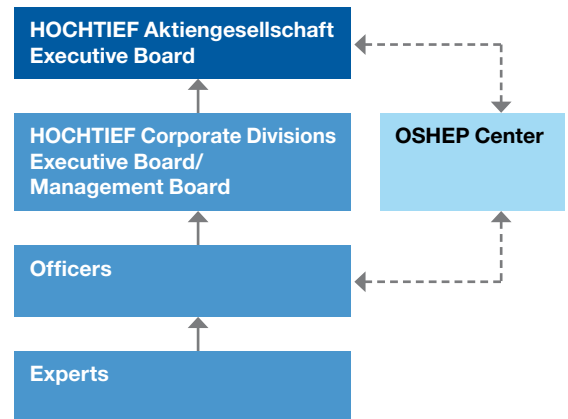
Structure of occupational safety and health at HOCHTIEF

At HOCHTIEF, occupational safety and health is a management task under the purview of the Labor Director within the Group Executive Board. Our competence center for occupational safety, health, and environmental protection (the OSHEP Center) is responsible for anchoring OSHEP within the company, further optimizing occupational safety and health management, and overseeing implementation of the directive and the supplementary provisions.

In terms of their organizational systems and procedures, the divisions have set up structures and processes that correspond with the relevant standards and are reviewed by the OSHEP Center on a regular basis. The divisions

also appoint management officers and specialists who advise and support the management boards and project executives. The OSHEP Center, as the superordinate link, maintains contact with the boards and executives and ensures that reporting is carried out. We thus see to it that our defined objectives and standards are implemented with as little error as possible.

Occupational safety and health is integrated into the entire project process. In addition, the divisions use management systems based on international standards (ISO 18001, Safety Certificate Contractors [SCC]). Measured in terms of personnel headcount, coverage amounted to 66.3 percent as of year-end 2012.



Identifying risk early on

At HOCHTIEF, occupational safety and health starts as soon as the first planning steps of a project are undertaken. Using what are known as “hazard assessments,” we identify risk at an early stage and establish preventive measures. The goal is to keep any residual risk to the health of our employees as low as possible. We also take the occupational safety and health performance of our subcontractors into account when selecting and assessing them.

In our service areas, occupational safety and health is closely coordinated with our clients. In most cases, measures are determined in consultation with them. HOCHTIEF is responsible for some of the measures.

Number of fatal accidents in the HOCHTIEF Group

Region	2009	2010	2011	2012
Americas	0	0	0	0
Asia Pacific	0	2	5	2
Europe	1	1	0	0
HOCHTIEF Group total	1	3	5	2

Subcontractors (in Europe) are not included in the table. However, they must comply with the safety standards that apply to HOCHTIEF.

Tribute

We deeply regret that employees have died during their work.
We extend our condolences to their families.

Even given our above-average preventive organization, it is unfortunately not possible to entirely rule out accidents, some of which may have serious or fatal consequences. We use a graduated reporting system to record and analyze these accidents in order to understand the cause, develop new preventive measures, and optimize our processes. The objective is to develop a uniform concept across the Group of how to classify on-the-job accidents. Binding standards will thus be set regarding reporting for the HOCHTIEF Europe division in the future. Various management hierarchies will be involved in investigating accidents depending on the seriousness of the accident in question.

Promoting a culture of occupational safety awareness

It is important to us that a culture prevail at HOCHTIEF in which each employee feels responsible for occupational safety and health. To develop and promote this, notably all managerial staff must be aware of their responsibilities and enable or maintain such a culture of occupational safety and health within their areas of competence.

The work safety cultures at the HOCHTIEF units and companies have developed to differing degrees due to the varying social welfare systems in the different countries. In order to develop a uniform philosophy, in Europe,

for example, we are planning an initiative of the Executive Board of HOCHTIEF Solutions. The initiative will first focus on upper-level managerial staff, who are expected to actively promote occupational safety and health in their divisions. The OSHEP Center will follow the process and support the operational units where needed.

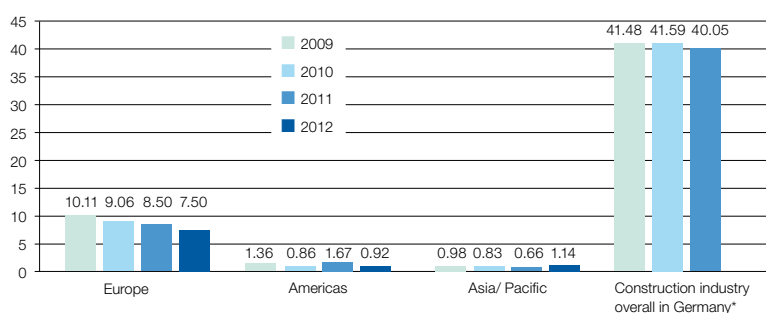
At Leighton in Australia, the salaries of managerial employees were linked in 2011 to the results of the extensive occupational safety and health programs.

We attach particular importance to providing training and continuing education for our safety experts. They are always up to date in their areas of specialization, and they advise and support the project executives in their occupational safety and health activities. The experts take advantage of internal and external working groups to share their experiences on a regional basis.

In addition, we, of course, focus on continuous professional development for all HOCHTIEF employees. They receive regular training both internally as well as externally. We take care to ensure that the intervals between training measures are short. Occupational safety and health are established components of the course offerings at HOCHTIEF's internal continuing education facilities. In many places, the managerial staff additionally conduct on-site briefings for their teams known as "tool box talks". We also give our business partners access to the relevant tools.

To bring our accident statistics reporting in line with international standards, we state the accident frequency rate (AFR) rather than the number of accidents per 1,000 employees.

Accident rate within the HOCHTIEF Group (accidents per million man-hours)



*Source: Annual accounts of German institutions for statutory insurance and prevention; figures for 2010 were not yet available as of the editorial deadline.

Environmental and Climate Protection

HOCHTIEF affects the environment with its business activities. We are aware of this, and have pledged—together with our partners—to find solutions to keep the impact on soil, water, air, climate, biological diversity, and cultural assets to a minimum as well as to avoid environmental damage. We conserve resources, optimize their use, and systematically reduce emissions harmful to the environment and our climate.

To reach these goals, HOCHTIEF established minimum requirements for environmental and climate protection in a Group directive. The directive was revised in 2012, with additional environmental and climate protection aspects being added. Our corporate guiding principles and the HOCHTIEF Code of Conduct are also required to address these topics to ensure that employees are sensitized to the issue. Back in July 2008, we joined forces with more than 80 leading international companies to sign the CEO Climate Policy Recommendations to G8 Leaders.

Organizational structure of environmental and climate protection in the HOCHTIEF Group

The way in which we have integrated environmental and climate protection into our organizational structure underscores the value placed on this area by our Group: The Center for Occupational Safety, Health and Environmental Protection (OSHEP Center) reports directly to the Executive Board. The divisions have integrated OSHEP into their organizational structures on their own responsibility and ensure by means of qualified employees that the standards defined are implemented. Management officers and specialists advise and support the management boards and project executives. The OSHEP Center interfaces with the boards and executives and ensures that reporting is carried out.

Environmental and climate protection is integrated into the entire project process. In addition, the HOCHTIEF divisions maintain management systems based on international standards (ISO 14001, ISO 50001). The proportion of projects in the HOCHTIEF Europe division with environmental management certification (ISO 14001; EMAS/SCC) thus stood at 80.0 percent in 2012 (2011: 79.9 percent).

Identifying risk early on

It is crucial that any risk to environmental and climate protection in our project work be identified and meas-

ured at an early stage. Only then can preventive measures aimed at avoiding environmental damage be planned and implemented. Environmental and climate protection risk is also taken into account when making investment decisions.

Our divisions have identified the most important environmental and climate protection aspects for them in light of their areas of operation and regional circumstances and allocated them to the individual projects. In the case of major infrastructure projects such as the construction of roads, tunnels, or bridges, the effect on the environment is precisely determined and environmental impact studies carried out in the early phases. If needed, individual environmental protection concepts are developed and implemented in the construction process.

Despite all the precautions taken, incidents affecting the environment cannot be fully ruled out. Any resulting environmental damage is recorded and assessed using a graduated reporting system. This allows us to develop measures to avoid future incidents and to optimize our processes. Our Australian subsidiary Leighton, for example, has for many years operated a three-level system for reporting environmental damage and has established this indicator across the company.

Our aim is to develop a uniform understanding regarding the type and scope of environmental incidents throughout the entire Group.

Fostering employee awareness and training

We consider it important that our employees develop an in-depth understanding of ecology, which is why we continually provide education on this topic. The training measures range from regular instruction when working on projects to e-learning tools and in-person seminars. The numerous suggestions for environmental and climate protection submitted by our employees to our Ideas

Management team testify to their high level of awareness in this area.

HOCHTIEF attaches particular importance to providing training and continuing education for our environmental experts. They are always up to date in their areas of specialization, and advise the project executives in their environmental activities. These experts share their experiences on a regional basis via internal and external working groups.

Environmental and climate protection issues at HOCHTIEF

Renewable energy sources

Energy infrastructure is an important business area for HOCHTIEF. We undertake a variety of activities targeted at increasing the supply of electricity on the basis of renewable energies. In the North and Baltic Seas, we are erecting wind energy farms that integrate our special equipment developed in-house.

We are building modern pumped storage power plants and researching innovative methods for the interim storage of energy on the ocean floor. We have already been in the market for electricity from geothermal energy for several years now and operate two geothermal power plants.

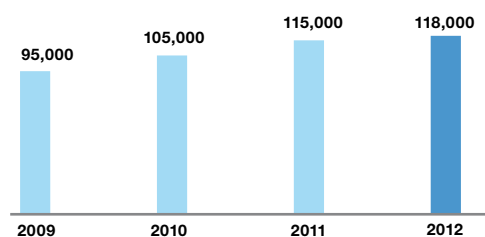
Energy efficiency

A substantial contribution can be made to improving climate protection by increasing energy efficiency as well as conserving energy. Carbon emissions are caused to a substantial degree by cooling, heating, and operating properties.

This is where HOCHTIEF takes action—both for our clients and within our own organization. All over the world, we construct “green” buildings noted for their electricity and heat conservation. As an energy contractor, we conserved 118 thousand metric tons of CO₂ emissions for our customers in Germany in 2012 and contributed to an efficient operation of properties and industrial installations with our sustainable facility management services.

Within the Group, we implemented a number of measures to save electricity and reduce carbon emissions (see chart on page 71). We succeeded in reaching our internal climate protection targets in Germany and in the USA in 2011, even exceeding them in some cases. New targets are currently being developed. Our country-level subsidiaries and our individual projects have likewise formulated specific targets for lowering carbon emissions.

Carbon savings by HOCHTIEF Energy Management for clients (t CO₂-e)*



*Source for carbon conversion factors for the HOCHTIEF Solutions energy managers: gemis 4.6

Waste management

Waste management starts with waste avoidance. We therefore plan our materials usage early on and in detail. Project-specific waste disposal concepts are used to determine methods of disposing of the waste once separated. For infrastructure projects, HOCHTIEF develops plans at an early stage to keep quantities of excavation materials to a minimum and to reuse them where possible. For instance, we use material excavated during tunnel construction to produce concrete for road and path building projects.

Water supply and water quality

HOCHTIEF is involved in various projects that contribute to improving the supply of water to people and regions. These include modernizing existing water pipes and sewer systems, expanding the water infrastructure, and building water treatment plants. Water consumption management is an important factor in the sustainable buildings we construct.

For civil engineering projects, we ensure by means of individual designs that a lowering of the groundwater table is kept to a minimum, water quality is continuously monitored, and suitable water treatment methods are used.

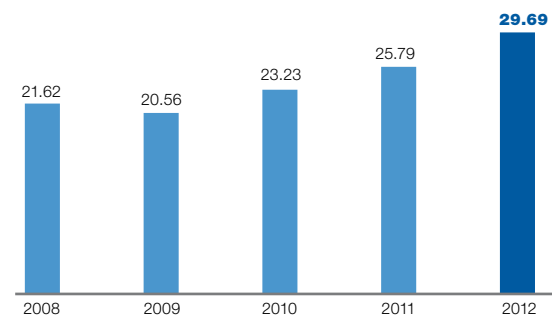
Biodiversity

HOCHTIEF advocates maintaining biological diversity in the areas surrounding its projects as early as in the planning phase of construction projects. We develop customized environmental strategies to minimize the

impact of our actions on nature. Moreover, we renature the affected land in many projects, thereby protecting the local flora and fauna.

Key figures

Work done (EUR billion)



The environmental indicators below are to be viewed in relation to the project work carried out for each year.

Environmental damage

Incidents resulting in significant chemical or biological environmental damage must be reported to HOCHTIEF. Such incidents are divided into three levels:

Level 1: Trans-regional, high severity and/or irreversible detrimental effect and/or estimated impact of over EUR 5 million

Level 2: Medium severity, estimated impact exceeding general deductible but under the general amount of coverage of EUR 5 million.

Level 3: Low severity, impact under the general deductible

No Level 1 environmental damage was reported in any of the three HOCHTIEF divisions in 2012.

Fines

In the period under review, no significant fines were levied against HOCHTIEF for violations of environmental regulations.

Water consumption (in m³)

	Water consumption (in m³)	Group percentage
2012*	5,074,045	68 %
2011	735,000	35 %
2010	671,000	45 %
2009	714,000	45 %

*Half-year figure for Leighton (07/12–12/12)

The data is estimated from material-specific cost types assuming average prices.

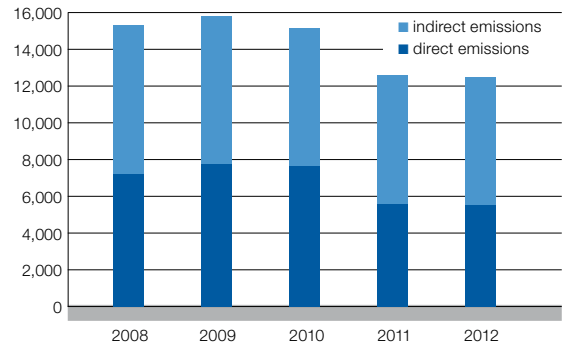
Waste requiring disposal (in tons)

	Waste requiring disposal	Group percentage
2012*	1,061,669	75 %
2011	499,384	40 %
2010	510,464	45 %
2009	508,660	45 %

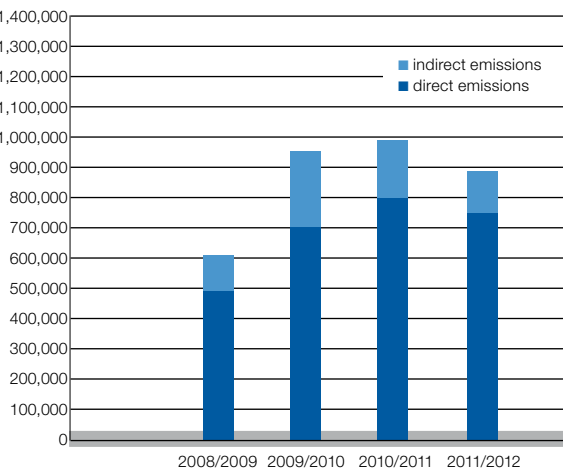
*Half-year figure for Leighton (07/12–12/12)

The Group-wide waste recycling rate was approximately 75 percent in 2012.

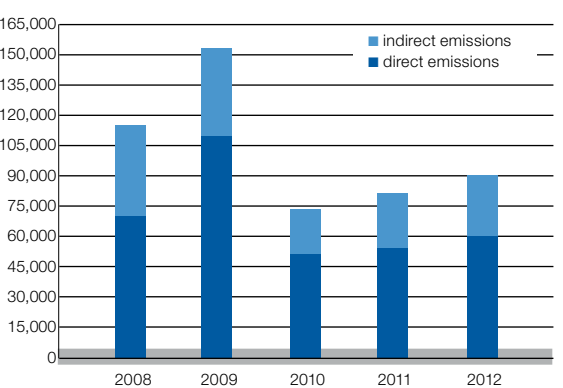
Greenhouse gas emissions*:
HOCHTIEF Americas Division (t/CO₂)



Greenhouse gas emissions*:
HOCHTIEF Asia Pacific Division (t/CO₂)



Greenhouse gas emissions*:
HOCHTIEF Europe Division (t/CO₂)

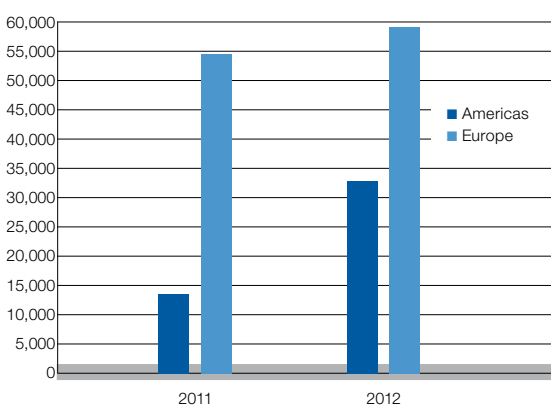


Group percentage 2011: 85%
2012: 85%

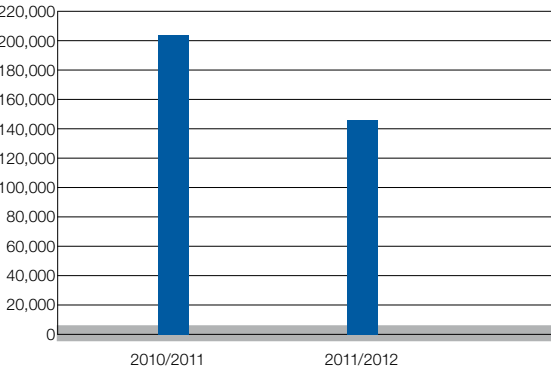
The key figures shown relate to the energy consumption and carbon emissions of the main corporate units in Europe, the USA, and Australia. The majority of the data is estimated from material-specific cost types assuming average prices.

Energy consumption levels and the greenhouse gas emissions inferred from them directly depend on the nature and scale of the projects in progress. A tunneling project with a tunnel boring machine, for example, generates far greater indirect carbon emissions than a building construction site or a facility management project. The trend in the key figures therefore indicates very little as regards actual climate protection activity.

Energy consumption in the HOCHTIEF Americas and HOCHTIEF Europe divisions (megawatt hours)



Energy consumption in the HOCHTIEF Asia Pacific Division (megawatt hours)



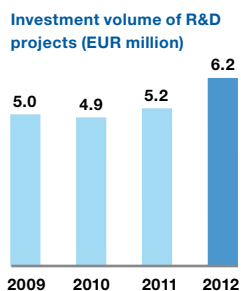
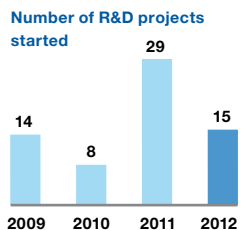
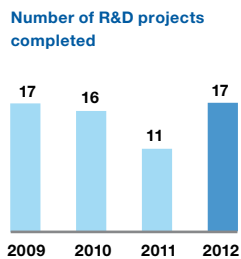
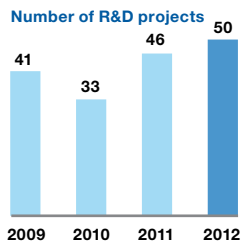
Group percentage 2011: 85%
2012: 88%

The major office locations in Germany have been using green power fully since 2010. The Leighton Group, too, uses green power at selected locations.

*Metric tons of carbon equivalent. Source for carbon conversion factors: GHG Protocol tool for stationary combustion, Version 4.0

Research and Development

As a sustainable company, HOCHTIEF wins over clients and partners in many projects with innovative and forward-looking concepts. We identify market trends at an early stage and develop sustainable solutions in our research and development work. Managing innovations effectively is a major factor in HOCHTIEF's sustainability activities. We therefore continually optimize this process. In addition to product and project-related innovations, we enhance our internal workflows and processes on an ongoing basis. In this way, we clearly set ourselves apart from the competition and create measurable added value.



The statistics in the charts relate to the first-level innovation projects.

Innovation management on three levels

Innovation is managed on three levels at HOCHTIEF:

The **first level**, central innovation management, focuses on cross-divisional issues, i.e. innovations that benefit operating activities throughout the Group. Innovation management is coordinated by HOCHTIEF Corporate Development. This department picks out promising ideas and supports their implementation. The Innovation Committee, which comprises members from the operational units and Corporate Headquarters, decides in each case whether to go ahead with a project. HOCHTIEF spent around EUR 6 million on Group-wide, first-level research and development (R&D) projects in fiscal 2012. Around 80 employees worked on a total of 50 projects. We launched 15 new projects in 2012 and brought 17 to completion.

The **second level** of the HOCHTIEF innovation management system comprises divisional innovation. These projects are developed, financed, and implemented by the units and companies themselves.

The **third level** relates to project-specific innovation. R&D work of this kind is carried out in the contract bidding and execution stage. The resulting expenses are accounted for as part of project costs and these innovations are not registered at Group level. The majority of HOCHTIEF's developments take place at this third level.

Ongoing employee participation

Our employees play a key role in innovations and are constantly on the lookout for potential improvements. Employees' suggestions are dealt with by "Ideas Management," a separate unit within Innovation Management. Our employees in Germany can use the "Ideas Room," a central tool on the intranet that was also used

intensively in the reporting period to submit suggestions. Overall, 324 ideas were published in 2012.

Cross-border research and development

We build projects around the globe that meet above-average sustainability standards. This is why we also participate in cross-border organizations and research initiatives and have built up a high-caliber cooperation network. We work closely and continuously with national and international universities, scientists, and associations. As a member of the European Construction Technology Platform, HOCHTIEF makes an active contribution toward maintaining and improving the high technical standards of the European construction industry. We are also a member of ENCORDER, the European forum for industry-led research, development, and innovation in the construction sector. Benefits from our membership include best practice exchange on issues such as corporate responsibility, work safety, and virtual construction.

In June 2011, the members of ENCORDER collectively signed a "Sustainable Development Charter" in which they agree to integrate sustainability into their corporate strategies and promote this concept, especially in research and development.

R&D projects from the field of sustainability

Energy infrastructure

Many of our innovation projects are closely related to issues of sustainability or are driven forward by our objective of acting sustainably. This particularly applies to the expansion of a sustainable energy infrastructure based on renewable energies, in which HOCHTIEF is involved through a wide range of services. To this end, we have forged ahead with existing development projects in the reporting year and launched new research projects.

Further development of offshore foundation drilling

The Offshore Foundation Drilling (OFD[®]) technique developed together with a partner for erecting offshore wind farms was fine-tuned in the reporting year. In contrast to the conventional method, the piles for the wind turbines are not rammed into the sea floor, but instead a hole is drilled for them. The new method has crucial advantages: First, the acoustic pressure which is harmful to marine animals is substantially reduced compared with the ramming method and is well within the legal limit. In addition, OFD can be used in almost any underground location and enables piles with a larger diameter than previously to be erected. We have also joined with partners in developing a mortar that will further accelerate the installation of piles, making it possible to reduce the impact on the environment even further. We plan to carry out final tests on the procedure in the fourth quarter of 2013 and to offer it to customers in 2014.

New construction methods for onshore wind power plants

In addition to the further development of offshore services, HOCHTIEF is growing its expertise in the field of onshore wind energy. In 2012, we launched an R&D project to develop a construction method for wind power plants in poorly accessible low mountain regions. In order to be able to erect the high towers of the facilities cost-effectively and with as little environmental impact as possible, e.g. without clearing large areas of trees, new construction methods are needed. The new design will also take into account the dismantling of the facilities.

Innovation project on pumped storage power plants

Energy from wind farms or photovoltaic systems is not always available when it is needed. A future energy supply based on regenerative energy thus requires efficient storage media. A HOCHTIEF innovation project is therefore looking into the development of pumped storage power plants in Germany and neighboring countries. Construction work could begin on such a pumped storage power plant in Freden, Lower Saxony, once the regional planning process is completed and official planning permission has been granted. The plant could

potentially start operation in 2020. The repowering of existing plants is part of our planning in this innovation project.

Hollow-sphere storage facilities on the ocean floor

HOCHTIEF is working with the Fraunhofer Institute for Wind Energy and Energy System Technology as well as other partners on the "STENSEA" project (Stored Energy in the Sea) to research and develop a concept for storing energy on the ocean floor. Unlike land-based pumped storage power plants, this system does not use two reservoirs, but rather a hollow sphere on the ocean floor is used to store water. When electrical energy is needed, the sphere is flooded. The inflowing water drives a turbine to generate electricity. When there is a surplus of electricity in the grid, part or all of the water is pumped out of the sphere, and in this way the energy is stored until re-released during the next filling cycle. HOCHTIEF would handle the construction, logistics, and operation of the hollow spheres.

Green building/energy efficiency

Plus-energy district

In 2012, HOCHTIEF, together with the Technical University of Darmstadt, launched the "Plus-energy district Oberursel" research project. On a site in Oberursel in Hesse, a district with some 150 apartments and commercial premises is to be built. It is to have a positive energy balance. The entire district will meet its energy needs from its own renewable sources and by drawing energy from the surrounding area through networking, while also supplying energy to the surrounding area when it has a surplus. The aim of the research is to develop and test a sustainable concept as a basis for designing, implementing, and operating future plus-energy districts.

Procurement

As an integral part of our corporate strategy, our firm resolve to conserve resources, protect the climate, and treat people fairly also guides procurement activities at HOCHTIEF. Key sustainability aspects are therefore enshrined in our Group Procurement Directive and taken into account when selecting, evaluating, and developing subcontractors and suppliers as well as in the procurement of materials and products.

Each year, HOCHTIEF spends the equivalent of approximately 58 percent of Group output on the procurement of goods and services. Expenditure in 2012 totaled EUR 17 billion. As a company committed to sustainability, working to reconcile ecology, economics, and social responsibility aspects is an essential part of the job for us in procurement as elsewhere. To this end, we have further stepped up our activities toward greater sustainability in procurement and with regard to our procurement culture.

Enhanced Group Procurement Directive

The HOCHTIEF Group's procurement strategy is geared to maximizing value creation for the company and clients.

Our divisions put this Group strategy into effect in the operating business.

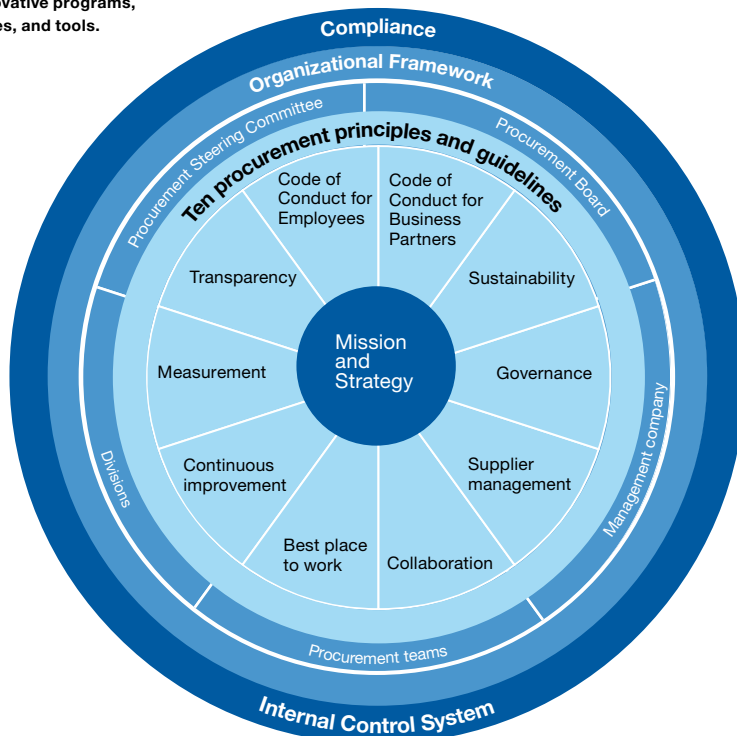
The Group Procurement Directive, which was revised with major additions in mid-2012, is a key cornerstone of our procurement strategy. To further improve the implementation of sustainability in our procurement processes, the Directive now makes reference to the six thematic areas of sustainability at HOCHTIEF (see page 50). Divisions are thus required to give due regard to corporate social responsibility and sustainability principles throughout supplier selection and evaluation as well as when awarding orders to subcontractors. Divisional procurement functions must monitor compliance with these principles, perform sampling-based checks, and investigate any suspicions of noncompliance.

The Group Directive helps us to improve procurement on an ongoing basis. Part of this consists in prequalifying and evaluating suppliers as well as carrying out centralized training. At the same time, in adopting the Directive, we have created a new framework for an internal audit system covering all procurement units and levels. First and foremost, this takes in mutual control, functional separation, and automated test routines (see chart).

Procurement strategy

Key features:

- Developing and fostering entrepreneurial procurement culture
- Pursuing opportunities to add value and cut cost
- Enhancing competition with innovative programs, processes, and tools.



Code of Conduct a key feature

We have a tradition at HOCHTIEF of organizing our activities along ethical lines (see page 58). The HOCHTIEF Code of Conduct therefore features among the ten procurement principles and rules in the Group Procurement Directive. For companies that work with HOCHTIEF, we have laid down rules in our Code of Conduct for Business Partners, which we revised in 2011. Companies are obligated to comply with these strict rules in their own operations and in dealings with their subcontractors. The rules include expecting companies not to permit child labor and to pay their workforces a fair wage or salary.

Reducing procurement risk

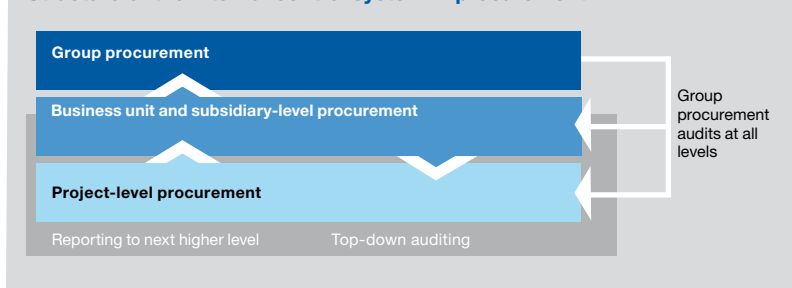
Large-scale projects like those developed and undertaken by HOCHTIEF tend to span long timescales. In many cases, prices of key inputs such as steel and copper increase over the project duration. We use special financing systems to better contain material price risk. Prices negotiated today thus apply for the entire duration of a project.

New procurement challenges

HOCHTIEF focuses its business on the areas of energy infrastructure and resources, transportation infrastructure, as well as social and urban infrastructure. Our projects center on the delivery of integrated, sustainable solutions. This calls for additional segment-specific expertise and above-average market knowledge in procurement.

In the area of energy infrastructure, for instance, the task of procurement does not end with buying materials—i.e. steel and concrete—to build the foundations for offshore wind turbines. As HOCHTIEF also performs the maintenance of such turbines, our procurement experts must also obtain items such as helicopters to ferry personnel to and from installations and charter tugboats for our specialty equipment.

Structure of the internal control system in procurement



Similarly in transportation infrastructure, HOCHTIEF's activities are not limited to building projects like tunnels, bridges, and roads. Our integrated service portfolio in this area also includes the supply and installation of energy-efficient and energy-saving lighting for such infrastructure.

As an example in the area of social and urban infrastructure, our US subsidiary Turner is a pioneer in the green building segment. HOCHTIEF is also extending its position in sustainable construction in many other countries. This requires us to procure and use in those projects materials and services that meet the strict sustainability standards applicable. We comply with the exacting standards for sustainability certification by using resource-conserving materials and techniques as well as measures for increasing energy efficiency. Our facility and energy management experts also ensure sustainable real estate and facility operation and are supported in this by the relevant procurement units.

In the area of resources, our majority-owned Australian subsidiary Leighton aims for sustainability in the procurement of overburden excavators and caterpillars used in mining. Energy and fuel efficiency are important criteria in the procurement of such machinery.

Donations and Sponsorship

As an international construction group, HOCHTIEF designs living spaces all over the world and is therefore constantly interacting with the companies at which and for which we work. We see ourselves as corporate citizens and embrace social responsibility wherever we are at work. We prefer working together with regional subcontractors, and support cultural and social initiatives and local institutions. At the Group level, we focus our social commitment on donations and sponsorship activities that involve two overarching themes: education and modern architecture.

How to handle donations and sponsorship and the topics of focus are governed primarily by the HOCHTIEF Code of Conduct at the Group level and, since 2007, by a directive. The directive additionally stipulates that no donations may be made to political organizations, parties, or individual politicians, whether directly or indirectly.*

There are separate, supplementary directives at the divisional level. Differences in donation and sponsorship activities result mainly from the differences in the regions in which our divisions operate and the prevailing social welfare policies and cultural norms. Finally, we aim to gear our social commitment toward the needs of the society that we intend to support. HOCHTIEF Asia Pacific, for instance, is highly involved in working for the rights of Indigenous Australians. The HOCHTIEF Americas division undertakes a variety of measures to help ethnic minorities, and the HOCHTIEF Europe division supports talented young people from a migrant background.

The Group directive on donations and sponsorship will be revised in 2013. Our goal is to more closely align the provisions regarding the use of cash donations and gifts, expertise, and individual efforts regarding social issues with our topics of focus and to increase the overall impact by combining related topics.

Organization

At the Group level, the Corporate Communications department is responsible for donations and sponsorship. There are varying ways of dealing with this in the divisions. In the HOCHTIEF Europe division, for instance,

all activities planned by the corporate units or in connection with projects must be coordinated with the communications managers. Responsible parties have likewise been specified in the companies and the operational units of the HOCHTIEF Americas and the HOCHTIEF Asia Pacific divisions. All activities are additionally reported to the central CR coordination office at HOCHTIEF. In justified individual cases and emergencies, such as natural disasters, the topics of focus need not be adhered to. Additional sums and materials are made available in such cases.

Focal points of sponsorship activities

To leverage the impact of our donation and sponsorship activities, we established two focal points in 2007, both of which have a special relationship to our company and our business activities. All HOCHTIEF divisions give high priority to promoting these endeavors. The first involves our commitment to educational projects and fostering young talent, by means of which we are investing in one of the most important factors in economic development. The second relates to modern architecture, an area that we feel particularly bound to promote on the basis of HOCHTIEF's tradition as an international construction group. We believe that by being involved in these areas, we will also raise awareness of our business activities and other topics relevant to construction.

Beyond these two focal points, the HOCHTIEF Group has numerous project-related and location-related commitments as well as sponsorship topics specific to the divisions. We also very much welcome our employees participating in volunteer activities.

*Leighton, our Australian subsidiary, reports on its indirect political donations in its annual report and on the Internet at www.leighton.com.au.

Focus on Bridges to Prosperity

For some years now, the Bridges to Prosperity (B2P) non-profit organization has received support in its Central and South America projects from Flatiron, Turner, and E.E. Cruz, our US subsidiaries. In cooperation with sponsors, B2P builds pedestrian bridges across rivers and gorges in low-infrastructure regions all over the world to give the local population better access to trade, education, and medical treatment. In addition, Flatiron is particularly committed to its role as a strategic B2P partner and uses its building expertise to support the design of the bridge models. In 2012, HOCHTIEF was for the first time involved from Germany and Europe in constructing a bridge in Africa. Two additional projects are planned to follow in 2013. The goal is for the HOCHTIEF Asia Pacific division to also participate in B2P in the future so that the entire Group will be involved in sponsorship activities.

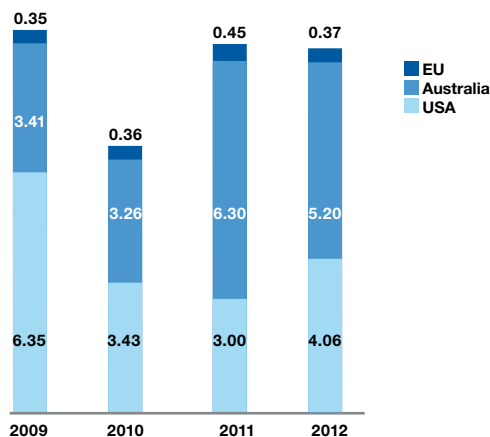
Our commitment to B2P extends far beyond simple cash donations. For all of the projects we finance, we have a group of employees on site who play an active part in building the bridges—an unforgettable team experience that the employees bring back to their everyday working lives. By integrating local workers into the bridge building, we pass on our expertise to the local population, which is then able to use these methods and the skills they have acquired in other projects.

According to B2P reports on the impact of an average project, some of the results of a newly erected bridge were:

- the number of students attending classes increased by twelve percent
- medical facilities reported 24 percent more patient visits
- the number of local businesses rose by 15 percent
- the number of women with jobs increased by 18 percent

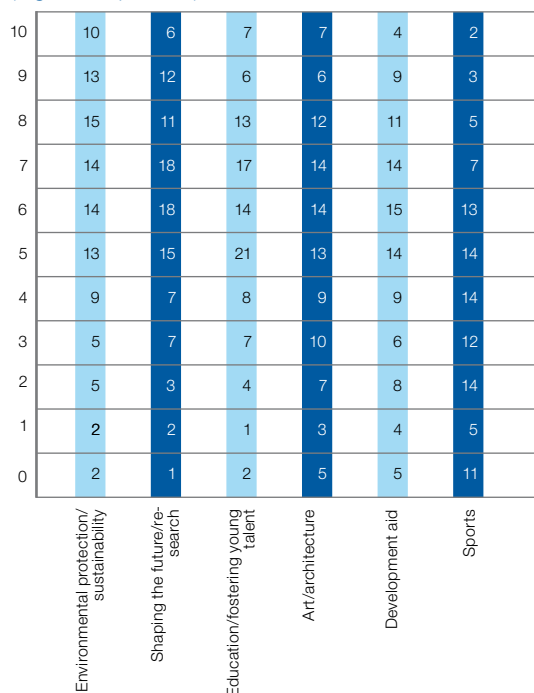
You will find more on B2P and our activities in the article starting on page 34.

Total donations and sponsorship (EUR million)



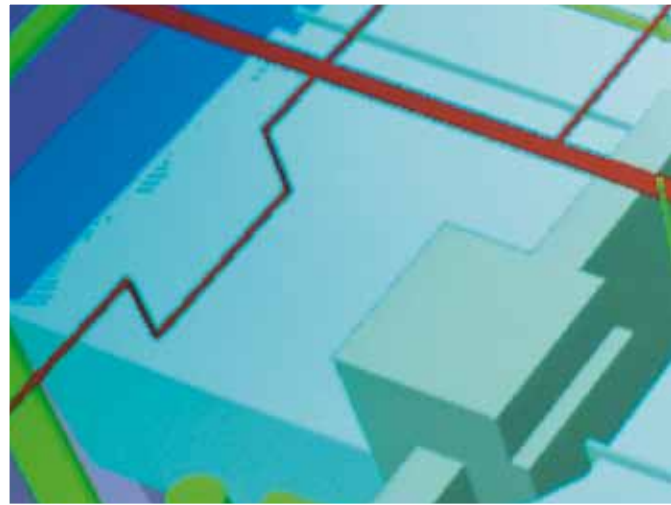
Results of 2011/2012 image survey: Stakeholders believe that the sponsorship activities we focus on fit well with HOCHTIEF

Based on your image of HOCHTIEF, in which area should we be concentrating our social welfare initiatives? (Figures in percent)



0 = Do not agree at all
10 = Agree strongly

**HOCHTIEF develops
creative ideas and new
technology.**



**MY
PIONEERING**



OUR ACHIEVEMENT

HOCHTIEF sets itself apart with superior technological prowess coupled with its employees' experience and innovative potential. In our projects, we employ state-of-the-art technology and develop unique solutions—to deliver one-of-a-kind innovations worldwide.

Segment Report

HOCHTIEF Americas Division

For further information about the company, please see www.turnerconstruction.com and www.flatironcorp.com.

The companies included in the HOCHTIEF Americas division recorded numerous successes during the reporting period in our six sustainability focus areas. Turner, for instance—our subsidiary specializing in building construction—was again recognized as a leader in the US green building segment. Flatiron, our civil engineering subsidiary, was among Canada's top employers in 2012. And finally, our cooperation with the charitable organization "Bridges to Prosperity" saw further successes with the construction of three pedestrian bridges in Nicaragua.

Focus area 1: Sustainable products and services

Turner: Market leader in green building

Turner, HOCHTIEF's US subsidiary, again achieved the top spot in the green building market segment in the annual rankings of industry publication Engineering News-Record (ENR) for the fourth time in a row in 2012. Turner was also ranked No. 1 in sustainable building by "Building Design and Construction" magazine for the fifth time. By the end of 2012, Turner had either completed or begun implementation of a total of 576 buildings certified in accordance with the LEED* standard or registered for certification. In addition, the company employs 1,387 LEED Accredited Professionals—auditors trained for certification. This is more than any other construction company in the world. (You will find more on seals of quality for sustainable building in the article starting on page 10.)

*LEED = Leadership in Energy and Environmental Design

 www.usgbc.org

In July 2012, the U.S. Green Building Council (USGBC) awarded the Gold LEED certificate to the Columbia University Northwest Corner Building built by Turner in New York. The 14-story educational facility contains a lecture hall, classrooms and meeting rooms, and a café. An abundance of natural light and the use of regional, recyclable construction materials along with energy-efficient, resource-conserving building technology make a key contribution to the building's pleasant atmosphere and small environmental footprint. In addition, Turner recycled more than 2,000 tons of construction waste during the building phase. Added to this was a special engineering challenge: Much of the building was to be constructed on top of a sports hall.

This required special measures from Turner in terms of structural design and safety, for which the company was able to contribute the knowledge it had amassed in other challenging projects of this nature.

Highly efficient building supply installations were also the main factor in awarding Gold LEED certification to the Fort Belvoir Community Hospital in the state of Virginia in July 2012. Thanks to the design of the approximately 110,000 m² building, it consumes nearly 30 percent less energy than conventional hospitals. Moreover, water consumption is reduced by collecting rainwater to provide a natural water supply.


Another Gold LEED project from Turner is the Helen DeVos Children's Hospital in Grand Rapids, Michigan, which received certification in April 2012. Two of the factors leading to the new 14-story hospital building receiving the quality seal are its highly efficient building shell and its heat recovery system, both of which make a key contribution to the high energy efficiency of the property. The modern engineering installations ensure that water use is very low. The glass facade lets in abundant daylight, which has a positive impact on patients' recovery. The building was additionally given the accolade "Best Healthcare Project" for 2011 by ENR.

"Net zero energy" buildings take things one step further. These latest-generation green buildings are designed to not utilize more energy than they produce themselves by means of photovoltaics installations, geothermal pumps, and wind energy systems. In April 2012, the USGBC South Florida honored the progressive concept of Turner's "TD Bank Cypress Creek" project by conferring the "Outstanding LEED New Construction" award. The Platinum LEED-certified office property in Fort Lauderdale uses a solar-powered system to produce more than 100,000 kilowatt-hours of electricity each year, even though it only uses approximately 97,000 kilowatt-hours.



Built by our US subsidiary and inaugurated in August 2012, the Colonel Smith Middle School in Fort Huachuca, Arizona is the first net-zero-energy building in the state. The school combines photovoltaic systems and wind turbines to generate energy. On the consumption side, resource-efficient building engineering ensures that less energy is used than is generated. Water, for instance, is heated via solar panels. In addition, the project combines the highest standards in sustainable building with an innovative use of space founded on a project-based learning model: The approximately 350 sixth to eighth graders enjoy flexible common work spaces in their new school and are also able to use the outside areas for studying. The design and orientation of the building are such that the rooms receive the maximum possible natural light at all times, which is said to have a positive impact on the learning environment and, according to studies, on the students' achievement levels.

Sustainable transportation infrastructure

The US "Greenroads Foundation,"  of which our US civil engineering subsidiary Flatiron is a member, develops sustainability initiatives for transportation infrastructure projects. The foundation has its own certification system to enable sustainability in this construction segment to be measured and compared. The system can be applied to new construction as well as refurbishment and revitalization projects and extends to streets and bridges. A project must fulfill a total of eleven fundamental factors to be given the "Green Road" designation, including materials and resources used, construction methods, and road surface.



The entrance to Colonel Smith Middle School in Arizona: With this green building, Turner created an eco-friendly learning environment (picture left).

Working in view of the Golden Gate Bridge in San Francisco: HOCHTIEF and Flatiron built a new approach, dubbed the Presidio Parkway, to the world-famous bridge.

One Greenroads project currently underway with HOCHTIEF participation is the Presidio Parkway in San Francisco, the new 2.5-kilometer-long south accessway to the Golden Gate Bridge. The consortium led by HOCHTIEF PPP Solutions North America will build, operate, and partially finance the stretch of road as part of a public-private partnership. Flatiron will carry out the construction work in its capacity as design-build lead. The current accessway built in the 1930s no longer meets modern traffic requirements and is seismically unsafe. Upon its completion in 2015, the Presidio Parkway will improve traffic connections to the surrounding areas as well as the general situation at this key traffic junction, along with reducing the impact of traffic on the environment. The project also includes landscaping, as well as improving pedestrian and bicycle paths as supporting measures.

The traffic authority of the state of New York also aims to expand and improve its transportation infrastructure in the most environmentally friendly manner possible. The "GreenLITES" environmental certification program is one of the programs developed in this context. In April 2012, the Lake Champlain Bridge built by Flatiron received the Evergreen award, which is the public authority's highest accolade. The bridge is the main connection between the states of New York and Vermont and on both sides crosses areas that are highly sensitive in terms of their historical and cultural heritage as well as their ecology.

 www.greenroads.org

Focus on the environment: In its expansion and conversion work on the Calavera dam, Flatiron is deploying an end-to-end package of environmental protection measures. This is also a topic of interest for the young, up-and-coming engineers visiting the site as part of Flatiron's Build-A-Bridge program.



Focus area 2: Active climate protection

Internal climate protection measures

Turner is committed to contributing to climate protection in various ways in its daily business activities. During the reporting period, the HOCHTIEF subsidiary succeeded in further improving the environmental life cycle assessment of its office locations by means of its "Green Zone" program launched in 2011, which takes into consideration comfort and environmental quality, recycling and waste disposal, water consumption, energy and indoor air quality, as well as innovation and design. A total of 280 Turner offices and jobsite locations took part in the 2012 survey, with 118 meeting the necessary requirements for certification as a Green Zone. The program fulfills several functions at once: The checklist is used to assess the status quo at the locations and provide ideas for future measures. Above all, the internal certification motivates employees to implement improvements in the area of climate protection in their day-to-day business activities.

Another method used to improve climate protection in the company is the interactive energy displays installed by Turner in many of its offices. The displays indicate precisely how much electricity and heat is being used at the location.

In the reporting period, our subsidiary Flatiron received the first Platinum certification ever awarded by the "Association of Equipment Management Professionals" for the company's environmentally friendly equipment fleet. Platinum certification is the highest of the four certification levels. Prior to receiving the certification, Flatiron had invested in new construction machinery and equipment that use less fuel and have lower emissions.

Focus area 3: Resource protection

Back in 2008, Flatiron developed a minimally invasive bridge construction process. The process significantly reduces the environmental impact of major infrastructure projects since the structure is erected using a type of assembly-line procedure, eliminating the need for heavy-duty construction vehicles. In the fall of 2011, Flatiron received an environmental award from the Canadian "Alberta Roadbuilders and Heavy Construction Association" for implementation of an environmentally friendly construction method in building the Athabasca River Bridge project in Canada such that a fish biotope and breeding grounds on the river were spared.

During the reporting period, Michael Deane, Vice President and Chief Sustainability Officer of Turner, received a "Recycler of the Year" award from the Construction Materials Association to recognize his achievement in developing an online program used by Turner to collect and evaluate data on waste disposal and recycling for construction and demolition projects. The application generates data on several



Long-term commitment: With the Turner School of Construction Management, our American subsidiary Turner offers targeted support for companies run by women or ethnic minorities. Pictured here are the graduates of one such seminar.

hundred projects each month. In 2012, Turner recycled some 529,540 metric tons of construction waste which corresponds to a recycling rate of 93.6 percent.

Since the end of 2011, Flatiron has been relocating and upgrading the Calavera dam, which provides drinking water to 2.5 million people in the San Francisco area. The old reservoir built in 1925 has only been operated at 40 percent capacity since it was classified as seismically unsafe in 2001. The work has been combined with a comprehensive environmental protection program. Nearly 5.5 million cubic meters of rock and soil have been moved in the course of the complex construction project, which generates natural asbestos fumes. To prevent damage to the health of workers and nearby residents and enable any necessary countermeasures to be taken, equipment has been installed on site to check the air quality and the concentration of the asbestos fumes. In order to protect the aquatic fauna, fish passages were also created to allow the fish to safely overcome the obstacle of the dam as they migrate. Moreover, when diverting water into the Alameda River in the future, it will be possible to match the temperature and the flow speed to the cycles and requirements of the native fish species.

Focus area 4: Attractive working environment

Award for high workplace attractiveness

The companies belonging to the HOCHTIEF Americas division are attractive and popular employers in the USA and Canada, as indicated by numerous studies conducted among various stakeholder groups.

Turner was ranked among the top 100 most popular US employers in the reporting period in the "Ideal Employer" study conducted by Universum Communications. The study surveyed more than 60,000 students nearing graduation. Turner was also recognized in the area of diversity in 2012. For the fourth year in a row, business owners named the HOCHTIEF subsidiary one of the top 50 organizations for multicultural business opportunities.

According to a survey, employees at Turner have a strong sense of loyalty to the company, and gave high favorability ratings for a range of topics including career development and benefit programs.

In 2012, Flatiron was voted one of the 50 best large employers in the country by the "Great Place to Work Institute Canada." The ranking was based on a survey of Flatiron's own employees and included some 60 factors as well as a detailed examination of corporate culture, personnel policy, and human resources operations. Eighty-two percent of employees said Flatiron was a "great place to work." A total of 49,000 employees from more than 230 companies in Canada took part in the study.



Support that's right on target: With the Build-A-Bridge program, Flatiron awards scholarships and paid internships to high school students interested in pursuing engineering careers.



Recruiting and personnel development

We draw on our employees' high satisfaction levels in our recruiting process. Many open positions can be filled by means of our "Employees Recruit Employees" initiative.

To win new employees, HOCHTIEF's US subsidiaries have established successful internship and early talent management programs. Turner alone provided internships to more than 300 students during the reporting period. The best among them have very good chances of being hired by the company after graduating. Flatiron subsequently hires some 70 percent of its interns. More than 90 percent of them are still working there. For young engineers, we offer a job rotation program that allows them to quickly gather experience in all core areas of the construction process and develop their personal strengths.

A comprehensive training and continuing education program is available to employees at Turner University, ranging from communication training and health-related courses to technical seminars. Our training programs are meeting with ever greater interest outside the company as well, with more than 7,500 external students registered.

Flatiron's Construction University offers a choice of around 150 different seminars, either as online or video presentations or on-site/on-the-job training courses. Employees wishing to continue their education externally—for instance, by going to college part-time—receive financial support from Flatiron.

Health protection

In the US health system, it is especially important for employers to take an active part in healthcare and health prevention for their employees. The HOCHTIEF subsidiaries have initiated various programs in this regard. Most of them involve prevention, such as free check-ups and flu shots for employees and their families.

Flatiron, for example, makes a contribution to health by holding health fairs every year where employees can take advantage of biometric health screening. The results are confidential, but Flatiron benefits from the aggregated health data, which it can use to further improve its programs. The HOCHTIEF subsidiary promotes good nutrition and fitness by holding a company-wide sports competition. Employees compete in teams for the highest number of hours of sports activities undertaken. More than 200 people took part in the "Flatiron Fitness Challenge" in 2012.

Flatiron construction sites include targeted fitness programs, such as a morning "stretch&flex" program. These exercises help to avoid injuries and increase the construction workers' awareness of safe behavior.

Increasingly, a healthy work-life balance plays a vital role in preventing work-related and psychological illnesses. Turner sends out a regular newsletter on this subject and also grants special vacation days, such as on the birthdays of employees' children, in order to foster a good balance between private and working life.



Focus on safety: For Turner's annual Safety Stand Down, workers interrupted their activities in Madison Square Garden to talk about occupational safety (picture left).

Simulating accident prevention: Virtual construction generates three-dimensional models that also help improve safety planning at construction sites.

Occupational safety

HOCHTIEF's US subsidiaries are regarded as exemplary in their sector in the field of occupational safety. In the period under review, they again received numerous certifications in addition to national and regional awards.

The Turner offices received more than 20 safety awards in the reporting period alone. These included several awards from industry body "Associated General Contractors of America" (AGC), such as the "Construction Safety Excellence Award" conferred in the category of largest construction company. Recognition is generally given for projects implemented with no accident-related downtime thanks to successful safety programs.

In March 2012, Flatiron was honored for its achievement, initiatives, and programs in the field of work safety with the "AGC First Place Construction Safety Excellence Award"—the top safety award for US construction companies. Based on a detailed examination, the jury evaluated Flatiron's management commitment to occupational safety and health protection as well as the involvement of and training provided for employees, along with risk assessment and control processes at the construction sites.

Flatiron reached a major safety milestone as 2012 drew to a close: a year without a lost-time safety incident. Employees worked more than 4.1 million man-hours and had zero lost-time incidents. In Canada, Flatiron employees have worked nearly four years in a

row (2009 to 2012) and over 3.2 million man-hours straight without a lost-time incident.

During the period under review, the safety management system of Flatiron was also certified in accordance with the international OSHA* 18001:2007 standard. Turner is in the process to obtain this certification. In order to familiarize employees with the standard's requirements, at least 90 percent of Turner employees, for instance, are required to complete a comprehensive, web-based OSHA training course comprising 30 course hours.

Turner is similarly setting new standards with its virtual planning and construction models. "Building Information Modeling" (BIM) is used to simulate designs as well as building and operational processes long before the start of construction. This enables risks to be identified and managed at an early stage and workflows to be organized more efficiently. Turner is one of the market leaders in virtual construction. In 2012, the New York building authorities for the first time approved and used the digital 3D site safety plans generated by Turner using BIM for two construction sites on the campus of New York University. This shortened the approval process, allowing the construction site to be set up much more quickly.

To sensitize employees to the topic of work safety, HOCHTIEF's US companies are initiating yearly programs and prevention campaigns based on observations made in the preceding year as well as new developments in regulations and standards. For example,



*OSHA = Occupational Safety and Health Administration

Peak performance: Three Flatiron employees climbed the 4,322-meter peak of Mount Shasta in the Cascade Mountains. Their 8.5-hour trek took them through ice and snow (picture left).

Hearts and Hammers: Turner has already implemented a large number of volunteer projects to help those in need—for instance, volunteers renovated a house.



Turner holds an annual occupational safety day called “Annual Safety Stand Down.” The latest event in September 2012 was entitled “Lean Construction and Safety Management: Materials Management for a Safe Working Environment.” On one day, employees and subcontractors at Turner construction sites put their work aside to participate in safety training and discussions. Lean management is a process optimization approach aimed, for example, at harmonizing processes and minimizing wastage. The presentations at the 2012 Occupational Safety Day primarily centered on how to use lean methods to improve safety management.

One of Turner’s initiatives is the “five-worker lunch” where, each month, five employees meet with a senior management representative to discuss safety topics.

This close-knit involvement and opportunity to shape decisions plays a major role in motivating employees to practice work safety in their daily lives.

Turner also changed the work safety evaluation criteria for the employee reward system in the reporting period. Instead of having points taken off for mistakes, employees now earn bonus points for correct behavior.

Focus area 5: Corporate citizenship

In line with the focus of HOCHTIEF’s sponsorship activities, our US subsidiaries are particularly active in fostering education and view their actions in light of their role as corporate citizens.

Turner, for instance, has for many years been working to promote companies headed by women and minorities. The company’s own Turner School of Construction Management plays a key role in this. It offers women and minorities free courses on construction- and business-related topics such as estimation, procurement, logistics, financing, safety, marketing, and business development. The support initiative, which has been in existence since 1969, is today offered in 31 cities with Turner locations and has more than 1,000 participating companies. In 2011/2012, Turner awarded contracts in excess of USD 1 billion to these firms.



Stepping up to the plate for a good cause: Turner organizes a softball tournament every year. The winning teams decide where the donations will go (picture left).

All together now: Flatiron, Turner, and E.E. Cruz employees celebrate the opening of a bridge they built over the Jucuapa River in Nicaragua for Bridges to Prosperity (B2P). The bridge will save lives during the rainy season.

A joint sponsorship activity with the HOCHTIEF Americas division is the cooperation with non-profit organization Bridges to Prosperity (B2P), initiated by Flatiron in 2009. Since that time, Flatiron employees have been building pedestrian bridges in impassable, remote regions of South and Central America, and since 2012 in joint teams with Turner and E.E. Cruz. In 2012, the teams built three bridges in Nicaragua. Flatiron is particularly closely linked with the organization. Flatiron plans and draws up the bridge designs for and together with B2P before they are implemented on site. (You will find more on the HOCHTIEF Group's partnership with B2P in the article starting on page 34.)

As is traditional in the US, HOCHTIEF's subsidiaries are also highly committed to charitable activities. They donate to health initiatives as well as take part in numerous volunteer activities and fundraising campaigns, for instance, to help the socially disadvantaged.

During the reporting period, for example, employees from Turner's office in Washington, D.C. repaired the house of a retiree who could not afford to do so himself. Volunteers from Turner's office in Arizona turned an abandoned lot into a public park. This especially benefited residents of a home for low-income seniors.

At the 24th Turner Annual Charity Softball Tournament, 300 employees played for a donation amount of EUR 28,000. The winning team was allowed to decide to which charitable organization the money would go.

For the annual "Giving Campaign," Flatiron's regional business units choose local projects to sponsor. The projects are then supported with donations of time, money, and various items. In 2011 and 2012, employees together donated several ten thousands of dollars, put in more than 500 hours of volunteer time, and collected hundreds of toys and articles of clothing as well as around 500 kilos of food.

 www.bridgestoprospersity.org

HOCHTIEF Asia Pacific Division

You can find more information about the company at www.leighton.com.au.

The HOCHTIEF Asia Pacific division comprises the Leighton Group of companies operating in Australia, Asia, and the Middle East. There are numerous sustainability-related highlights to report for 2011 and 2012. As the world's largest contract miner, Leighton Group was heavily involved in implementing environmental and energy efficiency measures for mining projects undertaken by Leighton Group subsidiaries. The company also again excelled in the field of occupational safety, sustaining the highest standards and posting outstanding achievements in this arena. Leighton is committed to diversity within the company, promoting in particular the progress of women and Indigenous Australians.

Focus area 1: Sustainable products and services

The Leighton Group, too, is active in the field of green building and once again completed a number of environmentally friendly buildings in accordance with sustainability standards during the course of the reporting period. (You can read more about green building in the article starting on page 10.)

One example is the "King George Central Office Tower" in Brisbane, which was completed in November 2012. This 36-story office and commercial property is expected to be crowned the "healthiest building in Queensland." In order to actively promote the health of the building's users and to encourage them, for example, to become more mobile, bicycle stands have been provided and user-friendly stairways erected for access to all levels. A cafeteria offering healthy food options has also been integrated. Thanks to its concept, the "King George" became the first property in Australia to be supported by the renowned "Heart Foundation." The building has also already received six stars under the Australian "Green Star" approval scheme for sustainable building promoted by the "Green Building Council of Australia."  It likewise expects to be recognized by the "National Australian Built Environment Rating System" (NABERS) in the categories "Energy" and "Water."

August 2012 saw the completion of the "Eclipse Tower" in Parramatta near Sydney. With 19 floors over a height of 88 meters, it is the tallest office block in the area. The Eclipse Tower has been registered for certification within the "Green Star" rating scheme, with good prospects for a five-star award. A five-star NABERS energy rating is also on the horizon. Among the sustainability measures implemented are a 75,000 liter rainwater tank serving the bathroom flush systems, and an intelligent glass facade capable of controlling the impinging sunlight so that natural light is effectively exploited without

causing the rooms to heat up. The building fabric comprises either renewable raw materials or a high percentage of recycled substances.

Completed back in 2010, the regional branch office of Leighton Group subsidiary Leighton Contractors in Brisbane was also honored in the period under review. Developed by Leighton Properties, this office building received six green stars and the "2011 National Urban Taskforce Development of the Year" award, the project coming top in competition with 35 other high-caliber real estate developments in Australia. The awarding jury considered not only the economic success of each participating project but also its benefit to the community, user satisfaction, and its environmental friendliness. In the case of the winner, contributors to this latter aspect include the use of recycled building materials, an efficient sanitation system, and an irrigation arrangement for the green areas that uses captured rainwater. A combined heat and power (CHP) generation system further ensures savings of more than 2,200 metric tons of CO₂ per year.

Since 2012, Leighton Contractors has been engaged in the growing market for electric cars through its subsidiary Visionstream. This participation involved purchasing parts of a commercial organization that has been operating charging stations for electric vehicles in Australia and New Zealand since 2008. Leighton is thus contributing to the expansion of a sustainable, climate-friendly transportation infrastructure.

Focus area 2: Active climate protection

Addressing climate protection from within

As the reality of climate change continues to drive global transformation toward a more resource-efficient and low-carbon economy, many governments and regulators around the world have sought to address these issues



Intelligent and elegant: The glass facade of the Eclipse Tower in Parramatta responds to sunlight so as to keep the rooms from overheating. That helps the building save a lot of energy (picture left).

Saving claws: On a road building project, Thiess works among other things with a hybrid excavator. Equipment like this generates average fuel savings of 30 percent.

through mechanisms such as usage restrictions, taxes and other market-based pricing mechanisms, adding pressure to business to act. The Leighton Group, as large energy users and operating in some tight regulatory environments, such as Australia where a price on carbon was introduced July 1, 2012, recognize the need to develop and implement cleantech and sustainability strategies to mitigate the risks and seize the opportunities of climate change and associated regulations.

One area where the Leighton Group is focused is optimizing fuel consumption and emissions released by mining vehicles and equipment fleets. To this end, the Leighton Group works closely with the Australian government. In the case of the “Analyses of Diesel Use for Mine Haul and Transport Operations” study, for instance, this cooperation was with the Department of Resources, Energy and Tourism. Leighton Contractors’ contribution was to develop the “Best Truck Ratio” model, which serves as a benchmark for assessing the energy consumption of all trucks in operation on a mine site. Actual energy use is then compared with the theoretical best performance for those machines. As a result, this tool serves as a yardstick not only for a fleet’s efficiency but also the remaining margin for improvement. Since the model relies on a ratio, a single benchmark can be applied to different mining projects.

With a view to achieving a better energy balance, Leighton Group subsidiary Thiess has, among other things, introduced to its projects trucks with an optimized load bed shape and size so as to reduce the quantity of vehicles required and the number of trips undertaken. As part

of the “Hunter Expressway Alliance” road building project in the Australian state of New South Wales, Thiess tested hybrid excavators for the first time. The aim was to ascertain whether hybrids were in fact lighter on fuel by directly comparing them and conventional high-performance excavators when performing the same work. The outcome? While keeping pace with the standard excavators’ productivity rates, the hybrids burned on average eleven liters of gasoline per hour—30 percent less than their counterparts. During the trial phase of the project alone, the hybrids saved roughly 4,500 liters of fuel and ten metric tons of CO₂.

Expanding sustainable energy infrastructure

The Leighton Group is committed to the expansion of energy infrastructure that will harness renewable forms of energy. Leighton Contractors made good on this commitment during the period under review as a member of a consortium charged with the construction of the largest onshore wind farm in the southern hemisphere. Located some 250 kilometers west of Melbourne, the Macarthur Wind Farm will be equipped with 140 wind turbines capable of generating up to 420 megawatts of electricity annually—enough to power 220,000 average households. The first wind turbines were connected to the power grid in fall 2012. Standing 83 meters high, these very tall towers contain turbines designed specifically for local wind conditions. As a result, they are able to generate up to three times more electricity than older models found in the region.

Since mid-2012, Leighton Group subsidiary Leighton Asia, India and Offshore (LAIO) has been erecting a total

Renewable energy for Mongolia: Leighton built the country's first wind farm (picture left).

Sensitive construction: Leighton built the Onkaparinga Valley Bridge using a long span technique for minimum encroachment on the wetland nature reserve.



of 31 wind turbines as part of the Salkhit Wind Farm in Mongolia. Set among the mountains some 70 kilometers south of the capital Ulan Bator and 700 kilometers from the Chinese border, this is the first facility of its kind in the country. LAIO is responsible for transporting and erecting the wind turbines, building the necessary roadways and electrical infrastructure on the site as well as laying a roughly twelve kilometer long overland cable to the nearest substation. On completion, the wind farm will generate 50 megawatts, which translates into five percent of Mongolia's energy needs. What's more, the facility is expected to reduce the country's CO₂ emissions by 200,000 metric tons a year. Mongolia has ambitious climate protection goals and aims to supply 25 percent of its energy requirements from renewable sources by 2020.

Focus area 3: Resource protection

Notably the major infrastructure and mining projects on the Leighton Group's books frequently leave a considerable environmental footprint and entail the consumption of resources. Water and site rehabilitation are consequently two key aspects of environmental and resource protection pursued by the HOCHTIEF Asia Pacific division.

Wherever possible, the Leighton Group implements environmentally sensitive construction methods—such as when building a bridge over a protected and ecologically fragile area. One example of this philosophy in practice is the "Seaford Rail Project," which was completed in late 2012 and links Adelaide with its burgeoning south-



ern suburbs. The 1.2-kilometer elevated rail viaduct over the Onkaparinga Valley features exceptionally long spans of over 50 meters between the piers. Thanks to the environment-friendly long span technique, which involves the incremental erection of each bridge segment, the construction footprint on the wetlands was minimized because, for example, less material needed to be delivered and stored on site. Aside from the sensitive construction methods, the project itself will have a positive impact on the environment because the rail link will significantly diminish road traffic in the region and consequently reduce air as well as noise pollution.

Commitment to watercourse conservation and water treatment

Due not least to the general scarceness of water in many parts of Australia, water conservation carries a high priority as part of the environmental management activities of our Australian subsidiary Leighton and its operational units. The Leighton Group therefore attaches great importance to ensuring that water is used efficiently in its projects. It also manages water treatment projects and is involved in the cleaning of contaminated water resources.

In order to keep the use of drinking water for site works to a minimum, Thiess is using a mixture of treated recycled water and harvested rainwater from various local sources for dust suppression and road compaction during construction of the M80 Ring Road in Melbourne. The effect: By the end of 2011, only three percent of the water used on site was drinking water.



Commissioned at the end of 2012, the Victorian Desalination Plant is the largest and most state-of-the-art seawater desalination plant in Australia. At full capacity, it produces 450,000 cubic meters of drinking water a day, equivalent to 150 billion liters per year, enough to supply Melbourne with water for a year in the event of no rain. Built by Thiess as part of a joint venture, the plant is powered entirely by renewable energy, for which purpose new wind parks have been built in the vicinity. In addition, a coastal park with wet biotopes, marshes, and wooded areas has been established around the plant in order to provide a new habitat for local fauna. This is one of the largest ecological restoration projects in the history of the state of Victoria.

In Hong Kong, Leighton Group subsidiaries John Holland and LAIO, working within a joint venture involving a further partner, designed and are in the process of building the world's largest sewage sludge incineration plant of its type. From late 2013, this facility will be recycling around 2,000 metric tons of sewage sludge per day, generating its own energy in the process. The project also includes an environment information center, cultivated gardens, and a habitat for water fowl.

Among the projects involving the restoration of natural surroundings was the revitalization of the Hunter River, completed in October 2011. After more than 70 years of effluent from the steel industry, the banks of this river and its estuary in the state of New South Wales were heavily contaminated. Over a period of two years, Thiess Services removed, cleaned, and disposed of around 800,000 cubic meters of the contaminated sediment.



The Victorian Desalination Plant: Thanks to its ample roof vegetation, the state-of-the-art seawater desalination plant fits in well with its surroundings (picture left).

Like a wave: In Hong Kong, Leighton built the largest sewage sludge incineration plant of its kind. Its design sets new aesthetic benchmarks.

Throughout the entire process, the water quality of the river was strictly monitored, with 200,000 measurements being carried out in all. This flagship project was recognized with the "United Nations Association of Australia World Environment Day 2011 Award." The area can now be commercially utilized—for example, for the construction of homes.

Another major undertaking involves the restoration of the platypus habitat in Sydney, with Thiess Services participating in Phase 2 of the project. Over the years, the area has been home to a whaling station, a gasworks, a weapons factory, and, finally, a naval base, with contamination levels reflecting these various usages. The central harbor location requires special protective measures to safeguard local residents. During the earthworks, for example, a gigantic marquee is to be placed over the site in order to prevent, among other things, unpleasant odors from spreading. Before the air is released, it will also be filtered by a special system. The contaminated water is to be treated in a reprocessing plant. Throughout the entire project, real-time monitoring systems are to be used to keep tabs on the liberated gases, noise, and vibrations.

Thiess is also committed to promoting water conservation beyond its own project work. This Leighton Group company is both main sponsor and eponym of the Thiess International Riverprize, first introduced in 1999 and now conferred by a non-profit foundation. The award recognizes international projects aimed at protecting and conserving rivers, and in 2012 it went to the USA's "Willamette River Initiative" in Oregon. These ef-

Happy winners: The 2012 Thiess International Riverprize went to a water protection project in the US. The recipients are pictured here accepting their symbolic check.

Green mining: The Thiess team are also carrying out renaturation work at the Burton Coal Mine.



forts were able to bring about quantifiable improvements for the river and its surroundings, which had become contaminated notably by chemical substances, as well as suffering from high water temperatures and a restricted flow channel. Today, the watercourse is cleaner than it was 50 years ago. Meanwhile, the “River Management Young Achievers Award” sponsored by Thiess Services was conferred in 2012 to a young researcher from the University of New South Wales for her investigations into water ecosystems.

Renaturation in mining projects

With its Australian subsidiary Leighton, HOCHTIEF is the largest contract miner in the world. Working on behalf of various clients, the Leighton Group extracts millions of tons of raw materials in Australia and Asia every year. Particular emphasis is placed on ensuring efficient and environmentally sound excavation techniques. Regular inspections into the state of the mines and the extraction processes used are therefore standard practice. Numerous mining contracts awarded to the Leighton Group also include the renaturation of the area (see also the article starting on page 22).

For example, the Burton Coal Mine in Queensland, at which Thiess has been operating since 1996, is to be renaturred in a five-year program. Implemented on the basis of detailed execution and control plans, the requisite measures will encompass landscaping, drainage, the laying of topsoil, and planting.

Focus area 4: Attractive working environment

Diversity plays a key role in the Leighton Group's corporate culture and human resources management. A

number of its development programs are geared to women and Indigenous Australians, with the aim of sparking their interest in the industry and providing them with qualifications.

Targeting the promotion of diversity

In line with its commitment to actively promoting diversity in its workforce throughout the entire Leighton Group, Leighton has set itself the target of increasing female representation in executive and senior management positions at Leighton Holdings from 25 percent in December 2012 to 40 percent by 2016, and appointing at least two female Directors to the Board by 2016. A range of initiatives have been launched to help women employees qualify for management positions, such as the “Great Leaders are Made” and “Women in Leadership” programs, preparing women for senior management roles. The “Advanced Management Program” is aimed at women with experience in leadership positions.

Also in 2012, a remuneration review focusing on gender equality was initiated. This will be pursued in 2013.

Mining is a field which traditionally tends to employ more men—but, as is the case with many other areas in the construction industry, mining is also suffering from a shortage of specialist staff. To counter this, Leighton has initiated various programs to actively recruit women for jobs in mining and prepare them for their duties with the necessary training measures. One example is the “Indigenous Women in Hard Hats” program, a partnership with the government of the state of Queensland. The program aims to recruit Indigenous women for jobs



at the Burton Coal Mine. With training in a wide range of areas, the women receive professional qualifications and practice skills such as operating heavy mining machinery. The HOCHTIEF subsidiary, in cooperation with the “Queensland Resources Council,” awards scholarships to support female engineering students. Other measures, such as the “Enginhearing Recruitment Program,” aim to attract female employees by helping them balance work, family, and study commitments.

Sometimes promoting gender equality means recognizing and responding to different needs. For instance, Thiess provides a broad range of work clothing tailored specifically for women. Because these items fit well, they enhance safety.

Leighton is a founder member of “Supply Nation,”  formerly known as the “Australian Indigenous Minority Supplier Council.” The organization supports and certifies Indigenous businesses and advocates on their behalf to foster their cooperation with other Australian companies and government agencies. In 2012, Leighton completed contracts worth a total of a good EUR 480,000 with Supply Nation-certified businesses.

Training young people

The Leighton Group has established a variety of programs designed to attract skilled young people and offer them entry-level opportunities and career prospects. Thiess, for instance, has launched a training program in partnership with “MEGT Australian Apprenticeships Centre” to equip apprentices and trainees with skills in various areas and job categories. Its goals are to

broaden participants’ horizons and prepare them for more diverse responsibilities.

Another Thiess initiative celebrated its 20th anniversary during the period under review: In 1992, the Leighton subsidiary launched an apprenticeship training program in Indonesia, which started out with eight participants. Now there are 420 trainees in the four-year program, which is based on Australian standards and was recognized as the best such program in the country as early as 2008. It trains heavy-duty mechanics, automotive electronics engineers, and welders, among other professions. Thiess invests some EUR 1.5 million in this program each year.

Health protection and occupational safety

The Leighton Group sets the highest standards in health protection and occupational safety. Its frequency of work accidents in Australia in 2012 equates to 1.61 notifiable incidents per million hours worked, with the figure in Asia at 0.64. These low incidence rates are attributable to a comprehensive safety management approach, with unusual methods and measures occasionally also part of the picture.

Back in 2008 in Indonesia, for example, Thiess established an independent network of radio stations providing major mines with their own individual programming. Health protection and occupational safety messages make up a large part of the informative output provided by the broadcasters, with relevant topics being dealt with on the basis of role playing, reports, and features involving mine workers, their families, or outside guests. The music mix is aligned in particular to helping combat worker fatigue in the night shifts. Between 2009 and 2012, the incidence rate of notifiable accidents at sites served by a radio station fell from 1.9 to 0.6.

The Sangatta mine is one of these sites. During the reporting period it posted a new safety record with an accident-free worktime total of over 8.6 million hours. The mine was also recognized in the national health protection and occupational safety awards. The Governor of the Indonesian region East Kalimantan and the Bupati of East Kutai Timur presented the prizes.

Safely through the day: In Indonesia, Thiess broadcasts its own radio program as a way of enhancing occupational safety in the mines. Lively music prevents fatigue.

 www.supplynation.org.au

Over 2.7 million accident-free work hours: Employees accepting the Safety Award for the Toka Tindung Gold Mine in Indonesia (picture left).

17 million accident-free working hours: The Doha City Centre in Qatar is a flagship project for occupational safety in the Habtoor Leighton Group.



The companies of the HOCHTIEF Asia Pacific division were the recipients of numerous safety awards during the period under review, with 15 being conferred in 2012 alone. Some examples: The Mining Division of Leighton Contractors received the “CME Safety Award” for the development of a remote-controlled camera for monitoring a hazardous loading process, thus eliminating the need for a worker to be present in the danger zone.

The “New Future Alliance” (NFA), comprising Leighton Contractors and three other partners, received an Excellence Award in the category “Best Solution of an OHS Workplace Risk” from the “National Safety Council of Australia,” similarly in 2012. The NFA is part of a major home construction and infrastructure program for Indigenous Australians in Northern Territory, at the same time providing jobs for members of their community. However, many Indigenous Australians have little or no training, particularly with respect to health protection and occupational safety. In order to improve this situation, a user-friendly system was developed and introduced in which Indigenous Australians of all age groups could be directly involved.

In the Philippines, Leighton Contractors operating the Masbate gold mine celebrated three years without a single incident of lost time through accidents at the end of 2012. Located 350 kilometers south of Manila, the mine produces one-sixth of the gold extracted in the Philippines. In September 2012, the Toka Tindung gold mine received the “Best Award for Occupational Health and Safety Management” from the Indonesian minister responsible, having by then clocked up more than 2.7

million hours worked without a serious accident. And in November 2012, this project managed by Leighton Asia garnered two further safety accolades: the “Aditama Award” and the “Best of the Best Trophy,” the highest honor a contract miner can receive from the government.

At the end of 2011, the safety management of the joint venture company Habtoor Leighton Group in the Middle East adopted a new slogan: “Safety: We can’t live without it.” This was the winner of a competition of employee suggestions. And the measures implemented as part of the program have brought tangible success: By the end of 2011, the projects “Al Shaqab Equestrian Academy” and “Doha City Centre” in Qatar had remained accident-free for 15 and 17 million work hours respectively, while the Zayac University project in Abu Dhabi passed the 18 million hour mark. The safety program is based primarily on illustrative training concepts and instilling a high level of risk awareness among employees.

Focus area 5: Corporate citizenship

Leighton and its subsidiaries and associated companies find many ways to engage with the communities where they operate and the people with whom they interact. Their support ranges from employees getting involved personally and contributing their expertise, to financial and other donations. In addition, the Leighton Group also awards and sponsors prizes for selected initiatives and groups. In 2012, the Leighton Group spent over EUR 5.1 million on corporate citizenship activities, focusing on arts and culture, Indigenous Australians, and the environment. Leighton maintains long-



standing partnerships, geared to sustainable success, with various organizations as well as educational and cultural institutions—including “Landcare Australia,” for example, whose partnership with Leighton dates back to 1997. Landcare’s objective is to protect the continent’s natural and cultural resources.

In addition to various environmental projects, Leighton has also sponsored the “Leighton Indigenous Landcare Award” since 2010, conferred on projects that work to foster culturally sustainable land use and environmental protection. In 2012, it was awarded to the Bunya Mountains Murri Rangers and Bunya Mountains Elders Council, in recognition of activities such as a program that teaches children about the cultural significance of the Bunya Mountain National Park.

In line with its sponsorship focus, Leighton Group sponsorship in 2012 included scholarships, training, and vacation programs for young Indigenous Australians to the tune of a good EUR 590,000.

Additionally, there are a wealth of local initiatives in the communities where projects are underway, as well as numerous volunteer initiatives. Thiess, for example, donated roughly EUR 34,000 in 2012 to charitable causes in Hunter Valley, where the company has been operating for over 20 years. Thiess supported initiatives including a camp for children with cancer and a program to help disadvantaged teenagers.

The employees at various mining projects held fundraising drives for breast and prostate cancer patients.

This, in turn, motivated them to go for medical screenings themselves. Employees of Leighton Asia in Hong Kong volunteered to serve on beach clean-up crews and refurbished a facility for preschoolers with learning disabilities. In the communities near two projects in India, Leighton companies funded eye operations for 88 people suffering from cataracts. This disease is responsible for 51 percent of all cases of blindness worldwide. Over 250 more people received treatment for other eye ailments.

Focus area 6: Compliance

In August 2012, Leighton introduced its Group-wide “Code of Business Conduct.” Rooted in Leighton’s corporate governance system, this extends the already established Code of Ethics by outlining the standards of behavior expected of everyone in the Group. These standards stem from the company’s values of Discipline, Integrity, Safety, and Success. The code is divided into various sections including People and Safety, The Environment and The Community, Ethical Business Practices, Use of Leighton Group Assets and Resources, and Government, Media, and Investors. The Code of Business Conduct is not intended to subsume the individual corporate cultures of the operational entities, but rather enshrine them within a uniform framework. As the company continues to grow, it is increasingly important that a consistent set of principles and standards guides decision making, regardless of operating company or location.

United against cancer: Thiess employees raise awareness of the risk of prostate cancer in a colorful campaign geared to motivating people to seek regular preventive check-ups.

 www.landcareonline.com.au



HOCHTIEF Europe Division

For further information on the company, please go to www.hochtief-solutions.com.

 www.dgnb.de


The HOCHTIEF Europe division comprises the operational entities and units of the controlling company HOCHTIEF Solutions AG. Through a wide range of projects, measures, and initiatives, they helped implementing and further developing the HOCHTIEF Group's six thematic areas of sustainability in their daily work during the period under review. HOCHTIEF has thus become an established player in the marketplace for offshore wind energy. With its energy management expertise, moreover, it is able to play a key role in improving climate protection. For the first time from its European base, HOCHTIEF has become involved in a bridge construction project in Rwanda under the auspices of the non-profit organization "Bridges to Prosperity."

Focus area 1: Sustainable products and services

The business portfolio of HOCHTIEF Solutions and its subsidiaries in Europe comprises numerous sustainable products and services. These include "green building" and the refurbishment of existing buildings in line with prevailing environmental standards, and also energy and facility management services aligned to cutting CO₂ emissions. (For more information, please turn to the article starting on page 16.)

Numerous HOCHTIEF properties certified

The HOCHTIEF Europe division obtained numerous green building certifications for its projects in the course of the reporting period. Further projects meeting sustainability criteria are underway. One example is the "Aquatikon" in Zurich, which is currently being developed by HOCHTIEF Solutions according to the Swiss Minergie-P-eco standard and received LEED Platinum precertification. The planned measures aligned to environmental, resource, and climate protection in this office property are wide-ranging indeed. Almost 100 percent of the building materials are suitable for recycling. Various cutting-edge technologies are to be harnessed to ensure optimum energy efficiency in the building, including automatically darkening window panes that respond to sunlight, and thermal component activation. Utilizing the principle of evaporative cooling, so-called salines will be installed in the atrium. Fed with captured rainwater, these can not only ensure a consistently pleasant interior climate but also reduce—by nearly a quarter—the amount of external cooling energy required. Further contributors to exemplary energy efficiency in the Aquatikon are a photovoltaic system installed on the roof and a central storage facility that captures the waste heat from all the building's various internal systems. Some 70 percent of the energy needed can be produced on site in this way.

In Germany, several HOCHTIEF-constructed properties were awarded certificates by the DGNB  (German Sustainable Building Council). Developed by our real estate experts, the Essen headquarters of IT service provider AtoS garnered the DGNB's gold seal of approval in October 2012. The approximately 7,500-square-meter office building is both heated and cooled by a highly efficient, so-called "energy floor." The temperature and the sun protection systems are automatically adjusted and can also be individually regulated via web-based controls. The lighting system reacts to presence detectors, automatically shutting down when no one is in the vicinity.

The Hamburg office and commercial property "Metropolis Haus," completed in late 2011, received DGNB bronze certification. It has two atriums offering natural workplace lighting. A special highlight is the historic auditorium of the former Metropolis cinema which—restored to its former glory in line with a preservation order—was integrated into the new building.

The office buildings at Hamburg's Katharinenquartier, which is currently developed in an old school complex and scheduled for completion in fall 2013, received DGNB silver precertification. This mixed-use development comprising homes, offices, and retail premises has been designed by HOCHTIEF real estate developers and their partners so as to keep the existing trees and ensure unimpaired visibility of the St. Katharinenkirche church tower, which is subject to a conservation order.

Since October 2012, two other buildings developed, built, and used by HOCHTIEF are also proud bearers of silver certification: The HOCHTIEF office buildings in Berlin and Hamburg were honored for their compliance with various sustainability criteria. Site selection, internal air quality, and the quality of the materials used were also taken



Saline flow tree in the atrium of the Aquatikon, Zurich. The eye-catching design feature in the building's atrium will double up as a sustainable cooling system (picture left).

Well protected: HOCHTIEF experts refurbishing the Ruhr University in Bochum strip out contaminated material using our innovative SurFace cutting and surface treatment technology.

into account, supplementing the imperatives of low energy consumption and reduced life cycle costs. Exemplifying the sustainability credentials of the build, all rooms are temperature controlled via a concrete core activation system that performs both the heating and cooling functions.

In Berlin, the office building “Berlins Grosse Freiheit” constructed in line with the LEED* “Gold standard” was completed in early 2013. This commercial property also features concrete core activation for heating and cooling, while the flat roof is to be grassed and planted, further enhancing the energy balance of the building. The room lighting is provided by energy-saving luminaires with demand-based control via presence detectors and daylight sensors. Moreover, environmentally compatible, regional, and recoverable construction materials have been used, some of which were themselves from recycled stock. (For more information on green building, see the article starting on page 10.)

Sustainable research project

Meanwhile, we are also developing visions that go beyond the individual building. HOCHTIEF Solutions is involved in the development of sustainable urban districts as “Energy-Plus” projects, to which end it launched the research project “Plus-energy district Oberursel” in 2012. Together with the Technical University of Darmstadt, it aims to develop and test a mixed urban district concept capable of covering its energy needs from its own, regenerative sources, with the various buildings doubling up as energy producers, consumers, or storage facilities. With energy centralized in this way, surplus output could also be supplied to buildings adjacent to

the district complex. The German Federal Ministry of Economics and Technology is sponsoring the pilot project with a grant of EUR 1 million (see also page 73).

Sustainable refurbishment of existing buildings

Another important segment in this industry is refurbishing and upgrading aging properties. Such projects avoid the problem of sealing off green field surface, while also ensuring the conservation of resources. Measures geared to increasing energy efficiency are vital in such projects—for example, improving insulation or installing cutting-edge technical equipment—as is adapting old structural fabric to meet new requirements and standards. Building materials that are hazardous to health are also removed from old buildings and replaced by harmless, eco-friendly materials.

One example is the refurbishment project at the Ruhr University of Bochum. By 2013, HOCHTIEF Solutions will have completely gutted the engineering faculty’s building complex, erected in 1965, leaving only the shell as the framework for the new facilities. These are to be built and installed in line with the latest ecological standards. Eliminating hazardous materials, including PCB-laden paint, constitutes a particular challenge. Here we can rely on HOCHTIEF SurFace, a cutting and surface treatment technology developed by us with which the hazardous substances can be removed and disposed of safely, expertly, and correctly in environmental terms. The faculty’s students are also benefiting on the theory side, with experts from HOCHTIEF holding a series of seminars at the start of construction work to explain the refurbishment approach.

*LEED = Leadership in Energy and Environmental Design

Neoclassical splendor from 1913: In refurbishment projects like Neue Direktion Köln we combine historic charm with cutting-edge architecture (picture left).

Electric mobility in the fast lane: HOCHTIEF Solutions installed 1,000 charging stations at the premises of German car dealers for RWE Effizienz.



***BREEAM = Building Research Establishment Environmental Assessment Method**

Ensuring a sympathetic approach to buildings subject to preservation orders is also integral to the HOCHTIEF portfolio. In Warsaw's Mazowiecka Street, our Polish HOCHTIEF project developers are refurbishing a building that is partly protected by a conservation order. The historic facade has been restored to its original glory, including the balustrades, cornices, and window frames. The building work is being carried out in accordance with BREEAM* standards for sustainability. Named the Mazowiecka Building, the project was also a recipient of the "Excellent Award" as part of the "EuropaProperty CEE Green Building" awards scheme. Factors in the jury's decision included the introduction of solar energy as a part of the modernization remit, leading to reduced consumption of primary energy, plus measures to save water, and a general reduction of power consumption throughout the build.

In Cologne, Germany, HOCHTIEF real estate developers are to convert the old "Königliche Eisenbahndirektion" railway administrative building of 1913 into a state-of-the-art office property, Neue Direktion Köln. In the course of the dismantling work, historical furnishings and fittings such as floor tiles, marble claddings, and wrought iron railings are being removed for later re-installation in their original form. The neoclassical facade, subject of a preservation order, is also to be retained.

Sustainable services

Efficient construction logistics are also indispensable to meeting the requirements of the various environmental certification schemes. In the "Kö-Bogen" project involving the construction of a retail and office property in down-

town Düsseldorf, our aim is to achieve LEED Platinum certification. This requires, for instance, that 95 percent of the waste generated during the construction phase be recycled. HOCHTIEF subsidiary Streif Baulogistik is providing the necessary collection containers for the various types of waste, such as plastic sheeting and polystyrene, wood, paper, metal, steel, and general rubble, along with precise documentary evidence that the waste has indeed been correctly sorted and disposed of.

Electric cars offer enormous potential within the mass mobility arena, and HOCHTIEF Solutions is involved in developing the requisite infrastructure. On behalf of RWE Effizienz, facility managers from HOCHTIEF specializing in utility construction and the provision of wide-area technical services, ensured that—by October 2012—around 1,000 RWE charging stations had been installed at German car dealerships.

Focus area 2: Active climate protection

Industry-wide cooperation is important when it comes to improving climate protection. Hence, HOCHTIEF is a member of the "European Network of Construction Companies for Research and Development" (ENCORD). HOCHTIEF and the other 18 companies in the organization collaborate on developing concepts, guidelines, and measures geared to promoting sustainability, particularly at the research and development level. In the period under review, ENCORD issued a code of practice specifying a uniform method of measuring CO₂ emissions, where construction material, the construction process as well as building usage and operating patterns were the key variables.

 www.encord.org



Climate protection through a sustainable energy infrastructure

HOCHTIEF Solutions is participating in the expansion of a sustainable energy infrastructure through its numerous services and project involvements. Notably in the field of offshore wind energy, we have in recent years positioned ourselves as an important market participant and trusted partner.

In summer 2012, the “Innovation”—currently the largest jack-up vessel in the offshore market—was completed and put into service. It can handle a payload of up to 8,000 metric tons and its crane can lift up to 1,500 metric tons. Its deck is big enough to transport between seven and twelve wind turbine assemblies, depending on their size. Since its completion, this special crane lifting vessel, developed by HOCHTIEF together with a partner, has been performing construction work at the Global Tech I wind park. There HOCHTIEF Solutions is installing the foundations for a total of 80 wind turbines which once erected will be able to supply 445,000 homes with environment-friendly power.

HOCHTIEF Offshore Development Solutions, a joint venture established with a partner in February 2012, develops offshore wind farms. With six wind farms currently in development in the North Sea—capable of generating a total of up to 3.5 gigawatts—the company is supporting the German government’s plans to expand the German offshore wind energy market. In this way, HOCHTIEF is also fostering the successful greening of energy supplies in Germany. Located between 160 and 200 kilometers off the island of Borkum, our windfarms extend over an area of more than 300

square kilometers. We aim to develop and optimize our projects within their early planning and design phase in order to reduce the risk of spiraling costs and delays in the subsequent construction phase. Before starting construction, we will then sell the project development work to companies, who will in turn construct and operate the wind parks at the sites concerned.

Like wind power, water and geothermal heat are sources of “clean” energy. In recent decades, HOCHTIEF has built a number of efficient hydroelectric power plants around the world. For example, HOCHTIEF Solutions is currently building the Cheves power station in Peru—2,000 meters up in the Andes. From the end of 2013, this facility will be covering peak power demand for the Lima region. Moreover, in November 2012, we and a partner were awarded a contract to build the Alto Maipo hydroelectric power plant in Chile. The project comprises two complex contract sections in the Andes south-east of the capital, Santiago. The contract includes 18.5 kilometers of tunnel boring work, the intake systems, and a five-kilometer steel pipeline. The HOCHTIEF consortium is also responsible for construction planning. Work on the 530-megawatt power station will begin in 2013 and is scheduled for completion in 2017.

South of Munich in Kirchstockach and Dürrenhaar, HOCHTIEF Solutions is operating two geothermal power plants which harness energy from high-temperature thermal water taken from depths of more than 3,600 meters. Offering a capacity of 5.5 megawatts, the Kirchstockach plant is initially being used to provide energy for electricity generation. Over the long term, however, it will also supply regenerative heat to the surrounding communities. The Dürrenhaar plant generates some 46,000 megawatt hours of electricity per year, providing energy to about 18,000 households. In these projects, HOCHTIEF was also responsible for the development and construction work.

With its mobile combined heat and power (CHP) generating units, HOCHTIEF Solutions is able to offer its industrial clients the possibility of supplying their facilities with energy from a decentralized source in line with their specific requirements. These CHP units operate on the basis of an engine that generates electrical en-

The “Innovation” in action:
The HOCHTIEF crane lifting shift takes foundation masts for wind turbines onto its loading deck. At 3,400 square meters, this is about the size of half a soccer pitch.

Storage for renewable energy: Pumped storage power plants use surplus electricity to pump water from below to the upper reservoir. When extra power is needed, the water is allowed to flow back down, driving turbines on the way. HOCHTIEF will develop and build pumped storage power plants of this kind in Germany.



ergy, with the waste heat produced also being used by the recipient business or plant, thus creating an inexpensive and energy-efficient integrated solution. The container format makes HOCHTIEF CHP units both flexible and portable, enabling them to be quickly installed ready for immediate service. The idea for this project came from one of our employees who submitted a suggestion to the HOCHTIEF Ideas Management scheme (for more details, go to page 72). It garnered our “Top Idea” award.

An infrastructure based on regenerative energies not only needs alternative sources of power generation but also new storage facilities in order to both close supply gaps and absorb production surpluses—because the wind and sun cannot be tailored to demand patterns. Pumped storage power stations are both suitable and tried-and-trusted as a solution for storing electricity and thus ensuring supply consistency and grid stability. As a developer of complex infrastructure projects, HOCHTIEF has therefore analyzed a number of possible sites for such facilities in Germany and its neighboring countries. In the fall of 2012, we began work on our first project in Lower Saxony, with the start of construction of the 200-megawatt power plant planned for 2016. HOCHTIEF is also focusing its R&D work on innovative storage solutions (for more information, please go to page 73).

Climate protection through sustainable energy and facility management

Offering various efficiency measures, technical solutions, and operational models, the energy and facility managers at HOCHTIEF Solutions help our clients to operate their properties and facilities more efficiently, save thousands of tons of CO₂ emissions every year, and thus also reduce their energy costs.

As an example, the automotive components supplier Saint-Gobain Sekurit will, in the course of the ten-year contract with HOCHTIEF Solutions starting in 2012, reduce CO₂ emissions at its Herzogenrath site in Germany by around 70,000 metric tons. To this end, HOCHTIEF's experts are constructing a combined heat and power plant and modernizing the existing boiler house, installing a refrigeration plant, and refurbishing the air conditioning system. And with newly installed building management technology, all the company's systems and equipment are to be centrally monitored and controlled.

Pharmaceuticals manufacturer Nordmark will, together with HOCHTIEF Solutions, be able to reduce its energy costs by a six-figure euro amount and cut its CO₂ emissions by around 3,700 metric tons year on year. Among other things, a CHP plant is to be installed, numerous refurbishment measures are to be carried out on the building systems, and the new cooling installation is to be filled with ammonia, a natural, environmentally sound refrigerant.

The energy management experts from HOCHTIEF Solutions have been commissioned to provide a rubber technology company Phoenix Compounding Technology in Hamburg, part of the ContiTech Group, with commercial energy media—primarily steam, compressed air, and process water—for a further four years. We will also be further modernizing and operating the associated energy supply systems at the site. The contract between the two companies has been in existence since 1998. In the interim, the client's CO₂ emissions have been reduced by 24,000 metric tons. Among other things, a CHP plant has been installed to power the production lines, with HOCHTIEF also ensuring that the waste heat from this system is properly utilized through an innovative, integrated heat recovery concept. Our energy experts take the water required for production from a canal and convert it into process water. A modern instrumentation and control system has also been installed, enabling all the technical systems to be centrally monitored and regulated.

In its role as energy contractor, HOCHTIEF Solutions was able to save its clients in Germany a total of 118 thousand metric tons of CO₂ emissions in 2012. The HOCHTIEF Solutions energy management unit has almost 100 percent ISO 50001 certification.

Internal climate protection measures

During the reporting period, various measures were also implemented to protect the climate and reduce the company's own CO₂ emissions. At HOCHTIEF Group headquarters in Essen, various printed materials are produced, giving rise to CO₂ equivalents. These are offset by investments in compensatory measures—for example, certified climate protection projects—arranged through the emissions trading agency First Climate. Among products rendered carbon-neutral in this way were the HOCHTIEF annual, quarterly, and sustainability reports published in 2011 and 2012, and the various editions of the HOCHTIEF employee and client magazines. In terms of printed matter, the equivalent of a good 134 metric tons of CO₂ were offset in the period under review. HOCHTIEF business trips by rail in Germany have also been rendered carbon-neutral since 2010. This gave rise to compensatory measures offsetting some 610 metric tons of CO₂ equivalent in 2011 and 571 metric tons in 2012. All offsetting payments go to wind power projects in Turkey and India.

Focus area 3: Resource conservation

Major infrastructure projects such as road, bridge, and tunnel construction involve significant interventions in the environment and the consumption of considerable resources. HOCHTIEF therefore deploys various protective and conservation measures, as well as developing ad hoc solutions in order to minimize any ensuing impacts.

One complex challenge is the construction of the Saale-Elster Viaduct near Halle, the concrete deck of which HOCHTIEF Solutions completed as part of a joint venture in 2012. The 8.6-kilometer-long bridge is part of the high-speed Nuremberg-Berlin railway link and crosses the Saale flood plain. This highly sensitive, protected nature reserve is home to many threatened species such as corncrakes, beavers, and red kites. There was an overriding requirement to ensure that the flood plain habitats were disturbed as little as possible. The environmental protection precautions put in place determined not only the schedule adopted by HOCHTIEF in this project—during the birds' breeding season, work along certain sections was brought to a complete halt—but also the method of construction. To avoid having to access the flood plain, our bridge building experts used



Minimally invasive construction: Preparing the last segment of the Saale-Elster Viaduct. Using a special top-down construction technique, HOCHTIEF can work from a gantry above to avoid harm to the nature reserve.

the environmentally friendly top-down construction method. In this, the build progresses end-on from an overhead truss, which in turn serves as the working platform that extends beyond the already completed bridge section. From there, the next piers are erected, allowing the bridge girders and deck to be laid on a step-by-step basis.

Keen to minimize the environmental effects caused by installing wind turbines at sea, HOCHTIEF began developing an innovative drilling process together with a partner in 2011. In this "Offshore Foundation Drilling" (OFD®) technique, the foundation is bored into the seabed rather than created by conventional pile driving. This creates substantially less noise: For sea creatures such as the common porpoise, whose habitat is the North Sea, the otherwise injurious sound pressure level is reduced by several orders of magnitude to a point substantially below the statutory limit. (For more information on the OFD method, please see page 73.)

Clean water with cutting-edge sewage treatment plants

By building state-of-the-art sewage treatment plants, HOCHTIEF again made a key contribution to eco-sustainability during the period under review, providing people and regions with clean drinking water and treating their wastewater. In Romania, an existing sewage treatment plant was refurbished and expanded by HOCHTIEF Solutions. The plant now treats almost 1,200 cubic meters of sewage per hour, employing the latest technologies to remove the nitrogen and phosphorus. The methane gas, which is produced as gathering sewage sludge ferments, is also captured to pro-

Industrial facilities are getting greener: The staff at the HOCHTIEF Polska office in Kraków enhanced the building of clients Silgan White Cap with greenery.



duce energy in an adjacent CHP plant. This sewage treatment facility is an infrastructure project in the environmental sector sponsored by the European Union.

We built a fully biological sewage treatment plant in Serbia to clean and clarify the wastewater produced by the 84,000 inhabitants of the industrial town of Sabac. Four times as big, another plant in Turkey is to treat a daily average of 62,000 cubic meters of sewage for the 334,000 inhabitants of Erzurum. This will greatly improve the water and environmental situation in the region because, until now, these enormous volumes of effluent have flowed untreated into the Euphrates River. The Turkish sewage treatment plant includes a sludge stabilization stage from which biogas is produced for electricity generation to power the plant.

Internal measures: Environmental program in Poland

In summer 2011, the Polish subsidiary of HOCHTIEF Solutions launched a program to enshrine environmental protection more deeply within its corporate culture. Four targets and various measures were defined to drive forward the process. The "HOCHTIEF Polska Green Horizon Environmental Program" aims to promote environmentally friendly behavior among the company employees, business partners, and subcontractors. Training events and courses as well as interaction with trade associations and similar organizations play a major part in the concept. Efforts are likewise underway to render the workplace and its surroundings more ecologically sustainable and more efficient. This means, for example, keeping the machine pool up to date, introducing efficient equipment, and reducing power, water, and resource consumption at the

point of use. And finally, the building sites operated by the company, together with their surroundings, are to be made "greener." To achieve this, there will be greater focus on environmental factors in the planning process, the use of ecologically harmless materials, reducing impacts on the environment, and implementing renaturation measures. The program has already borne its first fruits: In 2012, HOCHTIEF Polska took third place in the ranking for sustainable companies published by the business newspaper "Dziennik Gazeta Prawna." In addition to environmental protection measures, the jury also took aspects such as ethics, compliance, and occupational safety into account.

Focus area 4: Attractive working environment

Accolade as an attractive employer

Various benchmark comparisons and an employee survey published in the reporting period served to confirm HOCHTIEF's place among Germany's and Europe's more attractive employers.

Both in a ranking by consultancy firm "Universum Communications" and in a study of young engineers in Germany by the European research institution "trendence," HOCHTIEF was named among the 20 most popular employers cited. And in the pan-European "trendence European Graduate Barometer 2012" survey, we ranked number 132 in the engineering/IT segment. And we took second place in the league of most popular employers in Germany according to a survey by the property newspaper "Immobilien Zeitung" among more than 700 final-year students taking property and construction-related degree courses. In a Universum survey of over 5,200 engineers with up to eight years' professional experience, HOCHTIEF came in 27th among the companies for which the young professionals would like to work. For German high school students, too, HOCHTIEF is an attractive potential employer, as revealed by the "trendence School Student Barometer 2012," in which we were once again included among the 100 most popular companies.

Internal studies corroborate the picture. The employee survey "People.index 2012," which took in the German headquarters and also the operational units of HOCHTIEF Solutions in Europe, indicates that relations between



employed and employer are good. Over eight out of ten respondents felt strong ties with HOCHTIEF—a figure which lies well above that of other corporations. In particular, the level of cooperation with the direct line manager is viewed positively by almost nine out of ten. Respect, trust, and confidence play an important role in this regard. The result is a clear improvement compared with both the last People.index survey in 2009 and the general benchmark.

Employee participation and networking

HOCHTIEF employees everywhere have the right to elect their own representatives to safeguard their interests. Management expressly supports the right of employees to union membership. Effective 2010, 100 per cent of the workforce are represented by works councils. Employee representatives also sit on the Supervisory Board of HOCHTIEF. In units that have an Occupational Health and Safety Committee, employee representatives regularly take part in its meetings.

HOCHTIEF was one of the first companies in Germany to conclude a voluntary agreement—before the legal requirement for this came into force—covering the Group companies within the European Union on the provision of information to and consultation with employee representatives. The currently 11 out of a possible 19 European works councils from twelve countries are usually notified twice a year by the Group management on cross-border matters. The European Works Council, which has been in existence since 1996, represents all the employees of HOCHTIEF and its majority holdings in EU countries.

HOCHTIEF employees also have other avenues to actively participate in the company's affairs and network with one another. With the "peopleNet" platform, established in summer of 2011, HOCHTIEF in Germany has a social and business network via which employees can exchange messages and views across all areas of the company. Following its launch, peopleNet quickly came to be used intensively, notably in the field of knowledge transfer and experience sharing. And the level of active participation is steadily growing, with increasing numbers of online users from other European entities joining in. Another central tool in the field



Graduating with flying colors at the HOCHTIEF Academy: Successful graduates come away with a Bachelor of Engineering degree in construction site management and state accreditation in building construction engineering.

of knowledge and ideas management is the HOCHTIEF Ideas Room, which has been in existence for some years now (for more details, go to page 72).

Recruitment and personnel development

HOCHTIEF keeps in contact with promising talents among its former interns in order to recruit as many of them as possible following completion of their studies. And with success: Once again, the intern retention rate from this development program was around 60 per cent in the period under review. With lectures and talks at various universities in Germany, HOCHTIEF experts and managers regularly provide students with an insight into working life and promote career choices in the construction industry as well as at HOCHTIEF.

Filling positions with specialist requirements is sometimes particularly challenging, with jobs in the offshore wind energy field being a case in point. So in 2012, HOCHTIEF joined forces with a partner to develop an in-house training program for offshore workers. In the reporting period, 50 participants completed the seven-week training course (and you can read more about this in the article starting on page 28).

Our employees in Germany pursue continuous personal development (CDP) courses offered by the HOCHTIEF Academy. In the reporting period, the program offered around 135 different seminars. Over 3,500 employees took part in more than 400 single or multi-day internal events. Complementing the seminars from the CPD catalog, increasing numbers of individual training courses are also being offered to specific departments or divisions.

Running proud: The Essen corporate run is a highlight for many in the HOCHTIEF workforce (picture left).

How not to do it: In filming for the HOCHTIEF occupational safety video, actors play out how ignoring the rules causes accidents on site.



HOCHTIEF Solutions is responsible for facility management at Bahrain Airport and, in this capacity, participates in a development program that has garnered an award: Following the successful completion of their studies, young Bahrainis are offered the chance to go to Germany for 18 months. There, they initially take a language course and then work in a company that is already active in their homeland. In recognition of this, the award was conferred by the Bahraini Committee for Economic Development during the period under review.

Health protection

HOCHTIEF supports employees with a wide range of programs and measures notably designed to promote preventive healthcare. Sufficient exercise, healthy nutrition, stress management, and regular checkups by the company medical service all play a key role in the recommended regime. The period under review saw the launch of numerous campaigns flanked by a wide choice of activities and services, from yoga courses to nutritional advice.

For example, the company participated in a “Bike to Work” scheme launched by a German health insurance company and the German cycling organization ADFC in summer 2012, in which a total of 58 HOCHTIEF staff from around Germany took part. The distance cycled by the participants over the three-month period totaled a good 28,000 kilometers. For this and for its additional support to bike riders—including the provision of showering facilities at work—HOCHTIEF received the “Bike-friendly Company” award. Joint participation at sport events is also particularly popular: In 2012, 160 HOCHTIEF employees took part in the Corporate Run in

Essen, while more than 100 participated in the JP Morgan run in Frankfurt.

Occupational safety

Occupational safety is of paramount importance, particularly on HOCHTIEF sites. In order to sensitize employees to the concomitant risks and to train them to behave in a safe and secure manner, HOCHTIEF Solutions joined forces with Berufsgenossenschaft BAU, the employers’ mutual indemnity association for the construction industry, to produce—in the course of the reporting period—four information videos with subsequent interactive study questions. Among the topics were “Lifting Loads” and “Working Distances.” The question-and-answer part was produced in several languages to reach as many of our employees in Europe as possible.

The annual “Occupational Safety Day” held in Germany is an important tool for establishing and enhancing our health and safety culture. In 2012, the slogan adopted was “Safe buildings—from idea to operation.” Employees at the various HOCHTIEF sites had the opportunity to take part in seminars on a series of topics, including how they might be able to make their place of work healthier. At many locations, subcontractors were also invited to join in the activities of this motivational day.

The level of occupational safety on the “Barwa Commercial Avenue” project in Qatar, is regarded as especially exemplary. HOCHTIEF Solutions began work here in 2008, building an 8.6-kilometer retail boulevard. At peak times, this major site was attended by 15,000 workers from 45 countries. In all, 63,000 people took up work there to date. Yet up to the end of 2012, there



Young wind farmers: In a game at the HOCHTIEF booth, visitors to the Ideas Park generate electricity on special fitness bikes. The screen in the background shows how much power the kids are pedaling out at that moment.

Community commitment: Led by a HOCHTIEF member of staff, a class of Frankfurt school pupils discover the secrets of a passive energy house.

were only nine accidents with downtime recorded against almost 98 million hours worked. And each of the injured quickly recovered.

Our subsidiary HOCHTIEF Polska received a “Construct safely” award from the Polish Health and Safety Executive a total of four times in the reporting period.

Focus area 5: Corporate citizenship

HOCHTIEF Europe focused its sponsoring activities in the period under review on a project in the field of education and support for young talent: our collaboration with “Bridges to Prosperity” (B2P). Together with this non-profit organization, we built a pedestrian bridge in Rwanda in July 2012, facilitating people’s access to education, medical provision, and markets. (For more, read the article starting on page 34.)

August 2012 saw the fourth edition of the Ideas Park in Essen, a technical exhibition outing for the whole family organized by ThyssenKrupp. The purpose of the two-week event was to encourage children and young people to develop an interest in technology and innovation and to consider a profession in these areas. HOCHTIEF took part with an interactive information booth for which the slogan read: “On the energy track. Taking power from sea to city.” It offered young visitors a fun journey of discovery through the world of offshore wind power—from generation and transport to storage and consumption. Developed and attended by HOCHTIEF staff, the booth included a town model previously used by HOCHTIEF as part of another sponsoring project. Children had made this in a workshop organized and led by members of the German youth architecture and

town planning organization JAS, which HOCHTIEF has been supporting for some years now.

During the reporting period, many of our employees in Germany were engaged in volunteer activities both privately and together with their coworkers. HOCHTIEF likes to foster this involvement wherever possible and, to this end, launched an initiative in 2012 whereby employees who work as volunteers for a project that meets HOCHTIEF’s primary sponsoring criteria can be given fast-track financial assistance with the minimum of red tape. This was how employees from the human resources department were able to organize a day out for both able-bodied and disabled children at a horse riding center. These HOCHTIEF volunteers took a day’s vacation and, together with a kindergarten, arranged the entire program including therapeutic riding, crafts, and games.

“Energy + Architecture—Buildings also need a warm pullover” was the name given to a workshop sponsored by HOCHTIEF at the German Architecture Museum (DAM) in December 2012 in which Frankfurt school students participated. Included in the visit was a tour of the HOCHTIEF Passive House project. A HOCHTIEF employee who volunteers privately for work at the DAM had organized the event with a view to sparking interest among young people from socially deprived backgrounds in architecture and their developed environment.

HOCHTIEF offers young
talent opportunities.



**MY
OPENING**



OUR MOVE

HOCHTIEF is committed to fostering education and young talent. Through visits to construction sites, internships, and job training, we give young people the world over the opportunity to get to know our company—and to discover their talents.

Report on the Independent Audit

To HOCHTIEF Aktiengesellschaft, Essen

According to our assignment we have conducted a limited assurance audit for selected data of the 2012 Sustainability Report of HOCHTIEF Aktiengesellschaft, headquartered in Essen, Germany. The report refers to the period July 1, 2011 to December 31, 2012. In line with the assignment we have audited the content of chapter 2 "Sustainability at HOCHTIEF".

Responsibilities of the statutory representatives

The Executive Board of HOCHTIEF Aktiengesellschaft is responsible for the preparation of the 2012 Sustainability Report in line with the Sustainability Reporting Guidelines Vol. 3.1 (pages 7 to 17) criteria of the Global Reporting Initiative (GRI).

- Materiality,
- Stakeholder Inclusiveness,
- Sustainability Context,
- Completeness,
- Balance,
- Clarity,
- Accuracy,
- Timeliness,
- Comparability und
- Reliability

This report refers to the period July 1, 2011 to December 31, 2012. The responsibilities of the Executive Board include:

- Choosing and implementing of adequate methods in order to compile the Sustainability Report,
- Undertaking estimations and setting assumptions for selected corporate responsibility data that are feasible in the relevant corporate responsibility context,
- Developing, implementing and maintaining systems and processes that are necessary for the preparation of the Sustainability Report.

Responsibilities of the auditor

Our responsibility is to express an opinion on the Sustainability Report for the period July 1, 2011 to December 31, 2012 based on our audit. Our opinion takes into account any information that may lead to the conclusion that the content of chapter 2 "Sustainability at HOCHTIEF" has not been prepared in line with the above mentioned criteria of the Sustainability Reporting Guidelines Vol. 3.1 (pages 7 to 17) of GRI.

Our assignment does not include the corporate data on page 48 and 49 of the Sustainability Report, the work done figures for 2011 and 2012 on page 70, or references to other chapters or to the Annual Report.

Our assignment does include suggestions on how to further develop both the corporate responsibility management and the corporate responsibility reporting.

We have conducted our audit in accordance with the International Standard on Assurance Engagements (ISAE) 3000. Accordingly we are required to comply with ethical requirements and plan and perform the audit in line with the principle of materiality to obtain limited assurance.

The extent of audit procedures that are conducted in the context of an audit with limited assurance is limited compared to an audit with reasonable assurance (e.g. in accordance with § 317 HGB). Therefore the level of reliability gained is lower. The selection of audit procedure depends on the auditor's professional judgment. We have performed the following actions in the context of our audit:

- Inspection of the documentation of the processes underlying the corporate responsibility management;

- Documentation of the processes as well as inspection of the documentation of the systems and processes underlying the collection, analysis and aggregation of corporate responsibility data as well as an examination based on random samples;
- Inspection of the IT system used for collecting corporate responsibility data;
- Interviews with employees of the department "Corporate Social Responsibility" who are responsible for preparing the report. The focus of the interviews was on the process how the Sustainability Report has been prepared as well as the according internal controls that have been implemented.
- Analytical assessment of documents that we had been provided with as well as conducting interviews with employees who are responsible for the following parts of chapter 2 "Sustainability at HOCHTIEF":
 - The Company
 - Sustainability Strategy
 - Compliance
 - Risk Management
 - IT and Data Protection
 - Employees
 - Occupational Safety and Health
 - Environmental and Climate Protection
 - Research and Development
 - Procurement
 - Donations and Sponsorship

Audit Opinion

We state that our audit of chapter 2 "Sustainability at HOCHTIEF" for the period July 1, 2011 to December 31, 2012 has not led to any reservations. We have not become aware of any facts that the content of chapter 2 "Sustainability at HOCHTIEF" has not been prepared in line with the criteria of the Sustainability Reporting Guidelines Vol. 3.1 (pages 7 to 17) of GRI.

Suggestions for improvements

We suggest the following improvements in order to further develop both the corporate responsibility management and the corporate responsibility reporting. These suggestions are not contradictory to the above stated opinion and do not restrict the above stated opinion.

- Stronger embedding of the corporate responsibility management among affiliates as well as detailed documentation of flow of information
- Connecting corporate responsibility programme with key performance indicators as well as stakeholder communication
- Further development and standardization of the processes underlying the compilation, controlling and archiving of the corporate responsibility data in order to enhance data quality.

Essen, February 12, 2013

PricewaterhouseCoopers
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

[signed]
Michael Werner

[signed ppa.]
Juliane von Clausbruch

Information on this Sustainability Report

Reporting period and frequency of reporting

In this Sustainability Report, we have opted to present a relatively brief synopsis of the relevant topics. A supplement to this Report as well as further information is available on our Internet platform at www.hochtief.com/sustainability. The report covers the period between July 2011 and December 2012 and follows on from the Sustainability Report published in June 2011. The reporting periods for key figures are stated separately. The next Sustainability Report will be published on February 28, 2014. Starting in 2013, we will be reporting each year.

Report content and scope

The content of this report has been developed on the basis of internal processes. The relevant information was either requested from the operational units of the Group or originated from official HOCHTIEF documents. The report content has been checked by the staff in charge of the individual issues.

Certain companies in HOCHTIEF's international business portfolio have management systems of their own. This precludes compiling standardized data for the entire Group. We indicate any limits of coverage in this report wherever they apply.

The goals described in this Sustainability Report are based on the assumption that the HOCHTIEF Group will continue to operate in its current form.

Disclaimer

While the data contained in this report has been collected and processed with the greatest possible care, transcription errors cannot be fully excluded.

Previous reports

An archive of previously published reports is available online at www.hochtief.com/sustainability-reports.

Forward-looking statements

This Sustainability Report contains forward-looking statements. These statements reflect the current views, expectations, and assumptions of the Executive Board of HOCHTIEF Aktiengesellschaft regarding future events and developments relating to HOCHTIEF Aktiengesellschaft or the HOCHTIEF Group and are based on information currently available to the Executive Board of HOCHTIEF Aktiengesellschaft. Such statements involve risks and uncertainties and do not guarantee that future results (such as profit before tax or consolidated net profit) or developments (such as with regard to possible future divestments, general business activities, or business strategy) will transpire. Actual results (such as profit before tax or consolidated net profit), dividends and other developments (such as with regard to possible future divestments, general business activities, or business strategy) relating to HOCHTIEF Aktiengesellschaft and the HOCHTIEF Group may therefore differ materially from the expectations and assumptions described explicitly or implicitly in such statements due to, among other things, changes in the general economic, sectoral, and competitive environment, capital market developments, currency exchange rate fluctuations, changes in international and national laws and regulations, in particular with respect to tax laws and regulations, the conduct of other shareholders as well as other factors. Any information provided on dividends is additionally subject to the recognition of a corresponding unappropriated net profit in the published separate financial statements of HOCHTIEF Aktiengesellschaft for the fiscal year concerned and the adoption by the competent decision-making bodies of HOCHTIEF Aktiengesellschaft of appropriate resolutions taking into account the prevailing situation of the Company. Aside from statutory publication obligations, HOCHTIEF Aktiengesellschaft does not assume any obligation to update the forward-looking statements contained in this Sustainability Report.

Implementation of International Reporting Standards

Principles of the UN Global Compact

HOCHTIEF joined the United Nations Global Compact in 2008. We are consequently actively committed to supporting the Global Compact's ten principles and to advancing them within the Group. We are committed to the respect of human rights, labor standards, and environment protection standards and participate in the fight against corruption.

This Sustainability Report 2012 also serves as our report on progress in implementing the UN Global Compact. HOCHTIEF publishes the required annual Communication of Progress with an overview of specific action on each principle on the Global Compact website, www.unglobalcompact.org.

Guidelines of the Global Reporting Initiative

The HOCHTIEF Sustainability Report 2011 adheres to the current Guidelines (G3.1) of the Global Reporting Initiative (GRI) including the 3.1/CRE final version of the GRI Construction and Real Estate Sector Supplement (CRE). Conformity of the information provided with the requirement profiles has been checked by GRI and the report classified as Application Level B+.

For the summary GRI index, please see the back flap on pages 112–114.



GRI External Assurance



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○ not reported ➤ partially reported ● fully reported

CoC: Code of Conduct, AR: Annual Report 2012, CP: www.hochtief.com/clientportal, CG: www.hochtief.com/corporate-governance, HT: www.hochtief.com/riskmanagement, CAR: www.hochtief.com/career

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This report is dedicated to our colleague Dr. Ute Bardelmeier who as CR Coordinator was deeply committed to the subject of sustainability in our company for many years. Sadly, she passed away on November 24, 2012 and will be sorely missed in our Sustainability Report project team. We all miss her greatly.

The project team





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