

Learning by playing

Megacities

The bioeconomy

Worldwide training

Life cycle assessments

Seeing. Linking. Creating.

Corporate Responsibility Report 2012

Key data at a glance

Evonik Group: Key figures

in € million	2008	2009	2010	2011	2012
Sales	15,873	10,518	13,300	14,540	13,629
Adjusted EBITDA ¹⁾	2,165	1,607	2,365	2,768	2,589
Adjusted EBITDA margin in %	13.6	15.3	17.8	19.0	19.0
Adjusted EBIT ²⁾	1,298	868	1,639	2,099	1,953
ROCE ³⁾ in %	9.0	7.7	15.0	18.7	17.2
Net income	281	240	734	1,011	1,164
Employees as of December 31	40,767	33,861	34,407	33,556	33,298
Training ratio in Germany	approx. 9%				

Figures for 2008 include the former Energy Business Area; in 2009 and 2010 these operations were classified as discontinued operations.

¹⁾ Adjusted EBITDA = Earnings before interest, taxes, depreciation, amortization and adjustments.

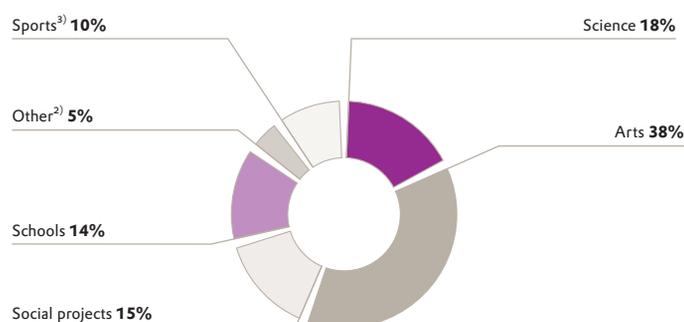
²⁾ Adjusted EBIT = Earnings before interest, taxes and adjustments.

³⁾ Return on capital employed.

ESH figures in the core specialty chemicals business

	2008	2009	2010	2011	2012
Greenhouse gas emissions in thousand metric tons CO ₂ equivalents	11,848	10,189	11,321	10,833	9,090
Energy inputs in petajoules	94.62	82.98	90.47	92.62	89.48
Output in million metric tons	10.79	9.26	10.61	10.35	9.71
Operating costs for environmental protection in € million	259	259	264	251	251
Investment in environmental protection in € million	44	43	36	48	39
Waste in thousand metric tons	503	362	424	501	478
Water intake in million m ³	395.5	337.4	328.8	310.0	297.1
Accident frequency Accidents per million hours worked	1.7	1.2	1.3	1.5	1.4

Donations and sponsorship of public projects in 2012¹⁾



¹⁾ Expenditures by the Corporate Center, business units and Innovation Management. Total: approx. €7.2 million.

²⁾ Includes donations of €120,000 to political parties in Germany: €45,000 to the SPD, €50,000 to the CDU/CSU and €25,000 to the FDP.

³⁾ Excluding sponsorship of the Borussia Dortmund and MSV Duisburg soccer clubs.

The company at a glance

Evonik is one of the world's leading specialty chemicals companies. Around 80 percent of sales come from market leading positions, which we plan to expand further. We concentrate on high-growth megatrends, especially health, nutrition, resource efficiency and globalization. As part of our ambitious growth strategy, we are investing considerable amounts to step up our presence in emerging markets, especially Asia. Important competitive advantages come from our integrated technology platforms, which we are constantly refining. Our operations are grouped in three segments, each of which has two business units which act as entrepreneurs within the enterprise.

Consumer, Health & Nutrition

This segment's products are used principally in applications in the consumer goods, animal nutrition and healthcare sectors. It comprises the Consumer Specialties and Health & Nutrition Business Units.

 See page 44 Segment performance



Key data for the Consumer, Health & Nutrition segment

in € million	2012	2011
External sales	4,204	4,081
Adjusted EBITDA	1,050	1,049
Adjusted EBITDA margin in %	25.0	25.7
Adjusted EBIT	924	917
ROCE in %	48.5	55.9
Employees	6,821	6,384

Services

This segment principally comprises Site Services and Evonik Business Services. It mainly provides services for Evonik's specialty chemicals segments and Corporate Center, but also serves third parties.

 See page 56 Segment performance

Resource Efficiency

This segment provides environment-friendly and energy-efficient system solutions. It is comprised of the Inorganic Materials and Coatings & Additives Business Units.

 See page 48 Segment performance



Key data for the Resource Efficiency segment

in € million	2012	2011 ¹⁾
External sales	3,131	4,045
Adjusted EBITDA	655	765
Adjusted EBITDA margin in %	20.9	18.9
Adjusted EBIT	517	611
ROCE in %	32.4	29.5
Employees	5,755	6,381

¹⁾ Including the carbon black business until July 2011.

Specialty Materials

The heart of the Specialty Materials segment is the production of polymer materials and intermediates mainly for the rubber and plastics industries. It consists of the Performance Polymers and Advanced Intermediates Business Units.

 See page 52 Segment performance



Key data for the Specialty Materials segment

in € million	2012	2011
External sales	4,843	4,880
Adjusted EBITDA	843	907
Adjusted EBITDA margin in %	17.4	18.6
Adjusted EBIT	691	748
ROCE in %	38.2	43.9
Employees	6,134	6,846

To meet tomorrow's challenges and our responsibility to society, we have aligned our business to the high-growth megatrends health, nutrition, resource efficiency and globalization. The key to our success is our ability to link the many unconnected aspects of our increasingly complex world. In this way we develop successful strategies, structures and solutions.

Contents

Seeing. Linking. Creating.

Corporate responsibility

Sustainability in business 29

Evonik's strategic focus.....	29
Our values and principles	35
Corporate governance	36
House of Compliance	36
Fighting corruption.....	38

The business 40

Very high earnings.....	40
Segment performance	44
Supply chain management.....	58
Product stewardship	60
Research and Development	66

Employees 71

Employees worldwide	72
Finding and fostering the right talents	74
Personnel expense and social security contributions	77
Working together as partners.....	79
A family-friendly company	81

The environment 83

Our management approach	83
Environmental targets	83
Production inputs and output	84
Energy inputs.....	84
Emissions into the air	85
Water data and emissions into water	89
Waste.....	91
Biodiversity and ecosystem services	93

Safety and health protection 95

Plant safety	95
Transportation safety and logistics.....	96
Corporate security	97
Occupational safety	98
Health protection.....	99

Society 101

Donations and sponsorship.....	101
Being a good neighbor	104
Representation of our interests.....	105

Annex

Major sites	109
Market positions	110
Major shareholdings	112
Awards and accolades 2012.....	113
Membership of networks and initiatives	114
About this report	115
GRI statement.....	117
GRI index, UN Global Compact and the German Sustainability Code (GSC).....	118
Independent Assurance Report	120
Credits	122



Dr. Klaus Engel
Chairman of the Executive Board



Thomas Wessel
Chief Human Resources Officer

Dear Readers,

Inhabitants of the world's highly industrialized countries are utilizing resources more intensively than ever before. Three times the capacity of the Earth would be needed if the lifestyle enjoyed today by citizens of Europe and North America were to be adopted worldwide. What is more, the competition for raw materials, energy, water and land is set to increase further. At the same time, the concentration of the greenhouse gas carbon dioxide has risen to a historically high level. That poses some very specific questions: How much growth and prosperity can we afford without causing excessive depletion of the available resources or irreparable damage to them? What basis will we hand down to coming generations to allow sustainable development of our planet?

As one of the world's leading specialty chemicals companies, Evonik is addressing this societal challenge. Our high innovative capability means that we have the necessary technological expertise, and we have already attained significant intermediate targets.

For instance, we achieved our long-term environmental targets two years earlier than planned. In our chemicals business, we have reduced our specific energy-related greenhouse gas emissions, specific water consumption and specific production waste by 20 percent or more since 2004. This success has given us an incentive, and we are therefore currently setting new environmental targets to measure our future success.

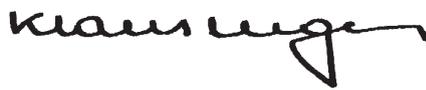
Our products make a key contribution to making the world a better place to live in by utilizing resources more efficiently, and facilitating a healthier lifestyle and a more balanced diet. For example, our amino acids for animal nutrition make raising pigs, hens and salmon more efficient and environmentally compatible. Our silica-silane systems improve modern high-performance tires and help save fuel. And we are already able to use biomass instead of petrochemical feedstocks for the production of some of our innovative materials. We are intensively exploring which raw materials we could use as the basis for our products in the next 20 years. At present the main renewable raw materials we purchase are sugar, fats and oils. In particular,

various types of sugar form the basis for biotechnological production methods. We are also focusing on biotechnology as a future technology for the development of life cycle assessments. They have already been performed for some of our products to show their ecological benefits.

Our objective is to look at the entire value-added chain, including the sustainability of the supply chain. For example, the analyses performed to identify the Evonik Carbon Footprint show that over 40 percent of our CO₂ emissions are attributable to our ecological backpack, in other words, to starting products that we purchase for further processing.

In view of this, our Procurement department plays a central role. We do not select our suppliers solely on the basis of economic indicators; our requirements include a good sustainability performance. Moreover, in 2012 we established the "Together for Sustainability" initiative with other chemical companies. The aim of this initiative is to raise sustainability standards throughout the supply chain.

Through our business success, we aim to create value—for our shareholders, our customers, our employees and society. In keeping with this basic objective, Evonik plays its role as a good corporate citizen and is involved in many networks and initiatives. As a member of the United Nations Global Compact, we are committed to fostering the ten principles of the Global Compact, which we regard as a guide for our day-to-day activities. These high standards are put into practice daily by our employees through our values: courage to innovate, responsible action, and sparing no effort.



Dr. Klaus Engel
Chairman of the Executive Board



Thomas Wessel
Chief Human Resources Officer

Megacities

More and more people are attracted to city life. That is a trend that creates many problems, but also offers opportunities because giant conurbations bring together many developments that are likely to have a major impact on the future. Products from Evonik could play a key role.

 See page 6

Life cycle assessments

In the old days, a product was good if it was fit for purpose and the price was right. Today, its sustainability profile also has to be considered. At Evonik, that is the task of the Life Cycle Management (LCM) team, which conducts life cycle assessments to systematically analyze the environmental impact of products and processes.

 See page 18

The bioeconomy

Oil and gas are still the most important raw materials for the chemical industry, but the weighting is set to change in the longer term. Plants that supply valuable raw materials and micro-organisms that produce innovative substances are becoming more important—for the industry and for Evonik.

 See page 10

Seeing. Linking. Creating.

Worldwide training

Evonik has earmarked approx. €6 billion for its ambitious program of investment between 2012 and 2016 to sharpen its profile as one of the world's leading specialty chemicals corporations. Highly skilled employees at all levels are very important to achieve this. Here are three examples—from China, Singapore and the USA.

 See page 14

Learning by playing

Sustainable business management is hardly child's play. Nevertheless, following an initial workshop with the napuro planning game, Evonik is convinced that "learning by playing" is an excellent way of exploring the main relationships and interactions that characterize and influence corporate sustainability.

 See page 22

Megacities

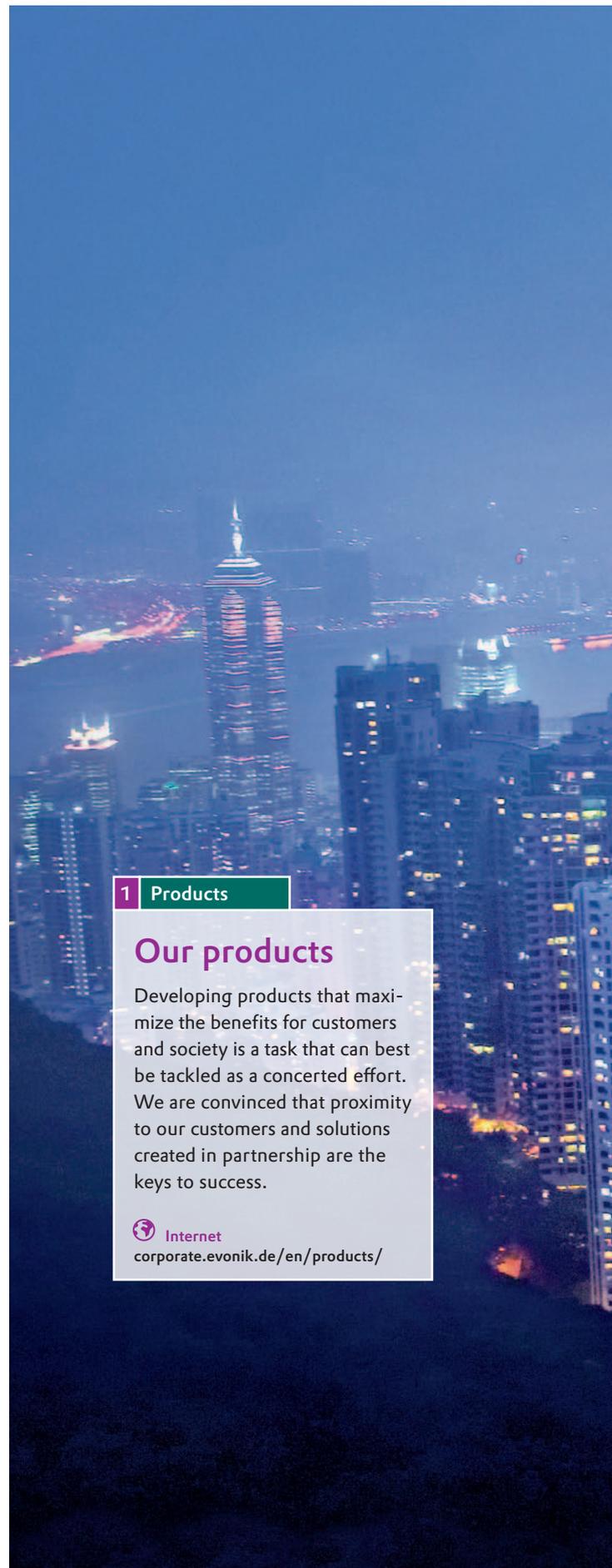
More and more people are attracted to city life. That is a trend that creates many problems, but also offers opportunities because giant conurbations bring together many developments that are likely to have a major impact on the future. **Products from Evonik 1** could play a key role.

Every morning visitors to the Tokyo suburbs are confronted by an unusual spectacle: Cars are lifted several meters above the ground, where they held for several minutes before being brought back to earth. This is a special type of parking garage where cars are stacked in an enormous shelving system due to lack of space. Although Japan covers a large surface area, its geographical features mean that only a few areas are suitable for human habitation. The Greater Tokyo Area is a metropolitan region with around 35 million inhabitants. According to the United Nations (UN) it is the world's largest conurbation.

The UN calculates that at present more than half of the world's inhabitants live in cities. And that could rise to 70 percent by 2050. Experts are predicting a particularly sharp rise in the urban population in Asia and Africa. At the same time, conurbations are growing in size. Today, there are 19 **megacities 2** with more than 10 million inhabitants, and there could be 29 by 2025. Back in 1950 the world had only one city of this size. The UN believes that this development will have a significant impact on the future: "Cities are where the pressures of migration, globalization, economic development, social inequality, environmental pollution and climate change are most directly felt. Yet at the same time they are the engines of the world economy and centers of innovation where many solutions to global problems are being piloted."

However, megacities differ greatly from each other. Cities in the established industrialized countries are mainly confronted with the implications of demographic change, while in developing countries, cities are growing extremely fast due to population growth and rural depopulation. They are therefore rapidly reaching their limits, not simply in terms of infrastructure. In China, enormous modern conurbations are planned on the drawing board.

Evonik is monitoring the urbanization trend very closely because the **megatrends 3** of relevance to the Evonik Group—health, nutrition, resource efficiency and globalization—have a significant impact on life in megacities. As one of the world leaders in specialty chemicals, Evonik is systematically aligning its business to these long-term trends. Its portfolio already contains many products that could help address the challenges confronting people in megacities.



1 Products

Our products

Developing products that maximize the benefits for customers and society is a task that can best be tackled as a concerted effort. We are convinced that proximity to our customers and solutions created in partnership are the keys to success.

 **Internet**
corporate.evonik.de/en/products/

2 Megacities

Trend to urbanization

The UN calculates that over half of the world population lives in cities. That could rise to 70 percent by 2050. And cities themselves are growing steadily. There are already 19 megacities with more than ten million inhabitants. By 2025 there could be 29.

 Internet
www.un.org/esa/desa/

3 Megatrends

What are megatrends?

The term megatrend was coined by the US future researcher John Naisbitt. It refers to particularly far-reaching and lasting developments relating to social and technological change. Megatrends have a global impact and permeate all areas of life. Evonik aligns its business to the health, nutrition, resource efficiency and globalization megatrends.

 Internet
corporate.evonik.de/en/company/megatrends/



4 Corporate Venture Capital

Funding for innovation

Through its corporate venturing activities Evonik aims to invest up to €100 million in the mid term in promising start-up companies and leading specialized venture capital funds.

5 Corporate Foresight

Visions of the future

Evonik's interdisciplinary Corporate Foresight team envisions tomorrow's world and translates those visions into action plans for the company. Innovation Foresight opens up robust new areas of business for Evonik with a 10 to 15-year time horizon.



Further information

Read more on page 18 of Evonik's CR Report 2011



One aspect that is particularly challenging for megacities is individual transportation. High levels of noise pollution and emissions and too few parking lots are already a problem for many city-dwellers, but the situation looks set to worsen as conurbations grow. A perceptible improvement could come from small, easily maneuverable battery-powered electric vehicles that make virtually no noise, do not emit fumes and can be squeezed into the tiniest parking spaces. The drives for such cars could come from Kamenz, near Dresden in Germany, where Evonik manufactures chemical battery cell components for large-scale lithium-ion storage systems. These are already being used in Daimler's E-Smart.

Many people move to cities in the hope of a better life because cities tend to offer better opportunities than rural areas. Those who achieve their dream of prosperity often alter their eating habits: A high proportion of their additional income is spent on meat. Evonik's amino acids for animal nutrition play an important role in ensuring a sustainable and healthy supply of meat and fish. The right amount of essential amino acids is essential for livestock to digest their feed optimally.

Depending on the region, the need for refrigerants for a wide range of applications in densely populated cities can be as challenging as providing heat in winter. Evonik can provide a solution to this problem. Vacuum insulating panels (VIPs) that work on the same principle as a double-wall thermos jug are used for highly efficient insulation of refrigerators and other appliances. This excellent insulating properties of Evonik's AEROSIL® silicas give optimal results within a very compact space. Incidentally, Evonik also uses the insulating effect of AEROSIL® for a completely new product that could be used for insulating panels in the construction sector. The benefits of these new panels are that they are permeable to moisture, non-combustible and far thinner than conventional materials with the same insulating properties.

PLEXIGLAS®, which is marketed as ACRYLITE® in the Americas, offers many possibilities for lighting megacities. Thanks to its high optical purity, very good processing properties and high weather resistance, this material is extremely well suited to lighting applications.

To ensure systematic identification of new growth areas, research and development at Evonik uses a range of different approaches such as open innovation. The company invests in promising start-ups through a [Corporate Venture Capital Fund](#) ⁴. In addition, it has built up its own expertise in future research through its [Corporate Foresight Team](#) ⁵. Technologies for cities are currently the focus of this team's work.

The bioeconomy

Oil and gas are still the most important raw materials for the chemical industry, but the weighting is set to change in the longer term. Plants that supply valuable raw materials and micro-organisms that produce innovative substances are becoming more important—for the industry and for Evonik.

Progress is fermenting in glass vessels. Or at any rate, in the laboratory bioreactors at Evonik's site in Halle-Künsebeck in Germany. They contain bacteria and a mixture of sugar, water and other nutrients to feed the **microorganisms** . The special feature of the bacteria in these tanks is that they produce particularly large amounts of the amino acid L-lysine, which is used in animal nutrition. L-lysine enhances the efficiency and sustainability of raising pigs and other livestock. The small-scale tests in the laboratory will later be ramped up by Evonik for **industrial-scale production** . The capacity of the industrial fermenters for these bacteria is several million liters.

The site in Halle-Künsebeck, which belongs to the Health & Nutrition Business Unit, is one of the centers of Evonik's **biotechnology research** . More than 30 years ago, a small group of researchers at this site started working on a method of producing L-lysine by fermentation. Their work was successful. Today, employees at this site develop and optimize production processes for, among other substances, the amino acids Biolys® (L-lysine), ThreAMINO® (L-threonine) and TrypAMINO® (L-tryptophan). They also conduct research into biotechnological production processes for other business units in the Evonik Group, for example, for polymers and active ingredients for cosmetics.

Evonik regards market-oriented research and development of the sort carried out by Halle-Künsebeck and other sites as a key drivers of future growth. Technology platforms are essential for efficient and sustainable production. "And Evonik regards biotechnology is one of its central technology platforms. Partly because it supports the increased focus on sustainable development as part of our growth strategy," explains Dr. Achim Marx, who is responsible for bioeconomics at Evonik.

The bioeconomy encompasses the production of renewable biological resources and the conversion of these resources and waste streams into value added products such as food, feed, bio-based products and bioenergy. At any rate, that is how the EU Commission defines the term. High expectations are placed in the bioeconomy—not just in Europe. In view of the rapid growth in the world's population,



1 Micro-organisms

Brilliant chemists

Bacteria, fungi and yeasts have the ability to manage highly complex processes in an extremely small space in their cells. They metabolize ingredients such as sugar and fats into many other substances. These micro-organisms enrich these products in their cells or reject them as “molecular waste.”

2 Industrial-scale production

Benefits of biotechnology

Biotechnological processes tend to involve lower investment costs than chemical processes. For instance, production processes involving many separate steps can be carried out by bacteria in a single cell. In addition, the use of renewable raw materials such as sugar and plant residues can reduce dependence on petrochemical feedstocks. The relative benefits of the various production methods have to be evaluated on a case-by-case basis.

3 Biotechnology research

What is biotechnology?

The OECD defines biotechnology as “the application of science and technology to living organisms as well as parts, products and models thereof, to alter living or non-living materials for the production of knowledge, goods and services.” A distinction is normally made between red biotechnology for medical applications, green biotechnology for agricultural applications, and white biotechnology for industrial applications.



Internet
www.biotechnologie.de/bio/navigation/en/

5 Biogas

Power for the future

Newly developed SEPURAN® hollow fiber membrane from Evonik makes upgrading biogas more efficient and more environment-friendly—and saves energy. SEPURAN® could therefore make an important contribution to tomorrow's energy mix.



Annual Report

Read more on page 36 of Evonik's Annual Report 2012

4 Biodiesel production

Plant-based fuels

Evonik has provided support for the use of biodiesel from the start of commercial production. Alongside traditional starting products, attention is turning to second-generation raw materials. Our production portfolio is tailored to the specific requirements of the production and use of modern high-tech fuels.



Internet

www.alkoxides.com

6 Creavis

Strategic research

Creavis is Evonik's strategic research and development unit. It develops new products for high-growth future markets and thus builds up profitable new business activities outside the existing portfolio.

 Internet
www.creavis.com

climate change and the increasing depletion of resources, the bioeconomy is expected to help secure the supply of high-quality food for people, and renewable raw materials for energy generation and industrial and medical applications.

Evonik is closely linked into the bioeconomy. In the mid term, the Health & Nutrition Business Unit aims to generate sales of €1 billion with products produced using biotechnological methods. To achieve this, Evonik is investing around €350 million to expand business with the feed additive Biolys® (L-lysine), which is produced by fermentation. New production facilities with total capacity of nearly 200,000 metric tons a year are under construction in Brazil and Russia. In 2012, Evonik completed expansion of capacity at its production facilities in Blair (USA) to 280,000 metric tons a year.

The company's product portfolio also includes bio-based polymers, ingredients for cosmetics and active substances for medicines. It also supports the sustainable use of renewable resources by providing catalysts for the [production of biodiesel](#) [4](#) and membranes to upgrade [biogas](#) [5](#). The Group is also working with BioAmber on the development of catalysts for processing bio-based succinic acid. Production of these platform chemicals from renewable raw materials is currently being ramped up to industrial scale worldwide.

"Many of the hopes placed in the bioeconomy are still pipe dreams," says Marx. "A lot of research still has to be done." Evonik invested around €1.7 million in strategic biotechnology research at its site in Marl (Germany) in 2012. Experts from a range of disciplines have been working together closely in this field since 2007. Now, two further laboratories have been set up in the Biotechnology Science-to-Business (S2B) Center operated by the [Creavis](#) [6](#) research unit. This has increased laboratory space in the Biotechnology S2B Center from around 400 m² to over 1,100 m².

Since fall 2012 scientists working in the new laboratories have been investigating whether and, if so, how residual plant matter can be used as a renewable resource for the chemical industry. If they are successful, production of, for example, high-performance polymers and detergent additives could be placed on a more flexible basis.

The scientists also intend to look for new production methods for tropical vegetable oils and fats that are becoming more scarce. The idea is that micro-organisms should be able to convert sugar into the required substances. These oils and fats could then be used, for example, in cosmetic formulations, as building blocks for polymers or as polymer additives.

Worldwide training ✓

Evonik has earmarked approx. €6 billion for its ambitious [program of investment](#) **1** between 2012 and 2016 to sharpen its profile as one of the world's leading specialty chemicals corporations. Highly skilled employees at all levels are very important to achieve this. Here are three examples—from China, Singapore and the USA.

24-year-old Shi Xichen knows exactly he likes best about his job at Evonik: "I love analyzing data." Shi Xichen works at Evonik's [site](#) **2** on the edge of Shanghai, in a plant where the Performance Polymers Business Unit produces starting products for high-performance polymers. Shi Xichen has samples of them on his laboratory workbench every day. In Germany, he would probably have taken a three and a half year vocational training course to qualify as a chemical laboratory technician. However, China does not have a training system that offers a comparable blend of theoretical instruction and hands-on practical experience in the workplace.

Evonik has therefore made its own arrangements to secure the skills it needs for its plants in China. For example, it cooperates with the Shanghai Petrochemical Academy (SPA) in the Jinshan district of the city. It was here that Shi Xichen received his training. The Academy provides a four-year vocational training program for more than a hundred young people after their basic schooling. Alongside financial support, Evonik provides equipment for the Academy. For example, it donated a training facility where students can practice working with pumps. Incidentally, it was constructed by apprentices and instructors from Evonik's site in Marl (Germany).

All students at SPA attend the same theoretical classes for the first two years. In the third year they are split, with about 30 students a year being allocated to a special "Evonik Class." The fourth and final year is dedicated to practical training. The students in the Evonik Class spend the entire academic year on an internship at Evonik, where they learn the practical aspects of their potential future jobs. At the end of that period, Evonik decides which of them to hire. As a cooperation partner, Evonik has first choice among the graduates in the Evonik Class.





1 Investment program

Driving growth

In its specialty chemicals operations Evonik is expanding in business segments and markets where it already has—or intends to build—a strong competitive position. Capital expenditures are aimed at utilizing potential for sustained profitable growth and value creation.

 **CR Report**
Read more on page 41 of Evonik's CR Report 2012

2 Sites

A global presence

Evonik is based in Germany, and we do business around the whole world. We are active in more than 100 countries globally and operate production plants in 24 countries.

 **Internet**
corporate.evonik.de/en/company/locations/

3 Plant safety

An active safety culture

Safety is a top priority at Evonik. Our objective is to protect our employees, local residents and the environment from any potential negative impact of our activities. We use indicators to monitor occupational and plant safety.



CR Report

Read more on page 95 of Evonik's CR Report 2012

4 Corporate culture

Our values

Our corporate values—"courage to innovate," "responsible action," and "sparing no effort"—are firmly anchored in our employees' day-to-day work and form the basis for their decisions. Our internal regulations are supported and supplemented by external principles and guidelines that we are committed to.



CR Report

Read more on page 35 of Evonik's CR Report 2012



5 Leadership

HR strategy driven forward

We have aligned our HR strategy to changing global conditions and added two new dimensions to our strategic drivers “Attract,” “Develop,” “Retain” and “HR Excellence.” For the “Leadership” dimension, the HR function is developing uniform processes and tools to support managers in tasks such as open and constructive feedback, and consistent and targeted measures for the development and advancement of employees. “Performance” concentrates on anchoring a healthy and balanced focus on performance in the Group.



Read more on page 71 of Evonik's CR Report 2012

Tobias Groschang in Singapore could soon be offering vocational training as well. Groschang is responsible for production start-up for the biggest investment project in Evonik's history, the construction of a new production complex for methionine, an amino acid used in animal feed. “At the moment, we are mainly hiring experienced personnel,” says Tobias Groschang. “But in the future, we want to offer vocational training as well.”

He has already hired many of the future shift supervisors. Most have between ten and twenty years' work experience.

The groundbreaking ceremony for this new complex in Singapore was held in summer 2012 and in spring 2013 Evonik opened a training center for new employees, most of whom come from the region. Shift supervisors, control room operators and machine operatives are particularly important for [safe and reliable operation](#) **3** when the plants come on stream in the third quarter of 2014. “We have hired the new employees very early to make sure we have enough time to train them in the specialist skills required for their future jobs,” says Groschang. That includes gaining a sound knowledge of the methionine production process and the associated safety standards, strengthening personal competencies, and learning and understanding [Evonik's corporate culture](#) **4**. A wide variety of training methods are used. Conventional face-to-face instruction is supplemented by interactive elements. One highlight will be the use of a special simulator where the new employees can practice starting up and shutting down the plants. Some of them, especially engineers and other technical managers, will also be trained at Evonik's present methionine production facilities, for example, in Antwerp (Belgium), Wesseling (Germany) or Mobile (USA).

[Leadership](#) **5** as a key competitive advantage—that is the heart of the North America Game Changing Leaders Program (GCLP) in the USA. North America is an important market for Evonik. In 2012 a total of 16 talents in North America participated in this six-month program, which is closely meshed with Evonik's growth strategy in North America. In 2012, Evonik's sales in this region amounted to around €2.4 billion, which was 18 percent of total sales.

As well as developing the participants' leadership skills, enhancing their understanding of the market and supporting their personal development, a central element of the program was working in groups to develop a new idea that Evonik could use to address the global megatrends. The assignment included making sure that the idea had the potential to support Evonik's growth in North America. At the same time, their business plans had to take account of sustainability. One of the teams looked at innovative solutions for lightweight structures for the automotive industry. Maybe Evonik will even be able to use their ideas to develop further business opportunities in the future.

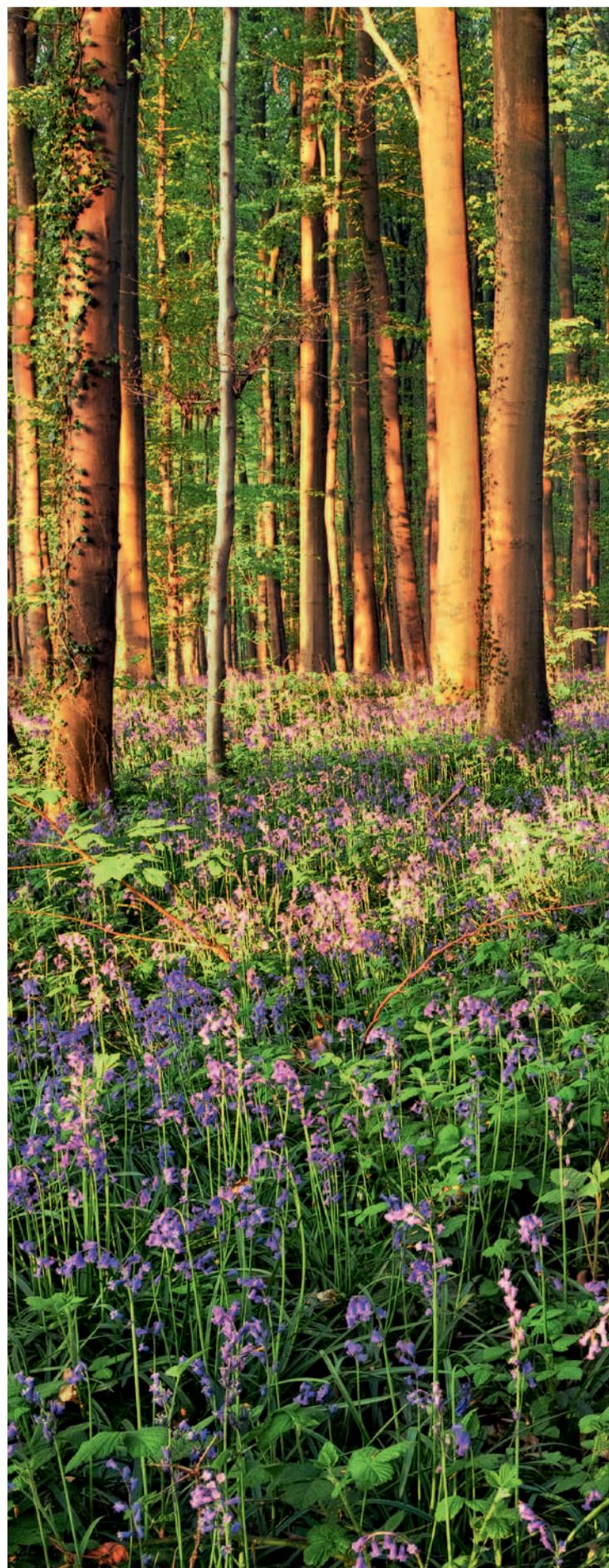
Life cycle assessments

In the old days, a product was good if it was fit for purpose and the price was right. Today, its sustainability profile also has to be considered. At Evonik, that is the task of the Life Cycle Management (LCM) team, which conducts life cycle assessments to systematically analyze the environmental impact of products and processes.

Road markings 1 are designed to enhance road safety. They contain tiny glass beads that reflect headlamps when it is dark and the roads are wet. Recently, increasing attention has been paid to environmental aspects as well as to safety. After all, the rising volume of traffic means that more and more road markings are needed. But which road marking system performs best in this respect? In other words, which has the best sustainability profile?

That's something Evonik wants to know. After all one system of cold plastic road markings is based on its DEGAROUTE® reactive resin. That is a good enough reason to compare this product with three other commonly used road marking systems—thermoplastic, solvent- and water-based systems—and to analyze the environmental impact of all four systems with the aid of life cycle assessments (LCAs). As the name indicates, life cycle assessments involve monitoring and assessing the entire life cycle of a **product 2 3**, from extraction of the raw materials and generation of the necessary energy, through production, transportation and use of the products, right up to recycling or final disposal. As a consequence of climate change, carbon footprints have become a central element of LCAs. As a measure of the greenhouse gas emissions over the entire life cycle of a product, they are a suitable way of determining, evaluating and communicating the impact that goods and services have on the climate.

At Evonik, life cycle assessments and carbon footprint analyses are performed by Life Cycle Management (LCM). LCM is an interdisciplinary team of eleven scientists and engineers from Process Technology & Engineering. Since 2009 the team has been working on projects associated with the climate and energy megatrends at the **Eco² Science-to-Business (S2B) Center 4** run by Creavis. Dr. Elmar Rother, who heads the team, explains that its task is to develop Group-wide LCA standards to evaluate the sustainability and climate relevance of Evonik's products and processes. It also provides support for LCA experts within the business units by conducting internal process analyses and customer-focused studies.



1 Road markings

Environmental protection on the street

Road markings increase safety. However, there are differences in their quality and environmental profile. Evonik arranged for a life cycle assessment on a product that has been successful for decades. The result: road markings based on DEGAROUTE® are good for safety and for the climate.

Internet
corporate.evonik.de/en/products/product-stories/pages/environmental-protection-on-the-road.aspx

2 Product: amino acids

More efficient animal nutrition

The global population increases by around 80 million people a year according to estimates by the United Nations. So how can they all be fed adequately in the future? How can rising demand for meat be met? One answer is to use amino acids from Evonik Industries as feed additives. Because they ensure balanced animal nutrition and at the same time protect the environment and save valuable resources.

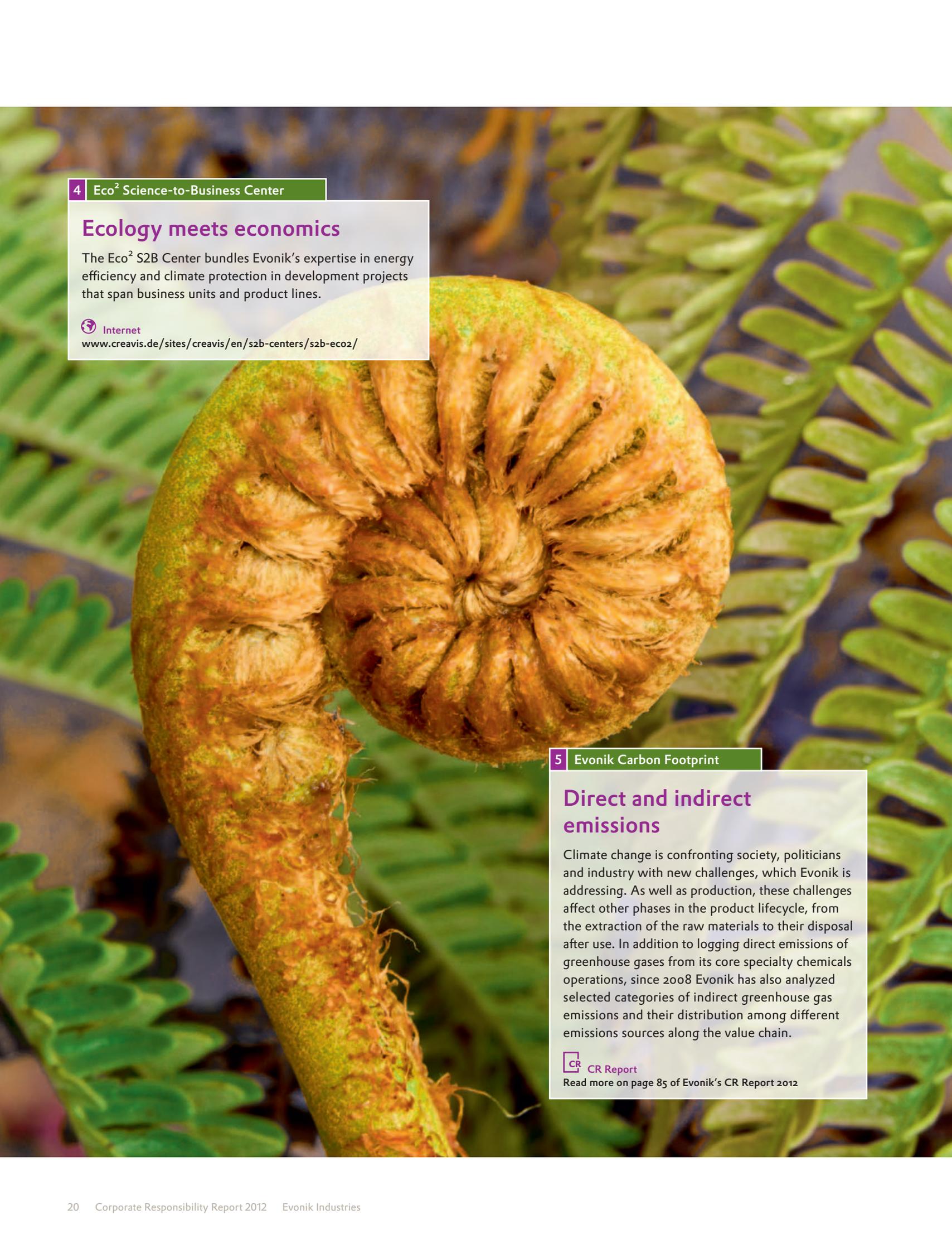
Internet
corporate.evonik.de/en/products/product-stories/pages/more-efficiency-in-the-trough.aspx

3 Product: silica-silane systems

All in the green zone

Labeling of tires means that consumers who purchase a new automobile or new tires are informed about their fuel economy and CO₂ savings, braking efficiency on wet roads and noise emission level. Evonik supplies filler systems composed of silica and organosilane that play a key role in the performance of tires. And that makes a contribution to climate protection.

Internet
corporate.evonik.de/en/products/product-stories/pages/GreenTires.aspx



4 Eco² Science-to-Business Center

Ecology meets economics

The Eco² S2B Center bundles Evonik's expertise in energy efficiency and climate protection in development projects that span business units and product lines.

 Internet

www.creavis.de/sites/creavis/en/szb-centers/szb-eco2/

5 Evonik Carbon Footprint

Direct and indirect emissions

Climate change is confronting society, politicians and industry with new challenges, which Evonik is addressing. As well as production, these challenges affect other phases in the product lifecycle, from the extraction of the raw materials to their disposal after use. In addition to logging direct emissions of greenhouse gases from its core specialty chemicals operations, since 2008 Evonik has also analyzed selected categories of indirect greenhouse gas emissions and their distribution among different emissions sources along the value chain.

 CR Report

Read more on page 85 of Evonik's CR Report 2012

6 Carbon Footprint Estimation method

Assessing research projects

Evonik has developed the Carbon Footprint Estimation method (CFE) to quantify and analyze the potential climate impact of new products at an early stage in their development.

 [Internet
corporate.evonik.de/en/responsibility/](http://corporate.evonik.de/en/responsibility/)

This morning Rother is meeting with team members Christina Haasken and Guido Vornholt at Hanau-Wolfgang Industrial Park to embark on the comparative analysis. As always, the first step for the project team, which is put together on the basis of skills and expertise, is to draw up a timeline and process schedule. The starting point for projects like this is normally a processing plant. “A key aspect of our work is analyzing material flows and energy consumption, especially in the context of the customer benefits provided by our products,” explains Dr. Rother. That requires a network of contacts in the business units and information from suppliers. Some of this information is obtained directly by the team, and some comes from supplier surveys conducted by Procurement.

The LCM group’s work is extremely important for Evonik, not least because life cycle assessments and carbon footprint analyses are recognized international tools. “We also create transparency for customers and stakeholders, comply with political and societal demands, and demonstrate Evonik’s position as a company that lives sustainability,” stresses Dr. Wilfried Blümke, Head of Bioprocess Technology & Life Cycle Management within the Process Technology & Engineering service unit. One objective is to build up a database that can be used to make decisions on the “right” raw materials. The team uses established information sources such as the European Life Cycle Directory (ELCD), and the databases maintained by PlasticsEurope and the EMPA institute in Switzerland. “Our own database also grows with each project we do,” says Dr. Blümke. He points out that more than half of production volumes sourced from outside the company have already been analyzed.

Dr. Rother estimates that the team averages 20–30 projects a year. At corporate level, it captures [Evonik’s carbon footprint 5](#), while at product and process level it helps business units conduct LCAs. And in the area of research and development, it has developed the [Carbon Footprint Estimation \(CFE\) method 6](#), mainly for projects at the Eco² S2B Center. This method allows standardized evaluation of development projects to establish both greenhouse gas emissions and the related reductions in such emissions at all stages in a product’s life cycle. It therefore ensures that comparable criteria can be used to evaluate different projects at Evonik.

In addition, life cycle assessments identify weaknesses, highlight scope to improve environmental characteristics at various phases in the value chain and show where Evonik products stand in terms of sustainability compared with other products. Besides, many of the people currently working in the LCM team will work in other units in the future, enabling them to transfer their knowledge of life cycle assessments. That is a key step towards making life cycle assessments, carbon footprint analysis and other methods standard tools in Evonik’s business processes. Ultimately, the aim is to make good products even better.

Learning by playing

Sustainable business management is hardly child's play. Nevertheless, following an initial workshop with the napuro planning game, Evonik is convinced that "learning by playing" is an excellent way of exploring the main relationships and interactions that characterize and influence corporate sustainability.

Lioba Appel, Charlotte Felden and Hangzi Zhu took a clear decision right at the beginning: As well as ensuring sustainable operation of 'their' company, they want to use sustainability for promotional purposes and to enhance its corporate image. "Green—right down to the tiniest screw" is the slogan they have chosen to differentiate their cleaning robot from its competitors. Besides, the company's environment-friendly philosophy is highlighted by the fact that all employees cycle to work.

This morning eleven members of the Evonik Perspectives talent retention program, three interns and one apprentice are testing the napuro sustainability business planning game. Their prior knowledge varies enormously. While Lioba Appel recently completed a BA in European Studies and has a relatively clear idea about sustainability thanks to an internship in Evonik's Corporate Responsibility (CR) department, the topic is almost completely new to Charlotte Felden. She is an intern in Employer Branding, and will soon be completing her master's degree in business administration. She has heard about sustainability but her knowledge is sketchy. The situation is similar for Hangzi Zhu, a PhD student who is currently working in Innovation Networks and Communication at Evonik. Today is set to change that.

In the global market for cleaning robots, which is the territory where the teams will be competing against each other, competition is tough and opportunities and risks are difficult to predict. How should the team react if the company suddenly finds the glaring spotlights of non-governmental organizations (NGOs) trained on it because **suppliers 1** use child labor? How should they respond if production costs rise dramatically as a result of a shortage of **raw materials 2**? Or conversely: how can opportunities arising from **innovation 3**, societal trends and changing customer needs be identified and utilized?

1 Suppliers

Supply chain management at Evonik

Corporate responsibility is systematically integrated into procurement via a multi-step process and the selection of suppliers is not based solely on economic criteria. Our goal is to ensure responsible conduct along the supply chain, based on long-term business relationships.



CR Report

Read more on page 58 of Evonik's CR Report 2012



2 Raw materials

Our production inputs

Production inputs totaled 8.16 million metric tons in 2012, including 0.73 million metric tons of renewable resources.

 CR Report

Read more on page 84 of Evonik's CR Report 2012

3 Innovation

Research and Development

High innovative strength is vital for Evonik as a leading global specialty chemicals corporation. It drives profitable growth and reinforces our market and technological leadership. Evonik invested €393 million in research and development in 2012.

 CR Report

Read more on page 66 of Evonik's CR Report 2012

5 Apprentices

CR in vocational training

We are one of the first companies in Germany to give corporate responsibility a firm place in our vocational training courses. In a three-year project, we developed and tested suitable modules to integrate sustainability into vocational training.



CR Report

Read more on page 75 of Evonik's CR Report 2012

6 Ongoing training

Lifelong learning

Successful employees are vital for Evonik's success. Our wide-ranging development programs therefore focus on ongoing education and training that fosters the personal competencies and abilities required of our employees and supports the strategic objectives of our human resources work.



CR Report

Read more on page 76 of Evonik's CR Report 2012

4 Sustainability

Evonik's Corporate Responsibility Strategy

We are convinced that sustainable development and corporate responsibility are vital for the future viability of Evonik. We therefore accept responsibility worldwide, especially for our business, our employees and society.



CR Report

Read more on page 29 of Evonik's CR Report 2012



Until now, the participants had not given much thought to such issues and how they interact. As the first step in the planning game, groups of two or three players establish a company and use the equity provided to purchase four out of a total of twelve “action cards” that they feel look most promising within the context of the strategy that has been defined. Their task now is to use their knowledge and judgment to build a sustainability-driven company. Dr. Markus Ulrich, Head of the Zurich-based company Ulrich Creative Simulations (UCS), who developed napuro, sees this as the game’s strength. Unlike a lecture, the content becomes tangible. Are the measures strong enough to withstand the events that confront the company, especially when it has to deal with critical non-governmental organizations, talented youngsters, suppliers in Asia and customers with changing requirements? “Participants experience the outcome of their own decisions, learn from mistakes, and see how things interact,” explains Ulrich.

It was the complexity inherent in sustainability that prompted CR manager Beatrix Timte to test the suitability of the planning game for use at Evonik. “Many people are unaware of the complex interrelationships, and that sustainability affects so many areas of business activity. Or they act in a sustainable manner but do not regard it as a contribution to the ongoing development of the company.” napuro alters that. It gives participants a clear insight into—and personal experience of—corporate sustainability and the associated possibilities.

So what do the participants think about napuro? “Given the complexity of the subject, it’s certainly not easy,” says Lioba Appel. Charlotte Felden was mainly surprised by how many areas play a role in [sustainability](#) ⁴: “It’s extremely difficult to concentrate on all of them.” Her co-player Hangzi Zhu agrees with her: “The interaction between the various decisions at operating and management level and the impossibility of predicting all possible outcomes and reacting accordingly was really quite remarkable,” she admits.

That is exactly what napuro is about: understanding that decisions always have implications and that corporate sustainability always has to be viewed in context. Alexander Roy of HR Personnel & Organizational Development, who will be acting as trainer for napuro in the future, outlines its benefits: “Participants experience the interrelationships, so they find them easier to understand.” This planning game is set to play a significant role at Evonik. The license has already been purchased and four further workshops are planned for 2013—with a mixture of participants ranging from [new employees](#) ⁵ to future executives and experienced professionals. After that, it will be included in Evonik’s [catalog of continuing](#) ⁶ professional development programs. One particularly interesting aspect of napuro is that every participant acts on the basis of their personal and professional background. Beatrix Timte explains that the program will initially only be available for German speakers. An English version is currently being evaluated.

Corporate
responsibility

Corporate responsibility

Sustainability in business	29
Evonik's strategic focus.....	29
Our values and principles	35
Corporate governance	36
House of Compliance	36
Fighting corruption.....	38
The business	40
Very high earnings.....	40
Segment performance	44
Supply chain management.....	58
Product stewardship	60
Research and Development	66
Employees	71
Employees worldwide	72
Finding and fostering the right talents	74
Personnel expense and social security contributions	77
Working together as partners.....	79
A family-friendly company	81
The environment	83
Our management approach	83
Environmental targets	83
Production inputs and output	84
Energy inputs.....	84
Emissions into the air	85
Water data and emissions into water	89
Waste.....	91
Biodiversity and ecosystem services	93
Safety and health protection	95
Plant safety	95
Transportation safety and logistics.....	96
Corporate security	97
Occupational safety	98
Health protection.....	99
Society	101
Donations and sponsorship.....	101
Being a good neighbor	104
Representation of our interests.....	105

Corporate responsibility

Sustainability in business

Evonik's strategic focus

Evonik is one of the world's leading specialty chemicals companies. Profitable growth and sustained value creation form the heart of our strategy. Around 80 percent of sales come from market leading positions, which we intend to expand further. We concentrate on high-growth megatrends, especially health, nutrition, resource efficiency and globalization. As part of our ambitious growth strategy, we are investing considerable amounts to step up our presence in emerging markets, especially in Asia. Important competitive advantages come from our integrated technology platforms, which we are constantly refining. Our strengths include the balanced spectrum of our business activities, end-markets and regional presence, and working closely with key customers. Our profitable future growth is also driven by our market-oriented research and development. Continuous improvement of the cost base is also very important.

Our operations are grouped in three segments, each of which has two business units which act as entrepreneurs within the enterprise. Site Services bundles typical services for the chemicals industry such as utilities, waste management, logistics and plant management for our sites. Evonik Business Services provides standardized Group-wide business services. The Corporate Center supports the Executive Board in its strategic management of the Group.

Our corporate responsibility strategy

We are convinced that sustainable development and corporate responsibility are vital for the future viability of Evonik. We therefore accept responsibility worldwide, especially for our business, our employees and society. Our CR strategy takes up the megatrends identified in our corporate strategy and supplements them with ecological and societal challenges. Evonik aims to make a substantial contribution to sustainable development by developing new products and business models. At the same time, we want to strengthen our market positions.

We drove forward our CR strategy in 2012 by intensively addressing the expectations of internal and external stakeholders. Since we are a supplier to many other industrial companies, the ecological footprint of our products is a key issue for our stakeholders, especially our customers. Our customers expect our products, services and technologies to help them achieve their sustainability targets. That applies to both the raw materials we use and production processes. Alliances along the value chain play a significant role in that.

In 2013, we are continuing to work on the development of our CR strategy and its implementation in our units and regions.

Central responsibility for sustainability management

The Executive Board bears overall responsibility for sustainability at Evonik and direct responsibility is assigned to the Chief Human Resources Officer. The issues derived from the sustainability strategy are implemented through goals set for the business units and specialist departments and their attainment is monitored using performance indicators. The role of the steering committees is to ensure that these goals are achieved.

The strategy is mainly developed and monitored in the Corporate Center. In addition, various network platforms, which are supplemented as required, are used to track sustainability-related issues in the Evonik Group and translate them into specific measures.

 See also page 40
Evonik Group: Key figures

 See also page 66 ff.
Research and Development

 See also page 44 ff.
Segment performance

 Internet
Responsibility at
www.evonik.com

Our CR partners in the business units, service units, Corporate Center and main regions in which Evonik operates are important multipliers and ensure that the development and implementation of the CR strategy takes account of the requirements of the operating units and Corporate Center, and the views of foreign companies.

Sustainability management at Evonik



Materiality analyses

We use materiality analyses to identify and evaluate the main global challenges in the area of sustainability. To this end, we evaluate selected challenges from a social and business perspective. We analyze the expectations of stakeholders, Evonik’s potential to take action, and the associated risks and opportunities for our business. The results are used to drive forward our CR strategy and make regional and business-specific recommendations. In addition, our sustainability analyses help raise awareness of corporate responsibility and sustainable development at all levels in the company.

In 2013 we carried out materiality analyses in the North America region and at Evonik Business Services. In common with other business units and regions, from a North American perspective the most significant issue is resource utilization. Stakeholder expectations and the associated business opportunities and risks received high scores. Health and population growth, which are given an equally high rating from a stakeholder perspective, are areas where Evonik has far less impact but which are nevertheless regarded as offering business opportunities. Overall, in North America stakeholder expectations and the assessment of Evonik’s influence are far lower than in Europe.

An additional criterion was used in the materiality analysis for our internal business and administration service provider Evonik Business Services (EBS): global challenges in relation to business processes. This had been used in the materiality analysis of Procurement in 2011. Alongside resource utilization and climate change, the materiality analysis at EBS showed that human rights, diversity, equality of opportunity, demographic change and health are important.

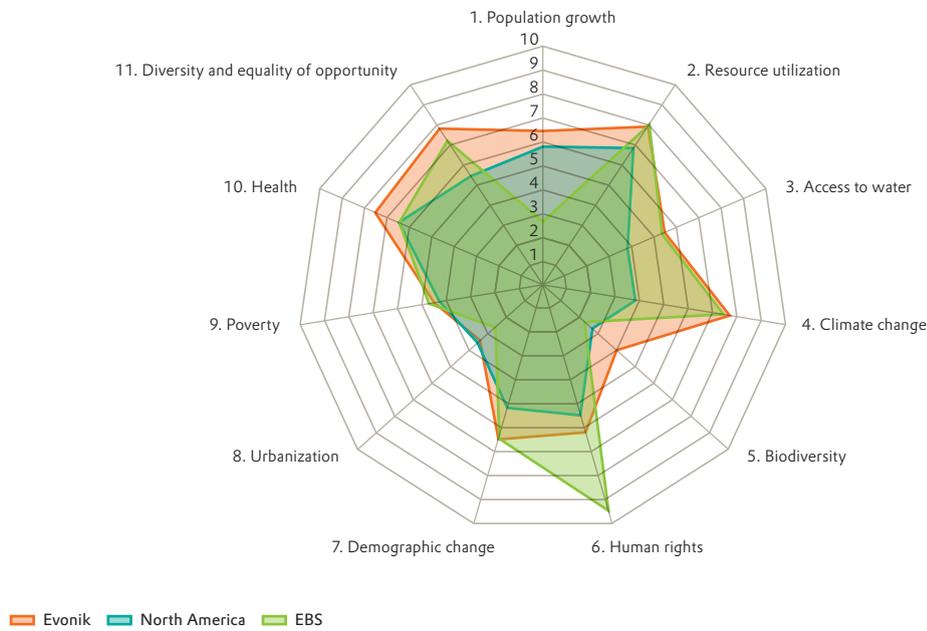
The megatrends that are important for Evonik’s growth—health, nutrition, resource efficiency and globalization—are reflected in the materiality analyses. They are based on expectations linked to the megatrends we have identified.

 **Further information**
CR Report 2011, page 30

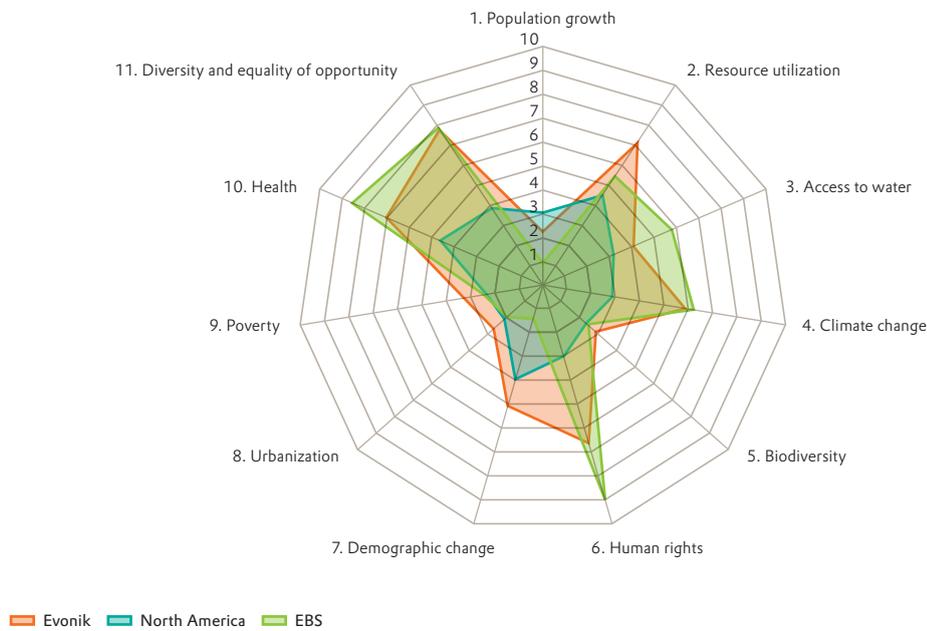
 **Internet**
Company/Megatrends at
www.evonik.com

Materiality analysis of the business – Comparison of Evonik, the North America region and EBS

Shareholder expectations

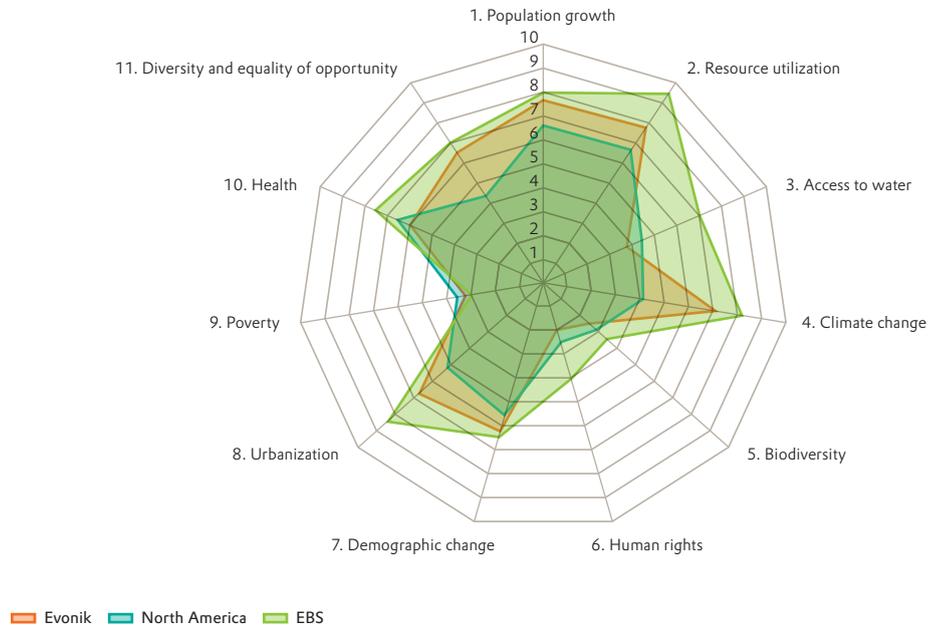


Impact of Evonik

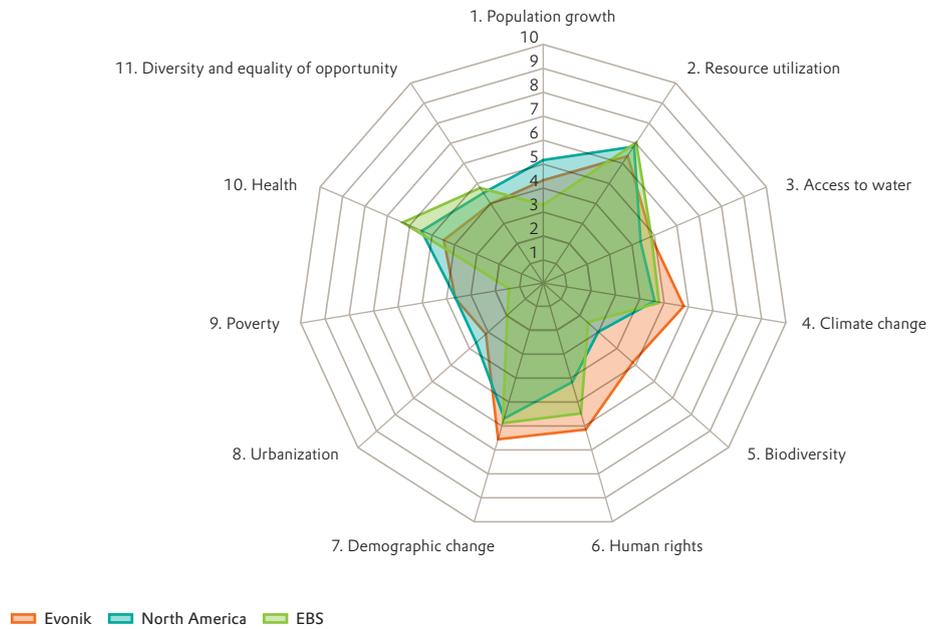


Materiality analysis – Comparison of Evonik, the North America region and EBS

Opportunities



Risks



Dialog with our stakeholders

Dialog with our stakeholders has a firm place in our sustainability strategy. We are engaged in a continuous dialog with customers, employees, owners, investors, suppliers, labor unions, scientific organizations and legislators. We also maintain contact with local residents and non-governmental organizations (NGOs). In 2012 we continued to network with our stakeholders. We respect their interests. By involving them, we want to obtain information for the strategic development of our business, potential process improvements and Evonik's role in the social environment.

The Evonik Sustainability Business Forum

We work with our partners at all stages in the value chain in an effort to find joint solutions to social and ecological challenges. For the 2012 Evonik Sustainability Business Forum (ESBF) we selected the topic "Scarce resources—Sustainable growth." The forum was attended by experts from companies, industry associations, politics, science and NGOs. Our aim is to establish an intensive dialog to identify the basis for possible change and development processes in our own organization and define the need for action. This should help us recognize key challenges better and integrate them into our organization. In this way, we contribute to making sustainability a central element at all stages in the value chain. Before the forum, participants received a newsletter with information on key aspects such as material flows, productivity of resources, the basis of future raw materials and new patterns of consumption. At the forum, they had an opportunity to present their own endeavors and solutions in the area of sustainability and workshops were held to identify challenges relating to scarce resources and propose solutions for the utilization of resources in the future. The ideas gathered were made available to participants in suitable form to help them ensure the future viability of their own operations or generate cooperation models for further work.

Employee involvement

In 2012 we continued the CRtopic series, which we introduced in 2011. This is open to all employees who are interested in obtaining information on current sustainability issues and their relevance for Evonik. Areas of focus in 2012 were the "Wittenberg Dialog" initiated by the social partners in the German chemical industry, and the cradle-to-cradle principle.

Cooperation

Networking with universities and scientific institutes is another pillar of our stakeholder dialog. At the "Evonik Meets Science" forum, for example, our experts discuss current research issues with top scientists from various disciplines. Forums are held regularly in Germany, Asia and the United States. The two forums held in 2012, in Darmstadt (Germany) and Shanghai (China), concentrated on megacities.

Focus of our work in 2012

We drove forward the development of our CR/sustainability strategy in 2012. Based on the results of our materiality analyses and an intensive investigation of the market environment, we are identifying strategic areas of action that we will be pursuing as part of our new CR strategy.

Our objectives 2013

Area	Objective	Planned deadline
Sustainability management		
	Conduct at least 20 ESHQ audits in the Evonik Group	2013
	Continue to develop the CR strategy and plan the rollout to the operating units	2014
The business		
	Investment of approximately €6 billion in the coming years	2016
	Step up the systematic stakeholder dialog and exchange of experience on CR (e.g. ESBF)	Annual target
Supplier management	Continue to analyze suppliers defined as a risk by checking 90 percent of identified potential risk suppliers using self-assessments	2013
Supplier management	Conduct at least 20 CR supplier audits	2013
Supplier management	Continue internal training of employees and carry out at least six further internal audits	2013
Product stewardship	Conduct a risk assessment for at least 99 percent of all substances marketed in quantities of >1 metric ton p.a.	2020
Employees		
	Introduce a sustainability-focused business planning game in German-speaking areas	2013
	Develop further training materials on sustainability issues (e.g. online tool)	Annual target
	Further expansion of the network for female employees and start of a mentoring program for women with twelve participants	2013
	Organize an international Diversity Day	2013
The environment		
	Set new quantitative environmental targets for the Group from 2014	2013
Safety and health protection		
	Introduce a performance index for occupational health	2013
	Group-wide initiative on safety culture: introduction of a safety vision for the Evonik Group	2013
	Occupational safety indicator: reduce accident frequency at Evonik (excl. Real Estate) (target < or = 1.5)	2013
	Plant safety indicator: improve Cefic Process Safety Performance Indicator for Evonik (business units with production activities) (target: < or = 48 compared with 2008 [reference base = 100])	2013
Society		
	Rollout of the Big Brothers Big Sisters mentor program	2013
	Introduction of an international tool to support science education	2015

It was not possible to complete the review of the CR strategy in 2012 so it will be continued in 2013. The deadlines set in CR Program 2012 for activities to roll out and implement the strategy has been adjusted. This also applies to the development of a web-based training tool to accompany communication of the new strategy.

We have also started to roll out napuro, a sustainability business planning game for our ongoing education and training offering. The goal of evaluating and flagging training with a CR content and evaluating relevant KPIs to assess investment decisions and portfolio managements have also been postponed.

Our values and principles

Our corporate values—“courage to innovate,” “responsible action,” and “sparing no effort”—are firmly anchored in our employees’ day-to-day work and form the basis for their decisions. Our activities are dominated by responsibility to society, the environment, colleagues and the business. Evonik’s success is determined principally by the core competencies of our employees: creativity, specialization, self-renewal and reliability.

Our internal regulations are supported and supplemented by external principles and guidelines that we are committed to.

External principles and guidelines

Good corporate governance, in other words, responsible and targeted management and supervision, forms an integral part of Evonik’s business processes. It is designed to strengthen trust in the company. At the same time, good corporate governance enhances transparency for all stakeholders and firmly anchors responsible conduct in the company.

Acceptance of the German Corporate Governance Code and compliance with the applicable legal requirements form the basis for responsible management of our company with a focus on sustained value creation.

Evonik is a signatory of the Code of Responsible Conduct for Business, which sets measurable standards that have to be firmly anchored in participating companies. These include fair competition, social partnership, the merit principle and sustainability. As a member of the United Nations’ Global Compact, Evonik is committed to its ten principles, which include promoting workers’ and human rights, preventing discrimination, protecting people and the environment and fighting corruption. We comply with the Guidelines for Multinational Enterprises issued by the Organisation for Economic Cooperation and Development (OECD). In addition, Evonik respects the International Labor Standards of the International Labour Organization (ILO).

We have signed the international Responsible Care initiative and are committed to continuous improvement of our performance in the areas of health, safety, the environment, and product stewardship. This commitment has been confirmed by signing the Responsible Care Global Charter of the International Council of Chemical Associations (ICCA).

Code of Conduct

Evonik’s binding Group-wide Code of Conduct contains the most important corporate values and principles and governs the conduct of Evonik, its legal representatives and its employees both internally, in the treatment of one another, and externally in the treatment of the company’s shareholders and business partners, representatives of authorities and government bodies, and the general public. It requires all employees to comply with the applicable laws, regulations and other obligations. They are also required to observe ethical standards. The Code of Conduct fosters a culture that ensures clear responsibility, mutual trust and respect, dependability and lawfulness.

Global Social Policy

Our Global Social Policy (GSP) contains an undertaking to observe fundamental values based on recognized international principles and standards of conduct. Evonik is committed to basic values such as the protection of children, freedom of employment, equality of opportunity, diversity, a ban on discrimination and occupational health and safety. All Evonik employees worldwide are required to observe the principles contained in the GSP and we take action in the event of violations. The GSP is available to employees in many languages. In 2012 we started work on mechanisms to check implementation of the GSP more stringently in the future and to evaluate the influence of our business activities on human rights.

 **Internet**
Responsibility at
www.evonik.com

 **Download**
www.oecd.org
www.ilo.org

 **See also page 95 ff.**
Safety and health protection

 **Download**
The Code of Conduct and Global Social Policy can be viewed in the Responsibility section at www.evonik.com

Corporate governance

Corporate governance comprises all principles for the management and supervision of a company. As an expression of good and responsible corporate management, it is therefore a key element in Evonik's management philosophy.

The principles of corporate governance relate mainly to collaboration within the Executive Board and Supervisory Board and between these two boards and the shareholders, especially at Shareholders' Meetings. They also relate to the company's relationship with other people and organizations with which it has business dealings.

Evonik's Executive Board and Supervisory Board are explicitly committed to responsible corporate governance and identify with the goals of the German Corporate Governance Code.

The Executive Board is responsible for running the company in the company's interests with a view to sustained value creation, taking into account the interests of the shareholders, employees and other stakeholders. It works together trustfully with the other corporate governance bodies for the good of the company.

The Supervisory Board advises and supervises the Executive Board. It appoints the members of the Executive Board and names one member as the Chairman of the Executive Board. The Supervisory Board is subject to the German Codetermination Act 1976 (MitbestG). Accordingly, it comprises 20 members, ten representing the shareholders and ten representing the company's employees. The representatives of the employees are elected by the workforce and comprise seven employee representatives and three representatives of the industrial union.

Performance-oriented remuneration of senior management

The Supervisory Board is responsible for the contracts of employment with the members of the Executive Board. It sets the total remuneration of each member of the Executive Board, comprising a base salary, variable short- and long-term components, pension benefits, reimbursement of expenses, insurance and various fringe benefits.

The contracts with members of the Executive Board and all executives include remuneration elements based on personal performance and the overall performance of the Group.

House of Compliance

Evonik understands compliance as all activities to ensure that the conduct of the company, members of its governance bodies and its employees respects all applicable mandatory standards such as legal provisions, statutory requirements and prohibitions, in-house regulations and voluntary undertakings. The basis for this understanding and for compliance with these binding standards is set out in Evonik's Code of Conduct.

The compliance culture created by the Code of Conduct, in particular, forms the basis for the "House of Compliance."

The compliance issues identified as being of specific relevance to our company are bundled in a House of Compliance. These are the pillars of compliance management, which is based on uniform minimum requirements for all these issues. Alongside traditional compliance issues such as antitrust law, foreign trade law, fighting corruption and data protection, as a technology-driven specialty chemicals company, issues of relevance to us include the environment, safety, health, quality, know-how protection, and IT compliance.

The Chief Compliance Officer coordinates the structure and ongoing development of the House of Compliance. He operates autonomously. He is supported in all major issues by a Compliance Committee. This is an internal advisory committee composed of the heads of the various specialist departments and Corporate Audit. Specially appointed staff officers in the business units, regions and other organizational units (for example, Compliance Officers for Fighting Corruption) ensure close networking of compliance and our business operations.

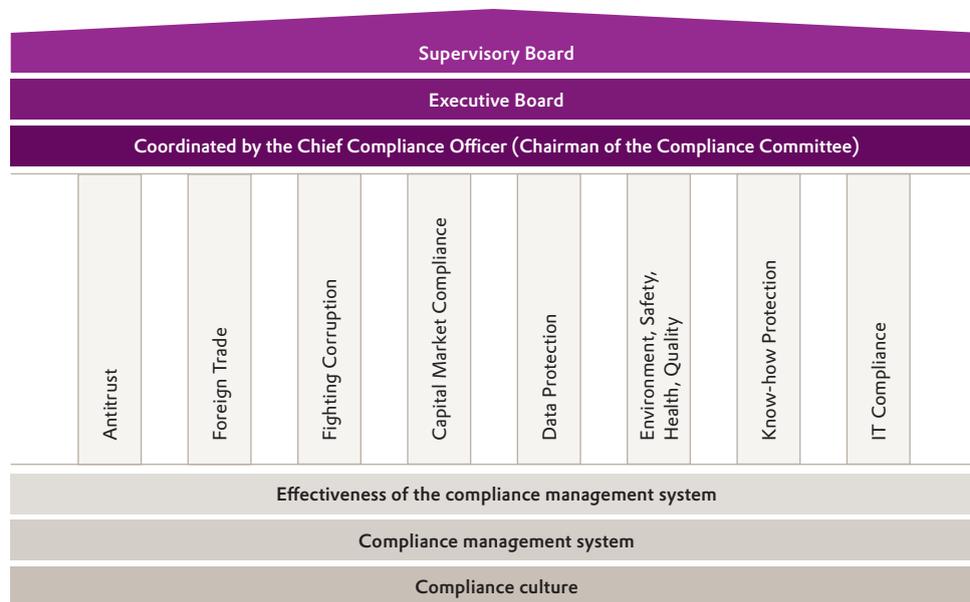
 Annual Report

For more information, see also page 235 ff. in the Evonik Annual Report 2012

 Internet

Responsibility/Compliance & Corporate Governance at www.evonik.com

House of Compliance



Antitrust law

Compliance with antitrust regulations is a central corporate objective and is included in Evonik’s Code of Conduct. Group-wide classroom and online training, conduct guides and specific legal advice on all issues of relevance to cartel law are the primary elements of our compliance activities in relation to antitrust law.

Foreign trade law

Every employee is required to observe all applicable foreign trade and customs regulations.

The Corporate Policy on Compliance with Global Trade Regulations and the associated trade compliance organization are designed to ensure compliance with the applicable export controls. Our trade compliance organization comprises a special department with Group-wide responsibility, a special IT system and a Group-wide network of around 70 trade compliance officers and trade compliance managers.

Fighting corruption

Evonik strictly rejects all forms of corruption. Even the impression of corruption or corruptibility should be systematically avoided. The Code of Conduct therefore establishes a zero-tolerance principle, which is set out in detail in the Master Gifts and Hospitality Policy, together with regional implementation regulations, and in the Policy for the Use of External Intermediaries for the Sale of Evonik Products and Merchandise. For practical application of these policies, all employees can access checklists that summarize the main points via the compliance page on the Evonik intranet. In addition, the Executive Board has issued a Group Policy on Fighting Corruption and Advancement of the Code of Conduct. This defines responsibilities, powers, tasks and reporting requirements aimed at avoiding corruption and the consequent harm to Evonik. In addition, a Group Policy on Sponsoring was issued in 2012. This set binding rules and processes for the prevention of corruption in this area.

Capital market compliance

A Group-wide policy that was revised thoroughly in 2012 ready for the stock exchange listing sets out the rules for capital market compliance by Evonik employees. It also contains information on the legal consequences of violating prohibitions imposed by capital market law. Through this policy and the accompanying organizational instructions, Evonik fulfills its organizational obligations in this area.

Management of data protection

The organization of data protection and rules on reliable processing of personal data are set out in a separate data protection policy. The Corporate Data Protection Officer monitors observance of these rules and assists the organizational units in implementation and coordination. In particular, his role is to monitor correct usage of data processing programs that handle personal data. Web-based training programs and information on the relevant requirements and responsibilities are available on the Evonik intranet.

Know-how protection

The Master Policy on Know-how Protection aims to protect the knowledge and expertise of our employees and thus Evonik's competitive and technological edge. The policy defines the basic responsibilities, powers, reporting obligations and fundamental requirements in this area.

IT compliance

Group-wide rules and regulations outline the safe handling information and the secure use of information systems. Evonik's IT Compliance Enforcement Program (ICEP) drives the implementation of compliance requirements imposed on managers and employees by legislation and the Group with regard to the operation and use of IT. As part of the ICEP, the internal control system was extended further in 2012, an IT compliance index to measure observance of IT compliance regulations on a quarterly basis and an IT risk management system for the future was prepared.

State-of-the-art information security and data protection technologies are used throughout the Group to avoid such risks. Modern technical protection is installed to counter the risk of potential unauthorized access and the loss of data. These are continuously expanded and adapted to the constantly changing risk situation to ensure that we have adequate protection against potential risks in the future. Various IT training methods are used to heighten employees' awareness of the need for security in the handling of information technology.

Fighting corruption

Evonik stepped up its activities to fight corruption in 2012. As a global corporation, we do business in regions that are classified as a corruption risk in the Corruption Perceptions Index (CPI) issued by Transparency International. We exercise particular care in dealings with officials and in the selection of intermediaries. Corruption risks are identified as part of our Group-wide risk management system. Under this system, a risk inventory is completed once a year and updated every quarter. In 2012 we also designed an interdisciplinary compliance risk analysis. As a first step, a list of specific questions was drawn up as a basis for assessing possible compliance risks. An analysis has already been conducted in a pilot area. Further significant elements are follow-up interviews and the agreement of additional measures with the executives responsible for the unit. Following conclusion of the pilot, the process will be rolled out stepwise to the relevant units.

Our employees can contact the relevant compliance office or compliance hotline at any time, anonymously if they wish, to report compliance issues. All allegations of conduct that infringes compliance policy are investigated and disciplinary action is taken where appropriate. In 2012 we terminated the employment contract with six employees as a result of violations of our compliance policy and in one case we also filed a claim for compensation from the individual concerned. Violating the ban on corruption also has far-reaching consequences for our business partners and can result in termination of the business relationship. This occurred in four cases in 2012.

In response to the violation of compliance rules at the Chinese joint venture Evonik Sanzheng (Yingkou) Fine Chemicals Co., Ltd., Evonik ended the collaboration in 2012. As a further consequence, compliance aspects are to be integrated more systematically in our M&A activities, especially with regard to joint ventures.

Compliance training

To give our employees continuous information on compliance and heighten their awareness of the related issues, we organize online and face-to-face training in the various aspects bundled in the House of Compliance. The aim is that every employee should normally receive training in relevant issues every three years. In addition, we updated our binding employee training concept on the issues covered by the House of Compliance and placed it on a formal basis. The concept sets standardized criteria. For example, it defines target groups and the frequency of training. In the area of fighting corruption, for instance, it specifies job groups for which this issue is of particular importance. These include all jobs involving external contact. The concept is currently being rolled out. At the same time, a joint intranet site was developed for the various areas of the House of Compliance. Alongside information on the training concept, this gives employees general information on the compliance organization and contact details. It also contains links to separate pages for each of the areas, which contain more detailed information.

International rollout of the fighting corruption e-learning program continued in 2012. Around 3,000 employees Group-wide successfully completed this online training program during the year. About 2,500 employees attended face-to-face training sessions. In addition, we published "Tone from the Top" messages from business unit heads on various compliance issues on the intranet as videos.

In all, more than 3,500 employees in the Evonik Group received training on the Code of Conduct in 2012. To create an awareness of compliance issues from the start of their working life, our apprentices are introduced to our compliance activities and our Code of Conduct in their first year of training. Similarly, new employees are informed about compliance and the regulations in force in the Evonik Group at face-to-face training sessions.

The business

Very high earnings

We posted another successful performance in 2012 although global business conditions remained challenging. Following a very good first half, the economic downturn that set in from the summer led to more cautious ordering patterns by our customers. Nevertheless, we registered high demand around the world. In the main, utilization of our production capacities was therefore high.

Overall, sales were €13.6 billion and the operating results were close to the very good numbers reported for 2011. It should be noted that the carbon black business was included for seven months of 2011 as the divestment of this business was closed at the end of July 2011. There was a slight organic drop in sales of 1 percent due to slightly higher selling prices. Adjusted EBITDA was €2,589 million (2011: €2,768 million), while adjusted EBIT was €1,953 million (2011: €2,099 million), and thus remained at a very good level.

Evonik's high profitability is evidenced by another excellent adjusted EBITDA margin of 19.0 percent in 2012 (2011: 19.0 percent). Net income grew perceptibly to €1,164 million (2011: €1,011 million).

AR Annual Report

For more information, see also page 59 ff. in the Evonik Annual Report 2012

Evonik Group: Key figures

in € million	2008	2009	2010	2011	2012
Sales	15,873	10,518	13,300	14,540	13,629
Adjusted EBITDA ¹⁾	2,165	1,607	2,365	2,768	2,589
Adjusted EBITDA margin in %	13.6	15.3	17.8	19.0	19.0
Adjusted EBIT ²⁾	1,298	868	1,639	2,099	1,953
ROCE ³⁾ in %	9.0	7.7	15.0	18.7	17.2
Net income	281	240	734	1,011	1,164
Total assets as of December 31	20,115	18,907	20,543	16,944	16,663
Equity ratio as of December 31 in %	25.6	27.6	29.1	35.8	41.0
Cash flow from operating activities	388	2,092	2,075	1,309	1,420
Capital expenditures ⁴⁾	1,160	569	652	830	1,078
Depreciation and amortization ⁴⁾	842	712	694	647	639
Net financial debt as of December 31	4,583	3,431	1,677	843	1,163
Employees as of December 31	40,767	33,861	34,407	33,556	33,298

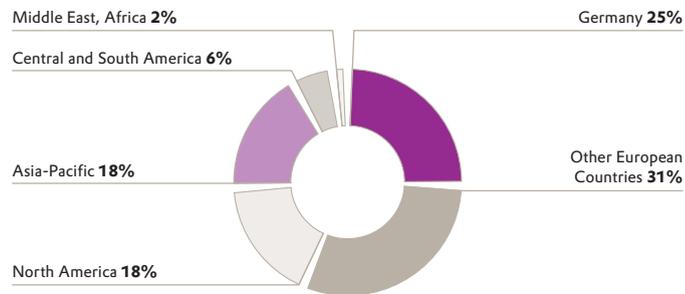
Figures for 2008 include the former Energy Business Area; in 2009 and 2010 these operations were classified as discontinued operations.

¹⁾ Adjusted EBITDA = Earnings before interest, taxes, depreciation, amortization, and adjustments.

²⁾ Adjusted EBIT = Earnings before interest, taxes and adjustments.

³⁾ Return on capital employed.

⁴⁾ Intangible assets, property, plant and equipment and investment property.

Sales by region¹⁾²⁾ ✓

¹⁾ By point of sale.

²⁾ The allocation of countries to regions at Evonik was altered slightly at the start of 2012.

Value added

Value added is calculated from sales and other revenues less the cost of materials, depreciation and amortization and other expenses. In line with the good operating performance, value added rose 4 percent to €4,730 million in 2012. The largest share of value added—57 percent (2011: 58 percent)—went to our employees. 10 percent (2011: 11 percent) was paid to the state in income and other taxes. A further 8 percent (2011: 9 percent) went on interest payments. Shareholders of Evonik Industries AG received 25 percent of value added, up from 22 percent in 2011.

Breakdown of value added ✓

in € million	2012	2011
Total value added	4,730	4,565
Split		
Employees	2,675	2,628
State	496	492
Creditors	392	431
Non-controlling interests	3	3
Net income	1,164	1,011

Considerable increase in investment spending underscores our growth strategy

In its specialty chemicals operations Evonik is expanding in business segments and markets where it already has—or intends to build—a strong competitive position. Capital expenditures are aimed at utilizing potential for sustained profitable growth and value creation. In 2012 we increased investment in property, plant and equipment by 30 percent year-on-year to €1,078 million (2011: €830 million). The increase was mainly attributable to strategic growth projects, which we either started in previous years or initiated in 2012. The biggest single project in 2012 was construction of a new methionine plant in Singapore. The regional focus of capital expenditures was Germany, which accounted for 53 percent of the total, followed by the Asia-Pacific (26 percent) and North America (13 percent).

Major projects completed or virtually completed in 2012

Segment	Location	Project
Consumer, Health & Nutrition	Essen (Germany)	New central laboratory for Consumer Specialties
	Essen (Germany)	New production facility for silane-modified polymers
	Essen (Germany)	Expansion of production capacity for hydrogen siloxanes
	Blair (Nebraska, USA)	Expansion of production capacity for Biolys® and lysine for aquaculture
	Darmstadt (Germany)	New production plant for RESOMER®
Resource Efficiency	Ta Yuan (Taiwan)	Expansion of production capacity for precipitated silicas
	Essen (Germany)	New R&D center for additives and specialty binders
Specialty Materials	Marl (Germany) and Shanghai (China)	Expansion of production capacity for polyamide 12
	Marl (Germany)	Rebuilding of the CDT production plant
Real Estate	Dortmund (Germany)	Acquisition of more than 240 residential units and modernization of 80 units

For further information on current capital expenditures projects, please see the sections on the segments.

Changes in the Group

In March 2012 we signed an agreement to divest our global Colorants business to a subsidiary of Arsenal Capital Management L.P., New York (New York, USA). The transaction was closed on April 30, 2012 and resulted in the deconsolidation of three subsidiaries.

Further, on June 30, 2012, Evonik signed an agreement to divest its shares in the subsidiary Evonik Sanzheng (Yingkou) Fine Chemicals Co., Ltd. to its Chinese partner. This transaction was closed on December 25, 2012.

In accordance with its focus on specialty chemicals, Evonik intends to withdraw completely from the real estate activities bundled in its Real Estate segment. In March 2013 we resolved on a step plan to divest the majority of this business and therefore reclassified the Real Estate segment to discontinued operations. Evonik currently holds 100 percent of the shares in Vivawest GmbH, which in turn has a stake of around 50 percent in THS GmbH. The other 50 percent is held by Vermögensverwaltungs- und Treuhandgesellschaft der Industriegewerkschaft Bergbau und Energie mbH (VTG). Vivawest and THS combined the property management activities for their residential real estate effective January 1, 2012. Now Vivawest GmbH and THS GmbH are to be combined in a single entity. VTG will hold around 27 percent of the shares in the new company, while Evonik will hold about 73 percent. As part of the transfer to a stable new ownership structure, Evonik plans to sell a 30 percent stake to RAG-Stiftung and a stake of around 10 percent to RAG Aktiengesellschaft. These transactions are contingent on the approval of the relevant bodies. In addition, a 25 percent stake is to be transferred to Evonik Pensionstreuhand e. V. (contractual trust arrangement, CTA). After these transactions, Evonik will probably still directly hold around 8 percent of the shares in the real estate activities. In the mid term we intend to divest this stake to trusted investors with a long-term investment horizon.

In preparation for the stock exchange listing, the previous sole owners of Evonik Industries AG—RAG-Stiftung and funds advised by CVC Capital Partners—sold some of their shares to institutional investors in Germany and abroad through private placements. Shares in Evonik were admitted to trading on the regulated market of the stock exchanges in Frankfurt am Main and Luxembourg on April 24, 2013 and trading commenced on April 25, 2013. In all, the previous sole owners sold around 14.5 percent of the company's capital stock prior to the start of trading.

Evonik 2016: Looking to the future

We have bundled our mid-term strategic goals in a carefully balanced program, "Evonik 2016." Growth, efficiency, values are the key aspects we will be using to achieve our ambitious targets. We intend to invest approx. €6 billion between 2012 and 2016 to expand our leading market positions. By steadily streamlining structures and workflows, we aim to mobilize further room for growth and innovation. The central element is the On Track 2.0 efficiency enhancement program which is designed to make a significant contribution, for example, through further optimization of global procurement, production and related workflows and global business and administrative processes. The aim is to reduce our cost base by a further €500 million a year. By 2012 we had already defined measures to achieve 50 percent of these savings and over €140 million were already being implemented. The values we live provide the foundations for us to enhance our growth impetus and raise efficiency.

Acquisitions and divestments

We seek to strengthen our core business through selective acquisitions. We therefore conduct a systematic and intensive due diligence process on all potential acquisition targets prior to purchase to identify all significant risks and benefits and arrive at an appropriate valuation of the business to be acquired. Should restructuring or divestment be necessary, we also implement these consistently. In the event of divestments, the legal and financial terms and reliability of the transaction are very important to us. We also attach great significance to the development perspectives for the business and the associated employees. Operations that we divest should therefore form part of the new owners' core business and have good development prospects.

Fostering customer relations

Working trustfully without customers and identifying customers' needs are important preconditions for our long-term business success. Only in this way can we provide custom-tailored products and solutions that are an exact fit with our customers' expectations. Thanks to many years of experience of product development and our close relationship with our customers, we are able to generate solutions that create value and optimize the environmental profile and the use of resources. This may even include integration into the customer's value chain, and possibly sharing production activities.

We are concerned to ensure transparency as regards the environmental impact of our major products and product groups, and their uses. To achieve this we conduct lifecycle assessments (LCAs), sometimes in collaboration with our customers.

To gain a knowledge and understanding our end-customers' CR and sustainability requirements, it is important that we have excellently trained sales and marketing employees who integrate these aspects into their day-to-day work. At Evonik, project work with customers is supported by training in skills, conduct and methodology.

Key account management and strategic partner management foster and facilitate contact between the various functions such as Sales, Marketing, Product Development, Technology and Procurement. Joint innovation projects with customers reinforce our relationships, especially with strategic partners, for whom we have established central contacts across organizational boundaries.

 See also page 33
Dialog with our stakeholders

Segment performance

Consumer, Health & Nutrition

The Consumer, Health & Nutrition segment produces specialty chemicals, principally for applications in the consumer goods, animal nutrition and health-care sectors. The long-term development of this segment's business is driven by socio-economic megatrends. As a result of growth in the world population, demand for food based on animal protein is rising. At the same time, the rise of an affluent middle class in the emerging markets is changing dietary habits and increasing demand for better quality day-to-day consumer goods such as personal care products and cosmetics. Moreover, the proportion of older people in the developed markets is rising as a result of demographic change, leading to higher demand for cosmetic, wellness and health-care products. This segment comprises the Consumer Specialties and Health & Nutrition Business Units.

Key data for the Consumer, Health & Nutrition segment

in € million	2012	2011	Change in %
External sales	4,204	4,081	3
Adjusted EBITDA	1,050	1,049	0
Adjusted EBITDA margin in %	25.0	25.7	-
Adjusted EBIT	924	917	1
Capital expenditures	303	186	63
Depreciation and amortization	132	123	7
Capital employed (annual average)	1,906	1,640	16
ROCE in %	48.5	55.9	-
Employees as of December 31	6,821	6,384	7

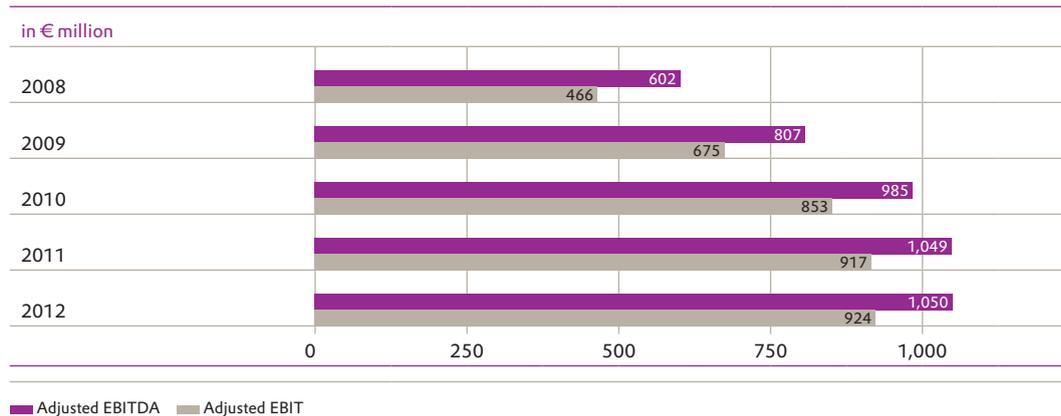
Development of sales in the Consumer, Health & Nutrition segment



Further rise in sales

2012 was another very successful year for the Consumer, Health & Nutrition segment. Globally, it saw demand for its products grow so overall production capacity was once again well utilized. However, selling prices slipped slightly, especially in the second half of the year. Buoyed by higher volumes, the segment posted slight organic sales growth. Together with the positive effect of exchange rates, sales grew 3 percent to €4,204 million.

Development of adjusted EBITDA and adjusted EBIT in the Consumer, Health & Nutrition segment



Excellent earnings performance

Thanks to the good volume trend, the operating results were once again excellent. Adjusted EBITDA matched the previous year’s level at €1,050 million and adjusted EBIT rose 1 percent to €924 million. The adjusted EBITDA margin declined slightly but at 25.0 percent it was still excellent.

Growth initiated

As a result of the growth strategy, capital expenditures increased substantially to €303 million (2011: €186 million). In response to the sustained growth momentum of the health and nutrition megatrends and the expansion of business activities in the emerging markets, significant investments are under way to create new capacities. Consequently, capital expenditures were well above depreciation, which amounted to €132 million in 2012. The average capital employed increased by €266 million to €1,906 million, principally because of the high capital expenditures. ROCE was excellent at 48.5 percent, although it was slightly lower than in the previous year due to the growth-induced rise in capital employed.

Consumer Specialties

A high proportion of this business unit's operations comprises ingredients, additives and system solutions, especially for high-quality consumer goods and specific industrial applications. The business unit has outstanding knowledge of interfacial chemistry. Its products are based on an extensive range of oleochemical derivatives, organically modified silicones, biochemistry and combinations of these. Key success factors are high innovative capability, integrated technology platforms and strategic partnerships with major consumer goods manufacturers.

Further improvement in earnings

In 2012 the Consumer Specialties Business Unit was able to continue the very successful performance reported in 2011. In view of the uncertain market environment, customers were more cautious. For example, orders were placed for smaller quantities. Overall, volume sales were almost unchanged from the previous year. The 2 percent rise in sales to €2,056 million was mainly attributable to currency effects and the first full-year consolidation the activities of Evonik Hanse GmbH, which were acquired the previous year. The operating results were higher than in 2011.

Investment in new markets

At the site in Essen (Germany), around €17 million was invested in construction of a research center for innovative and future-oriented products for the cosmetics industry.

This business unit has undertaken two major expansion projects to pave the way for profitable growth in attractive emerging markets in the future. The superabsorbents facility in Saudi Arabia and the production plant for organic specialty surfactants in China are expected to be completed by year-end 2013.

In Saudi Arabia, Evonik has established Saudi Acrylic Polymers Company (SAPCo), a joint venture with Saudi Acrylic Acid Company (SAAC), with capacity to produce 80,000 metric tons of superabsorbents a year. SAAC is a joint venture of the Saudi companies National Industrialization Company (Tasnee) and Sahara Petrochemicals. Total investment will run into triple-digit millions of euros, and Evonik's share is in the double-digit millions range. SAPCo's superabsorbent production facilities will use Evonik's state-of-the-art superabsorbent technology and are part of a new acrylic acid and derivatives complex at the Tasnee site in the Al Jubail Chemical Park in Saudi Arabia. They will benefit from low-cost propylene from the neighboring cracker operated by Tasnee and Sahara in conjunction with LyondellBasell. The acrylic acid required to produce superabsorbents will be supplied from a neighboring plant operated by a joint venture between SAAC and Dow Chemicals. The facility in Al Jubail strengthens our global leadership in this business and will meet rising demand for hygiene products in the fast-growing markets of the Middle East and in parts of Africa and Asia.

In Shanghai (China), Evonik is currently investing a sum in the upper double-digit millions of euros in a production complex for organic specialty surfactants. It will use renewable raw materials as the basis for ingredients for cosmetics, fabric care products and specialty surfactants for industrial applications. This will enable Consumer Specialties to support the growth of key customers in Asia, and especially the Chinese cosmetic industry, through local production. China, which is the largest market for cosmetic products in Asia, is expected to account for 25 percent of global growth in this market in the medium term.

Health & Nutrition

The Health & Nutrition Business Unit produces and markets essential amino acids, mainly for animal nutrition and the health-care industry. Key success factors are enormous technical experience of organic synthesis and biotechnology, which we regard as key growth drivers for the Evonik Group. Other significant competitive advantages are its global distribution network and extensive and differentiated service offering. Further success factors are a broad technology base, global access to markets and customers, and long-standing experience of patent protection and compliance with regulatory requirements.

Very successful business performance

Global demand for the Health & Nutrition Business Unit's products remained very strong in 2012. The amino acids methionine, lysine, threonine and tryptophan, which are important for animal nutrition, continued their dynamic development as a result of global population growth and rising per capita income in the emerging markets. In Asia, in particular, people in the growing and affluent middle class are altering their eating habits, resulting in far higher meat consumption. Business with health-care products continued to develop positively. Cooperation with key customers was successfully expanded. Good progress was made with the integration of the acquisitions made in 2011, the RESOMER® activities acquired from Boehringer Ingelheim and the pharmaceuticals business purchased from SurModics (USA). Sales grew 4 percent to €2,148 million, mainly because of the pleasing volume trend. Operating earnings were almost on a par with the previous year's excellent level.

Investing in further growth

In response to the sustained growth in demand for the amino acid methionine for animal nutrition, expansion of capacity for DL-methionine at three sites—Antwerp (Belgium), Wesseling (Germany) and Mobile (Alabama, USA)—was completed in 2012, almost a year ahead of schedule. This has raised capacity by 70,000 metric tons p.a. to a total of 430,000 metric p.a. In addition, Evonik is building a new production complex for DL-methionine in Singapore at a cost of over €500 million. In a fully backwardly integrated complex on Jurong Island, Health & Nutrition will produce all key strategic starting products required for the production of methionine. This production complex with capacity of 150,000 metric tons p.a. is expected to come on stream in the second half of 2014. It will increase Evonik's total production capacity for this product to 580,000 metric tons p.a.

Evonik is investing around €350 million to expand its market and competitive position in the feed additive L-lysine. Evonik's L-lysine, which is marketed as Biolys®, is produced using biotechnological methods and is regarded worldwide as an extremely effective source of lysine for animal nutrition. The increased production capacity for Biolys® at our site in Blair (Nebraska, USA) came on stream in fall 2012, doubling capacity to 280,000 metric tons p.a. New production facilities with nearly 200,000 metric tons p.a. additional capacity are to be built in Brazil and with partners in Russia. In Russia Evonik plans to produce around 100,000 metric tons p.a. Biolys® from 2014 through a joint venture in Volgondonsk in the Rostow-on-Don region, while in Castro (Parana, Brazil) it is building a plant at a site operated by the US company Cargill. This is also due to come into service in 2014. The advantage of both sites is the high growth momentum of the local markets and the very good availability of the materials for fermentation: wheat in Russia and corn in Brazil.

 **Internet**
Sustainability at
[www.evonik.com/
feed-additives](http://www.evonik.com/feed-additives)

 **Internet**
Customers can use the
AMINOFootprint® web-based
calculator to calculate the feed
mixture that has the lowest
environmental impact
www.aminoacidsandmore.com

Resource Efficiency segment

The Resource Efficiency segment provides environment-friendly and energy-efficient system solutions. Since supplies of fossil fuels are limited, we see the trend to renewable energy sources and energy-efficient and environment-friendly products as a key factor in the development of this segment's business. The segment comprises the Inorganic Materials and Coatings & Additives Business Units.

Key data for the Resource Efficiency segment

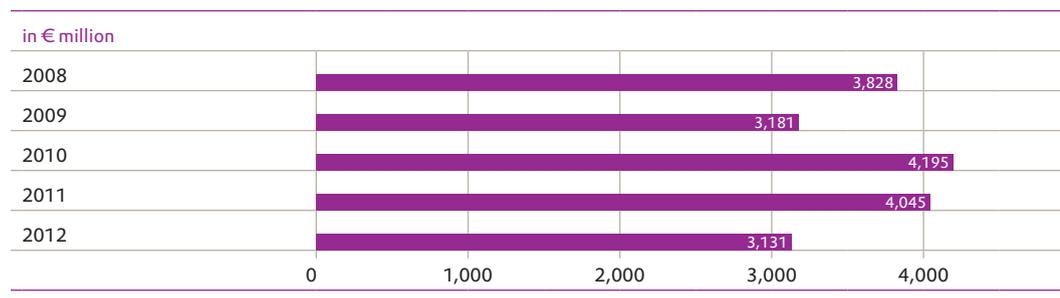
in € million	2012	2011 ¹⁾	Change in %
External sales	3,131	4,045	-23
Adjusted EBITDA	655	765	-14
Adjusted EBITDA margin in %	20.9	18.9	-
Adjusted EBIT	517	611	-15
Capital expenditures	171	170	1
Depreciation and amortization	136	152	-11
Capital employed (annual average)	1,596	2,068	-23
ROCE in %	32.4	29.5	-
Employees as of December 31	5,755	6,381	-10

¹⁾ Including carbon black until July 2011.

Lower sales due to divestment of non-core operations

Sales in the Resource Efficiency segment dropped by 23 percent to €3,131 million, principally as a result of the divestment of the non-core carbon black activities at the end of July 2011 and the colorants business at the end of April 2012. After adjustment for these factors and the positive currency effect, organic sales were only slightly lower than in the previous year. The drop in volumes, caused mainly by lower demand from the photovoltaics industry, was partly offset by higher selling prices.

Development of sales in the Resource Efficiency segment



Photovoltaic business restructured

In response to the persistently difficult competitive situation on the photovoltaic market, Evonik reached settlements with two of its main customers in September 2012, principally to wind up long-term supply agreements for silanes. Under the settlements, Evonik receives around €270 million and waives all rights relating to the underlying agreements. In addition, the production facility in Merano (Italy) was transferred to the customer. The production plant in Yokkaichi (Japan) was shut down and written down completely. The income from these settlements and all expenses relating to the restructuring of the photovoltaic business are reported outside operating income.

Development of adjusted EBITDA and adjusted EBIT in the Resource Efficiency segment



Higher adjusted EBITDA margin

The operating margins declined, mainly because earnings from the carbon black business were included in the previous year's figures until July. Adjusted EBITDA decreased by 14 percent to €655 million, while adjusted EBIT fell 15 percent to €517 million. The adjusted EBITDA margin improved from 18.9 percent to 20.9 percent for operational reasons and as a result of the divestment of the non-core businesses.

Improved return on capital

Capital expenditures amounted to €171 million, which was around the previous year's level, and were once again well above depreciation, which totaled €136 million. Average capital employed dropped by €472 million to €1,596 million, principally due to divestment of the carbon black and colorants activities. ROCE improved from 29.5 percent to 32.4 percent thanks to lower average capital employed.

Inorganic Materials

A central feature of the Inorganic Materials Business Unit, one of the leading producers of a wide range of silicas and silanes, is its integrated silicon technology platform. Key customers include the tire, electronics, construction and plastics industries. Its expertise in designing organic particles and their surface properties is also used in the catalysts business.

Performance unchanged

This business unit's sales dropped 36 percent to €1,473 million. Excluding the carbon black business, the decline was 1 percent. Positive currency effects were mainly offset by lower volumes. The business with silanes for the photovoltaic sector proved particularly tough as key customers scaled back or ceased production in response to high overcapacity. As a result, settlements were reached with two former major customers to end long-term supply agreements. By contrast, we registered a pleasing business trend with silicas for energy- and environment-efficient applications such as tires that enhance fuel economy and for the electronics and construction sectors. Further, silanes for the fiber optics industry were in high demand for the extension of high-speed networks, especially in Asia. The operating results were below previous year's figures, which still contained earnings from the carbon black business.

Investment in growth markets

A production plant for hexachlorodisilane (HCDS) came on stream in Rheinfelden (Germany) at the end of 2012. Evonik markets hexachlorodisilane as Siridion® HCDS. Applications for this silicon-based starting product for the semiconductor industry include efficient and cost-effective production of very high density flash memory chips, which are used, for example, in smart phones, digital cameras, MP3 players and USB sticks.

To support growth of key global customers in the tire industry, Inorganic Materials is raising capacity for precipitated silicas by 30 percent between 2010 and 2014, principally at existing production sites in Europe, North America and Asia. Total investment will be in the upper double-digit euro range. The main growth driver in the market for precipitated silicas is the trend to energy-saving tires with low rolling resistance. Using a combination of silica and silanes, it is possible to manufacture tires with considerably lower rolling resistance than conventional auto tires, resulting in fuel savings of up to 8 percent. Evonik is the only producer that offers both components, making it a component partner for high-performance tire blends for customers in the tire and rubber industries. Labeling of tires became mandatory in Europe at the start of November 2012, giving consumers transparent information on the fuel and CO₂ saving properties of the tires, their braking efficiency on wet surfaces and their noise level. In Japan there is a voluntary labeling program and other countries such as Korea and Brazil are introducing their own labeling. In addition, the growing automotive market in emerging markets, especially China, offers enormous growth potential for this technology.

Coatings & Additives

The Coatings & Additives Business Unit supplies high-quality functional polymers and specialty monomers to the paints, coatings, adhesives and sealants industries. It also produces high-performance oil additives and hydraulic fluids. A key attribute is its integrated isophorone technology platform. In addition, Coatings & Additives is closely meshed with Evonik's methacrylate and silicone platforms.

Sales and earnings at a good level

2012 was another very successful year for the Coatings & Additives Business Unit. Globally, demand was strong, especially from the automotive, construction and transportation industries which use oil additives to enhance the performance of engines and gears. High demand was also registered for products for the coatings industry, especially in the first half of the year. By contrast, business with composites weakened somewhat. Overall, sales slipped 5 percent to €1,658 million in the Coatings & Additives Business Unit. This was attributable to the divestment of the colorants business in April 2012. After adjustment for this effect, there was a slight improvement in sales. The operating results were slightly below the previous year's good level for the same reason.

Investment in new products

In Essen (Germany) the Coatings & Additives Business Unit invested €14 million in a new R&D center for the development of environment-friendly additives and specialty binders for the paints and coatings industry and applications technology services.

The groundbreaking ceremony for a major new facility for the production of functionalized polybutadiene was held in Marl (Germany) in summer 2012. This facility is scheduled to come on stream in mid-2013 and investment will be in the mid-double-digit millions of euros. Functionalized polybutadiene, which Evonik will be marketing as POLYVEST® HT, is mainly used in sealing components, for example, for double and triple-glazed windows and in adhesives for lightweight structures in automotive engineering. In automotive engineering, adhesives are increasingly being used to complement traditional welding processes or as structural adhesives for composites that cannot be welded. The new plant will make optimal use of the existing infrastructure and supply lines at the Marl Chemical Park and leverage synergies with existing polybutadiene plants.

In Shanghai (China) the Coatings & Additives Business Unit is investing more than €100 million in production plants for isophorone and isophorone diamine, which should come into service in the first quarter of 2014. Applications for isophorone include heavy-duty industrial flooring and colorants for high-quality, durable corrosion protection, while its derivative isophorone diamine is used in environment-friendly coating technologies. This capacity increase will be used to systematically strengthen the business unit's position and enable it to participate in the growing demand for these applications, especially in Asia. In addition, Evonik is building a technical service center at the Xinzhuang site in Shanghai. It will be equipped with state-of-the-art application technology laboratories in order to offer customers in the region customized products and technology services.

Specialty Materials segment

The heart of the Specialty Materials segment is the production of polymer materials and intermediates, mainly for the rubber and plastics industries. Progressive globalization offers market opportunities for this segment, driven by the mobility and urbanization megatrends, which are raising global demand for efficient transportation systems and sustainable construction methods. This is reinforced by the rise of an affluent middle class, especially in the emerging markets in Asia. In addition, growth should be boosted by new applications resulting from the substitution of materials. This segment comprises the Performance Polymers and Advanced Intermediates Business Units.

Key data for the Specialty Materials segment

in € million	2012	2011	Change in %
External sales	4,843	4,880	-1
Adjusted EBITDA	843	907	-7
Adjusted EBITDA margin in %	17.4	18.6	-
Adjusted EBIT	691	748	-8
Capital expenditures	344	210	64
Depreciation and amortization	151	153	-1
Capital employed (annual average)	1,811	1,702	6
ROCE in %	38.2	43.9	-
Employees as of December 31	6,134	6,846	-10

Slightly lower sales

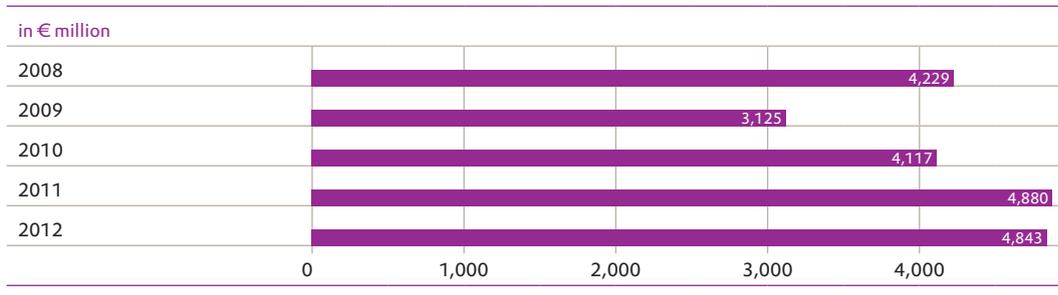
This segment's sales dropped 1 percent to €4,483 million. Positive currency effects essentially offset the organic sales decline. The production stoppage resulting from the fire at the CDT plant and lower demand, especially for methacrylates, resulted in lower volumes. Selling prices increased slightly as some of the rise in raw material costs was passed through to customers.

 See also page 98 f.
Occupational safety

Fire at the CDT plant

On March 31, 2012 there was an explosion followed by a fire at a production facility for cyclododecatriene (CDT) operated by the Performance Polymers segment in Marl (Germany). CDT is a precursor for polyamide 12, which is used in innovative, high-end products in the automotive, electrical and electronics sectors and in gas and offshore oil pipelines. The facility was rebuilt as quickly as possible and came back into service in December 2012. The damage caused by the fire and the earnings shortfall resulting from the production stoppage were covered by insurance (apart from a lower share borne by Evonik). The insurance refunds to cover marginal income forgone are recognized in the operating results. Any refunds above this level—mainly for reconstruction of the plant—do not form part of the operating results.

Development of sales in the Specialty Materials segment



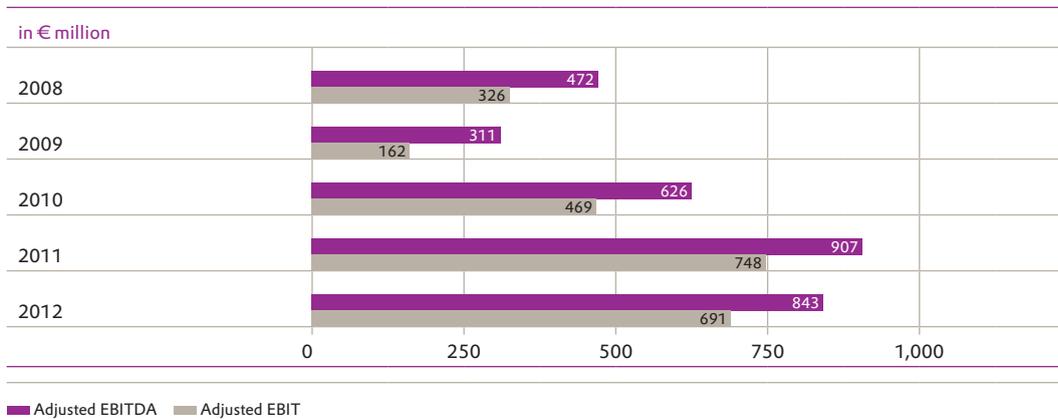
Operating results lower than in the previous year

The operating results were below the very good level achieved in the previous year, mainly due to the demand-induced drop in volumes, the rise in raw materials costs and, in some cases, lower selling prices. Adjusted EBITDA decreased by 7 percent to €843 million, while adjusted EBIT fell 8 percent to €691 million. The adjusted EBITDA margin was 17.4 percent, down from 18.6 percent in 2011.

Investment stepped up considerably

To strengthen market leadership, capital expenditures were increased by 64 percent to €344 million and were thus well above depreciation, which amounted to €151 million. As a result of the capital expenditures, the average capital employed increased by €109 million to €1,811 million. ROCE slipped from 43.9 percent to 38.2 percent owing to the lower earnings and higher average capital employed.

Development of adjusted EBITDA and adjusted EBIT in the Specialty Materials segment



Performance Polymers

The Performance Polymers Business Unit produces a wide range of high-performance materials, mainly for the automotive, aviation and electronics industries. At its heart are integrated technology platforms for methylmethacrylate chemistry (MMA) and polyamide 12. In addition, it manufactures high-performance polymers based on polyetherether ketone (PEEK) and polyimides to meet extremely high-tech mechanical, thermal and chemical requirements.

Sales and earnings below very high levels of the previous year

This business unit's performance in 2012 was dominated by the accident at the CDT plant. The shortfall in the supply of the starting product CDT led to a massive shortage of polyamide 12 products on the market. Evonik endeavored to alleviate the situation for its customers by purchasing starting products and offering alternative products from its range. The CDT facility was rebuilt in record time and technical work was completed in November 2012. The first commercial batches were produced in December 2012. Overall, the incident caused a significant drop in sales volume. At the same time, there was a sharp drop in demand for methacrylate-based products, especially in southern Europe, and this put pressure on selling prices. By contrast, business with polyimide foam (ROHACELL®) and polyimide membranes developed well. Overall, sales in the Performance Polymers Business Unit shrank 9 percent to €1,775 million. The operating results contracted, mainly because of the demand-driven drop in volumes.

Substantial capacity expansion

Rebuilding of the CDT plant in Marl (Germany) had top priority. Start-up of the planned capacity expansion for the specialty polymer polyamide 12 in Marl (Germany) and Shanghai (China) was therefore postponed to early 2013. In addition, a new polyamide 12 line is planned for Asia. Performance Polymers is planning this substantial capacity increase to secure its leading position in the market for polyamide 12.

Evonik has commenced basic engineering for the new methylmethacrylate production facility based on the innovative AVENEER® process in Mobile (Alabama, USA). A sum in the triple-digit millions of euros has been budgeted for this world-scale facility, which will have capacity of 120,000 metric tons a year and is scheduled to come into service in mid-2015. Methacrylate monomers and their derivatives are the basis for innovative products for resource-savings solutions such as lightweight automotive construction. The AVENEER® process developed by Evonik is convincing on both economic and environmental grounds: Catalysts developed internally by Evonik reduce by-products and raise yields, bringing a significant reduction in both costs and CO₂ emissions. Process-related carbon emissions are also lower.

Advanced Intermediates

Key factors in the success of the Advanced Intermediates Business Unit are advanced chemical processes, which Evonik has developed systematically over decades. This applies in particular for the integrated C₄ technology platform, where C₄ crack is processed into specialties. This business unit has gained access to new growth markets for hydrogen peroxide thanks to its innovative capability, which is demonstrated above all by the hydrogen peroxide to propylene oxide (HPPO) process, which reduces pressure on the environment. In addition, Evonik is the world market leader in alcoholates, which are used as catalysts in the production of biodiesel.

High demand

Demand was good in 2012. Sales grew 5 percent to €3,068 million, driven by positive exchange rate effects and, above all, higher volumes. There was particularly sound demand worldwide for plasticizer alcohols, butadiene, hydrogen peroxide and alcoholates for the production of biodiesel. However, increased raw material costs could only be recouped in part through higher selling prices. The operating results were therefore below the previous year's very good level. At year-end, the cyanuric chloride joint venture in China was dissolved by agreement with our partner. Since then, account management and supply to international customers for this substance in the plastics, paper and textile have been managed directly from Germany.

Investing in the future

Advanced Intermediates is building a new plant in Puerto General San Martino (Argentina) to produce catalysts for the production of biodiesel from renewable raw materials. This new plant is expected to supply over 60,000 metric tons p.a. of these products in the future, mainly to Argentina and Brazil. Through this investment Advanced Intermediates aims to participate in the fast-growing South American market for biodiesel.

In Jilin (China) Evonik is currently building a new production facility for hydrogen peroxide, which should be completed by the end of 2013. This will raise Advanced Intermediates' annual production capacity by almost 40 percent to over 800,000 metric tons. This investment in the lower triple-digit millions of euros is a further step into the market for new applications for this environment-friendly oxidation agent. Under a long-term agreement, most of the hydrogen peroxide from the facility in Jilin will be supplied to the neighboring propylene oxide plant operated Jishen Chemical Industry Co., Ltd., via a direct pipeline. Jishen will use the hydrogen peroxide to produce propylene oxide using the innovative HPPO process developed by Evonik and ThyssenKrupp Uhde. Propylene oxide is mainly used in the manufacture of starting products for polyurethane and the market is growing rapidly, especially in Asia.

To reinforce its market leadership in C₄-based products, Advanced Intermediates intends to invest a sum running into trip-digit millions of euros to expand its production facilities.

Services segment

This segment principally comprises Site Services and Evonik Business Services. It mainly provides services for the specialty chemicals segments and the Corporate Center, but also serves third parties. The Site Services unit bundles cross-site infrastructure services, such as supply, disposal, logistics and facility management. Evonik Business Services supports the specialty chemicals operations and the Corporate Center by providing standardized administrative services, including IT, human resources, accounting and legal services. The Services segment also includes the Group-wide procurement and engineering operations.

Key data for the Services segment

in € million	2012	2011	Change in %
External sales	999	952	5
Adjusted EBITDA	163	139	17
Adjusted EBITDA margin in %	16.3	14.6	-
Adjusted EBIT	68	56	21
Capital expenditures	103	84	23
Depreciation and amortization	91	82	11
Capital employed (annual average)	486	442	10
ROCE in %	13.9	12.7	-
Employees as of December 31	11,900	10,946	9

Higher earnings

The Services segment's sales totaled €2,715 million in 2012. Internal sales with the specialty chemicals segments and the Corporate Center accounted for €1,726 million of the total. The external sales of €999 million were mainly attributable to services and procurement activities for external customers. The 5 percent increase in external sales mainly resulted from higher demand for the services provided by Site Services. Adjusted EBITDA increased 17 percent to €163 million, while adjusted EBIT rose 21 percent to €68 million. Site Services, in particular, reported higher earnings as a result of improved capacity utilization and successful cost-cutting measures.

ROCE improved from 12.7 percent to 13.9 percent thanks to the higher adjusted EBIT.

Real Estate segment

The Real Estate segment, which Evonik plans to exit entirely in the medium term, focuses on letting homes to private households in the federal state of North Rhine-Westphalia. Alongside Evonik's portfolio of residential real estate, it comprises a 50 percent stake in THS.

Key data for the Real Estate segment

in € million	2012	2011	Change in %
External sales	239	412	-42
Adjusted EBITDA	199	219	-9
Adjusted EBITDA margin in %	83.3	53.2	-
Adjusted EBIT	154	171	-10
Capital expenditures	60	74	-19
Depreciation and amortization	48	47	2
Capital employed (annual average)	1,880	1,833	3
ROCE in %	8.2	9.3	-
Employees as of December 31	617	1,135	-46

Altered structure

Since January 1, 2012, the operational management of the Real Estate segment's property holdings has been assigned to Vivawest Wohnen GmbH, a joint venture with THS. To this end, leasing agreements have been concluded between Vivawest Wohnen (lessee) and the companies that own the real estate (lessors). Since Vivawest Wohnen is included at equity, from the start of 2012 sales from rental business were no longer recognized. Instead, the rental revenues of the fully consolidated owner companies are recognized after deducting the attributable management expenses. Thus, sales declined 42 percent to €239 million. The operating results, which comprise the at-equity earnings of Vivawest Wohnen and THS, were lower than in the previous year. In 2012 earnings included special effects from the revaluation of deferred tax assets at THS. These are included in the at-equity income from THS and were €6 million in 2012 and €20 million in 2011. Overall, adjusted EBITDA declined by 9 percent to €199 million, while adjusted EBIT slipped 10 percent to €154 million.

ROCE was 8.2 percent in the Real Estate segment, compared with 9.3 percent in 2011.

Targeted investment

Capital expenditures declined from €74 million to €60 million. The focus was on modernizing the housing stock to improve energy efficiency and on the construction and acquisition of new properties. The objective is to raise the value of the real estate portfolio in the long term through selective investment in modernization to secure or raise rental revenues and energy efficiency, and the purchase and construction of sustainable, future-oriented residential units at attractive locations in the federal state of North Rhine-Westphalia. The focus is on selected acquisition of residential properties that meet market requirements and offer attractive potential for rent rises in large and mid-sized cities in the Ruhr region.

Amalgamation with THS initiated

The planned amalgamation of our real estate business with THS, in which Evonik and the German Mining, Chemical and Energy industrial union (IG BCE) each have a 50 percent stake, will create Germany's third-largest residential real estate company. Since the roughly 130,000 residential units owned by Evonik and THS are managed jointly by Vivawest Wohnen GmbH, the employees of Evonik Wohnen GmbH were transferred to Vivawest Wohnen GmbH through a transfer of undertaking.

Supply chain management

In 2012, Evonik spent around €9.1 billion on raw materials, energy, technical equipment and services. Raw materials accounted for around 60 percent of total procurement volume.

Corporate responsibility is systematically integrated into procurement via a multi-step process and the selection of suppliers is not based solely on economic criteria. Our goal is to ensure responsible conduct along the supply chain, based on long-term business relationships. To achieve this we work with our suppliers and are engaged in a dialog with them on further improvements, for example, in the areas of quality, occupational health and safety, environmental protection, fighting corruption and working conditions.

CR management rolled out further along the supply chain

Before concluding or renewing agreements, we conduct a global risk screening process on new and established suppliers and then ask them to complete a self-assessment form. Every year, established suppliers classified as potential risks are selected for a self-assessment or a CR audit to check that they comply with the sustainability and CR standards defined in our general terms and conditions of procurement. A global risk screening process is systematically applied to suppliers considered a potential risk. This is based on Transparency International's internationally recognized Corruption Perceptions Index (CPI) for specific countries and the United Nations Human Development Index (HDI). The threshold is a minimum procurement volume of €50,000. In this way, the selection of suppliers takes account of their human development status and fair business practices. Observance of sustainability standards is assessed on the basis of the principles of the UN Global Compact and covers quality, occupational health and safety, environmental protection, fighting corruption, working conditions and responsibility along the supply chain.

A total of 213 potential risk candidates were selected for supplier self-assessments in 2012. The previous year's best performers will be re-evaluated in the third year or when their validation certificates expire. Almost all of the suppliers selected for this process in 2012 completed registration with Evonik's supplier management database (target: 90 percent). 77 percent of the questionnaires returned to us had been completed in full and could be evaluated. In all 126 suppliers met our CR requirements in full, while a further 36 met them to a large extent. Considerable potential for improvement was only identified in the case of three suppliers of no strategic relevance to Evonik. Their attention was drawn to this by our procurement staff. We immediately terminated our relationship with two established suppliers, both of whom had violated the CR standards set in our general terms and conditions of procurement. As a matter of principle, we reserve the right to terminate agreements with suppliers who are not prepared to cooperate on CR-related matters.

35 suppliers who submitted a self-assessment in 2011 were audited by an independent validation company in 2012. Where problems were identified, action plans with deadlines were set, with follow-up checks during the year. In 2012 we therefore met our target of conducting at least ten CR audits, mainly in China and Brazil. For 2013 we have set the following targets:

- Continue to analyze suppliers classified as a risk through self-assessments of 90 percent of those identified as potential risks
- Conduct at least 20 CR audits
- Further internal training of employees
- Conduct six internal audits of Procurement to check observance of global procurement processes by Procurement managers

Further, together with other multinational chemical companies in 2012 we defined uniform criteria for the assessment and subsequent evaluation of suppliers and gave a uniform voluntary commitment to apply them. Through this “Together for Sustainability” initiative the companies aim to establish high sustainability standards along the supply chain. A common sector platform reduces the workload for suppliers, because they only have to undertake one assessment or audit.

Vocational and ongoing training are keys to sustainability in procurement

Shaping Procurement and Developing Excellence (SPADE), a training program established in 2010, is designed to support the development of our procurement employees. This global program comprises a basic seminar held in all regions in the relevant local languages. Follow-on seminars for international groups of participants are held every six months to build on the knowledge gained at the basic seminar. Sustainable long-term procurement strategies from the heart of this program. Almost all procurement employees have taken part and we intend to continue this training program in 2013 with revised content and methods.

Around 85 percent of employees working in the area of procurement received training in aspects such as “Compliance – Anti Corruption,” the Code of Conduct and Corporate Responsibility@Procurement in 2012 through SPADE and other training sessions. We therefore exceeded our CR target of providing training for 50 percent of procurement staff in 2012.

Setting an example—Certification of quality and environmental standards completed

Last year, the implementation of quality and environmental standards in our Procurement organization was checked by auditors. In addition to being certified as conforming to the ISO 9001:2008 quality standard, in 2012 Procurement was certified for the first time as meeting the requirements of ISO 14001:2004 + Cor 1:2009 in the areas of the environment and responsibility. A certified auditor has been appointed to monitor our global procurement processes. This additional control function supplements the audits conducted by the Corporate Audit Division. The auditor examines the global procurement organization and draws attention to scope for improvement. Six internal procurement audits were conducted in the USA, China and Europe in 2012. They made a significant contribution to our goal of improving procurement processes.

Sustainable procurement

Following completion of an analysis of the production and origin of our 100 most important starting products, suitable emission factors have been allocated to them. Building on this, proposals have been developed to achieve a further reduction in the raw material impact on the Evonik Carbon Footprint (ECF).

 See also page 86 f.
Evonik Carbon Footprint
(ECF)

↓ Download
ESHQ Values in the
Responsibility section at
www.evonik.com

Internet
www.responsible-care.de

Internet
www.icca-chem.org

Product stewardship

One of the most important demands made by the public on the chemical industry is that, as well as ensuring that all substances satisfy legal requirements, the conditions of production, handling and use should be safe. We regard that as a basic duty and it is thus a matter of course to us. In fact, wherever possible we endeavor to exceed statutory requirements, for example, through our commitment to our own global Environment, Safety, Health and Quality (ESHQ) Values. In our view, this includes product stewardship, in keeping with the principles of the Responsible Care initiative.

Responsible Care is a global initiative of the chemical industry that was originally introduced in Canada in 1985 and is coordinated by the International Council of Chemical Associations (ICCA). Chemical industry associations in 53 countries participate in this initiative through national Responsible Care programs. This international initiative comprises a voluntary obligation by several thousand companies to go beyond statutory requirements. Its goals are to foster sustainability, demonstrate responsible product stewardship, increase safety at production sites and for local communities, and improve occupational health and environmental protection. As a long-standing supporter of ChemCon, the world's leading conference on chemicals safety, legislation and trading, we provide funding and active assistance in preparing and holding these conferences.

Responsible handling of chemicals

We have set up an extensive information system to help us meet our responsibility in this field. Elements include:

- More than 150 GPS Safety Summaries with information on substances in understandable language are available on our website
- Support for the information portal of the International Council of Chemical Associations (ICCA)
- Safety data sheets in more than 30 languages
- Technical information sheets and special product information
- 24-hour emergency hotline, including an interpreter service
- Central email addresses to register inquiries and ensure a timely response
- Additional information and details of how to contact our account managers can be found on our website via Product Finders.
- The "Products in the Web" link enable our customers to gain a preliminary overview of many of our products.
- A new feature of our website is "Evonik's opinion" where we provide information on topical issues relating to chemicals.

Where necessary, we train customers in how to handle our products. The safety of our products has top priority for Evonik. We bear responsibility for this and for the quality of our products throughout their lifecycle ("cradle-to-grave principle"). Thus, in October 2012, the cyanide production plant operated by Cyplus GmbH in Wesseling (Germany) was revalidated for the second time as conforming to the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (ICMC). Passing this audit is evidence that CyPlus GmbH meets the extensive and high standards set by the ICMC for cyanide producers. The ICMC is a voluntary global program for gold mining companies, cyanide producers and logistics providers. It was developed by representatives of the mining industry, suppliers, producers, governments and non-governmental organizations in order to guarantee very high and uniform global safety, environmental and quality standards for the use of cyanides in gold mining.

Since it transports cyanides over defined national and international routes, CyPlus GmbH (Consignor) has given an assurance that it will observe the ICMC's requirements in transportation as well as production. This includes clear accountability for prevention, training, and safety as well as setting out emergency plans and measures in written agreements with freight forwarders. In addition to validation in 2011 of the transportation route from the production facility in Wesseling to ports in Argentina, Brazil and Mexico and transportation within Argentina, transportation routes in Mexico and Turkey have been inspected and successfully validated by various auditors. Validation in Mexico includes conformance of the transfilling station and warehouse in Obergón (Sonora) to the ICMC Production Protocol.

CyPlus GmbH was one of the first official signatories of the ICMC, highlighting our commitment to safe and responsible handling of cyanides (Responsible Care) throughout their entire lifecycle.

How we live up to our responsibility

The lifecycle of a product starts with research and development and ends with recycling or disposal. Our specialist departments provide advice for customers at all stages in the product lifecycle, from selection of the raw materials through planned application, possible toxicological and ecotoxicological risks and statutory regulations right up to transportation and disposal.

The role of our product stewardship departments includes, for example:

- correct classification and labeling of dangerous substances and mixtures
- performing and periodically updating risk assessments
- arranging and monitoring statutory toxicological/ecotoxicological/physical chemistry studies
- preparing safety data sheets and other instructions and recommendations on safe handling of products, including updating them and distribution to customers
- reporting and registering substances in accordance with national and national legislation
- filing reports in substance inventories
- obtaining country-specific permits; this applies, for instance, to chemicals, biocides, crop protection products, pharmaceutical active ingredients, animal feeds and food contact substances
- steadily expanding knowledge of the hazardous properties of products
- continuously extending knowledge of the application properties and product exposure
- providing timely, risk-related information for customers and suppliers
- preparing GPS Safety Summaries (ICCA)
- conducting training for customers or internally

The Chemicals Management System

Evonik has used a proprietary Chemicals Management System (CMS) since 2001. This supports us in product evaluation, analogously to a lifecycle analysis.

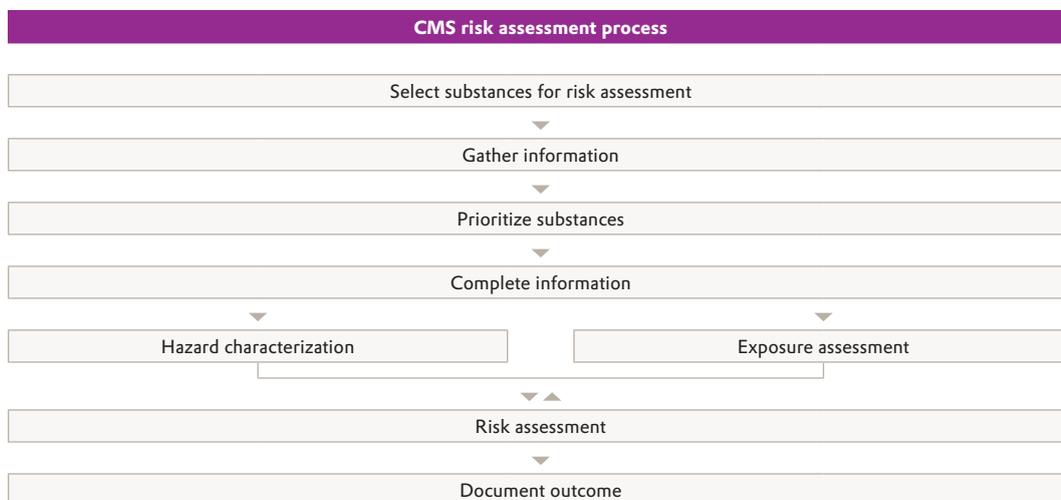
All substances placed on the market in quantities exceeding 1 metric ton p.a. are analyzed using the Evonik CMS, while particularly dangerous substances are analyzed from lower tonnages. The aim is to conduct a risk assessment of 99 percent of substances marketed in quantities exceeding 1 metric ton p.a. by 2020. The basis for this decision is active support for the United Nations' Strategic Approach to International Chemicals Management (SAICM), which aims to minimize significant adverse effects of the production and use of chemicals on human health and the environment by 2020.

Our CMS comprises the following phases:

selecting the substances to be analyzed, gathering information, prioritizing substances, obtaining any missing data on the basis of priority, characterizing the risks to people and the environment taking into account the entire lifecycle, exposure assessment, risk assessment and deriving risk management measures.

 **Internet**
Responsibility/ESHQ/
Product Stewardship at
www.evonik.com

 **Internet**
Responsibility/ESHQ/
Product Stewardship/
Chemicals Management
System at www.evonik.com



The CMS provides information on substance-related hazards, so we can assess how and to what extent people and the environment come into contact with them. Based on a subsequent risk assessment which we may decide to restrict the use of some of our products or even withdraw them completely.

 **Internet**
www.reach-info.de

REACH—the EU Chemicals Regulation

The revision of the European Union's chemicals legislation was designed to create a uniform regulatory basis for all EU states. The EU Chemicals Regulation REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) came into force on June 1, 2007.

Evonik supports the goal of protecting health and the environment in the handling of chemicals and systematically applies the REACH Regulation. Under REACH, all substances produced, imported or placed on the market in the EU in quantities of more than 1 metric ton p.a. have to be registered.

In the initial registration phase for major substances exceeding 1,000 metric tons p.a. and especially hazardous substances in quantities above 1 metric ton p.a. we registered nearly 170 substances with the European Chemicals Agency (ECHA). This phase was completed on November 30, 2011. By February 2013, we had submitted more than 500 registration dossiers for over 340 substances. The second registration phase, which will be completed on May 31, 2013, is for substances in the range of 100 to 1,000 metric tons p.a. We will probably register 160 substances in this phase. In the third phase, which ends on May 31, 2018, all substances in the range of 1 to 100 metric tons p.a. have to be registered.

Significant human resources and organizational measures are required to implement the complex requirements of the REACH Regulation. This requires well-trained personnel, appropriate IT systems, high financial expenditures and involvement and active collaboration with industry associations. Evonik therefore plays an active role in the working groups and committees of the German Chemical Industry Association (VCI), the Federation of German Industries (BDI), the European Chemical Industry Council (Cefic), the Technical Committee of Petroleum Additive Manufacturers in Europe (ATC) and the European Silicones Center (CES).

Alongside registration, restriction and authorization are becoming increasingly important. We constantly compare substances of very high concern and those on the list of potential candidates with our portfolio to ensure timely identification of any that are affected and take appropriate action where necessary. We also work closely with our customers to work out the next steps. Moreover, we have set up an email address for REACH-related inquiries from customers and suppliers.

Global Harmonized System of Classification and Labeling of Chemicals

In 2003 the United Nations initiated a Global Harmonized System of Classification and Labeling of Chemicals (GHS) based on a hazard classification of dangerous goods and substances and called on member states to introduce corresponding national regulations.

As a consequence, the European version of the GHS, "Classification, labelling and packaging of substances and mixtures" (CLP) came into force in 2009. This regulation establishes the GHS in the EU. Transitional arrangements apply for previous regulations, which have to be phased out by 2015.

We used the online training tool UWEB 2000 to train employees in changes and additions to the CLP Regulation.

Global Product Strategy (GPS) sets worldwide standards

We support the initiative of the International Council of Chemical Association (ICCA) to establish global standards for product stewardship, provide information on safe handling and use of chemical substances for the general public and thus improve the safety of chemicals.

Product information in accordance with the GPS standard is available in the form of Safety Summaries on Evonik's website and the ICCA's internet portal.

Bio-MTBE

Evonik launched Bio-MTBE, a new biofuel component, in 2012. MTBE, which the company has produced since the 1970s, is used as an effective anti-knock agent in gasoline. The Renewable Energies Directive adopted by the EU Commission in 2009 stipulates that 10 percent of fuel consumption in the transportation sector must come from renewable resources by 2020. E10 gasoline, which was introduced at the start of 2011, is expected to achieve the 6.25 percent biofuel requirement for vehicles set by the German government. E10 contains 10 percent bioethanol. However, its success has been hampered by the debate about poor compatibility with some vehicles and the use of commodities that could be used in food production. Bio-MTBE is an alternative based on biomethanol, which is produced from crude glycerine. Large quantities of crude glycerine are generated co-products products in the production of MTBE, so it is classified by the EU as a "waste product." Bio-MTBE is therefore an ideal component for biofuels that comply with the EU's Renewable Energies Directive as fuel components obtained from waste products count double in the calculation of the bioenergy content of fuels. Bio-MTBE producers can meet statutory requirements for the use of biofuels when setting the octane rating of their gasoline. From a purely chemical viewpoint, Bio-MTBE and MTBE are identical and are produced in the same plant in Marl (Germany). This simplifies logistics for the producer and the customer. Bio-MTBE has a number of technical benefits compared with ethanol. For example, it has far higher energy density. Low vapor pressure and very low solubility in water mean that Bio-MTBE—like MTBE—can be handled safely like in refineries and storage tanks. It can also be conveyed via pipelines, which is not possible with ethanol.

Hydrogen peroxide (H₂O₂)

Evonik is one of the world's largest producers of hydrogen peroxide (H₂O₂) and a market leader in this field. As an innovative producer, we offer high-quality products and services for the megatrends that affect society, together with outstanding solutions for our customers.

Hydrogen peroxide is an environment-friendly bleaching and oxidation agent that has traditionally been used to bleach pulp and fibers in the paper and textile industries and as a disinfectant in water treatment. As an environment-friendly oxidation agent, it is increasingly being used in the chemical industry as a substitute for critical substances. Standard commercial concentrations of this colorless and odorless solution are between 30 and 70 percent. Thanks to more than a century of experience of producing this substance, Evonik has the know-how required to produce aqueous solutions with concentrations of up to 98 percent. Our highly concentrated PROPULSE® products are used exclusively for drive systems in the aviation and aerospace industry. PROPULSE® decomposes when it exposed to heat or special catalysts, releasing oxygen and steam.

 **Internet**
www.umweltbundesamt.de/
index-e.htm

 **See also page 76**
Ongoing education and training

 **Internet**
Responsibility/ESHQ/
Product Stewardship/
Global Product Strategy at
www.evonik.com

 **Internet**
Company/Profile &
organization/
Operational Units/
Advanced Intermediates at
www.evonik.com

Since these properties place special demands on storage and transportation, Evonik has developed and registered special ISO transportation containers. These have reefer temperature control units and are monitored constantly by a GPS tracking system. Only specially trained and authorized freight forwarders are used for transportation. Since the German Chemicals Prohibition Ordinance and the Explosive Precursor Regulation apply to all our hydrogen peroxide products, customers are required to comply with the Cefic Code of Conduct and provide an end-use certificate.

Innovative technologies generate solutions

We constantly strive to improve our technologies in order to offer our customers tailor-made solutions. One example is SEPURAN® Green, the result of a three-year collaboration between the Performance Polymers Business Unit and strategic research at the Eco² Science-to-Business Center run by Creavis. These polyimide hollow-fiber membranes allow energy-efficient upgrading of biogas to biomethane. The joint project included benchmarking the technology used in various methods of processing biogas, developing the membrane modules and conducting long-term stability tests. Through a lifecycle analysis and the construction of an industrial-scale demonstration plant in collaboration with a market-leading plant engineering firm, it has been demonstrated that biomethane produced with SEPURAN® reduces emissions by around 90 percent compared with natural gas. If this is applied to emissions from the production of SEPURAN®, each module saves one hundred times the CO₂ equivalents emitted during production. Leading plant engineering companies now offer SEPURAN® membrane modules as part of their system solutions.

Key technologies such as biotechnology and nanotechnology are vital to help find solutions to the pressing problems of the future. These technologies can play an important role in more efficient use of energy and the increased use of renewable raw materials. Evonik therefore sees such technologies as a driving force in its strategy of sustainable innovation.

Social acceptance is vital for the long-term viability of products based on these technologies. Evonik is committed to responsible use of biotechnology and nanotechnology in dialog with society. It only markets or uses such projects if safety and environmental compatibility comply with latest state of the art and scientific findings. Evonik places strict limits on research and use of new technologies. These are derived from ethical values and, in particular, respect for human life and dignity.

Nanotechnology

Nanotechnology is a generic term for a wide range of developments and innovations. Their common feature is the investigation, production and use of minute structures measuring around 1 to 100 nanometers. One nanometer (nm) is one millionth of a millimeter. We have decades of experience of producing nanostructured materials. We utilize our knowledge to develop new applications for nanomaterials and creative systems solutions. For example, we see considerable opportunities in safe lithium-ion batteries for mobile electronics and automobiles, scratch-free coatings and UV filters and cosmetics. In these applications, nanomaterials are enclosed in a matrix.

We participate in research projects that focus on the possible release of nanomaterials from this matrix, the potential hazards, and safe handling of these materials. The results of our research are communicated openly to our stakeholders. Five dialog events were held in 2012. In addition, representatives of Evonik took part in the German government's Nano Dialog, where experts from industry, science, authorities and industry associations discuss the opportunities and potential risks of nanotechnology.

Biotechnology

Evonik uses micro-organisms for biocatalysis processes and fermentative production processes. Biotechnology is used to optimize these micro-organisms so that they either produce the desired substances in large quantities as a metabolic product in a fermentation process or produce an enzyme—also in large quantities—that can be used as a biocatalyst in production processes. Alternatively, precursors tailored for highly specific products can be generated from complete cells using a biotransformation process. Safe and responsible handling of this technology is a matter of course for Evonik. We respect the desire of our customers and the general

public for transparent action and communication, and stringent action to prevent risks. We regard biotechnology as a key to growth. Our Biotechnology Science-to-Business Center, which is part of our strategic research unit Creavis, develops new, cost-effective methods for producing existing chemical products, in some cases in collaboration with business units at Evonik and external cooperation partners. The use of renewable raw materials such as sugar and plant residues also reduces dependence on petrochemical feedstocks and thus secures access to raw materials. The focus is, on the one hand, on developing sustainable production processes such as fermentation and biocatalysis, and on the other, on the synthesis of bio-based materials with outstanding functions or a significant cost advantage. The competency clusters within the Biotechnology Science-to-Business Center are engaged in the development of high-performance polymers and the production of ingredients for cosmetics, for example, anti-aging products.

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 Responsibility/ESHQ/
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 Key Technologies at
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Animal protection

Evonik bears considerable responsibility for assuring the quality and safety of its products throughout their lifecycle in order to protect people and the environment. As part of our research to find new solutions, we are required to conduct tests on animals to comply with national and international legislation in order to obtain information on toxicological impact.

In this we follow the 3R concept: Reduce, Refine, Replace, where the basic principle is to replace animal testing by alternative test methods where possible. If there is no recognized alternative to testing on animals, we make sure we only carry out the number of tests that are absolutely necessary to obtain meaningful scientific data.

We are involved in several international organizations that aim to develop alternative test methods, for example, the European Partnership for Alternative Approaches to Animal Testing (EPAA) and we support SET (Foundation for the Promotion of Alternative and Complementary Methods to Reduce Animal Testing).

 **Internet**
www.epaa.eu.com

Further, through membership of the European Centre of Ecotoxicology and Toxicology of Chemicals (ECETOC), we are working on toxicological questions and the development of methods of evaluating the risks of chemicals. Evonik is also an active contact for the Organisation for Economic Cooperation and Development (OECD) on questions relating to toxicological evaluation of chemicals.

We are currently participating in an in-vitro test strategy to determine potential skin sensitization and are evaluating existing in-vitro methods of testing irritation of the skin and eyes.

For tests on animals, Evonik only uses test institutes that are validated in accordance with the applicable national and international legal provisions. Test institutes with a good reputation are selected and are required by master contracts to observe the highest quality and animal protection standards. They are monitored regularly by the animal protection officer who works for the entire Group. His tasks include examining the key data on animal testing compiled by the company. In addition, he informs product stewardship managers about alternative methods and new solutions. He audits the test institutes and engages in the political debate with non-governmental organizations and public authorities. His activities are documented in an annual report.

Research and Development

High innovative strength is vital for Evonik as a leading global specialty chemicals corporation. It drives profitable growth and reinforces our market and technological leadership.

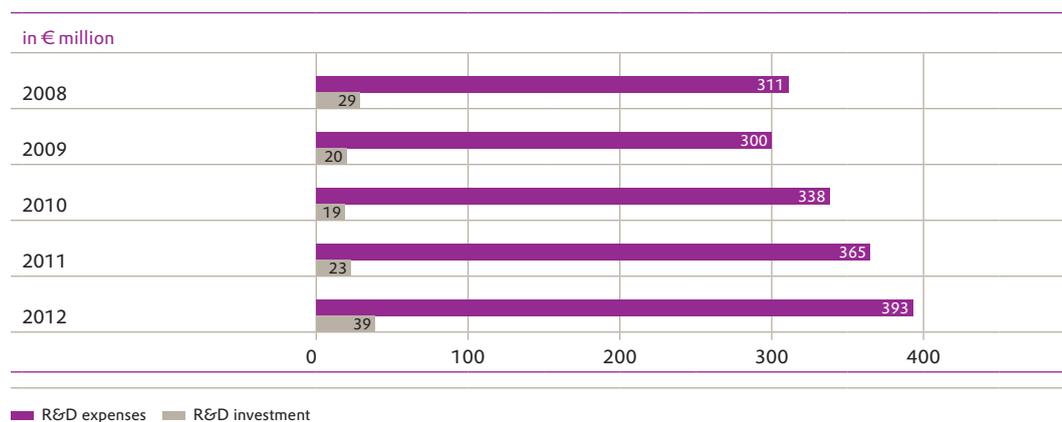
We deliberately combine different concepts for our innovation work. These include both ongoing development of established products, processes and applications, and moving into completely new technologies and solutions. In addition, we analyze long-term trends in order to derive new areas of growth for Evonik.

Interdisciplinary collaboration within our decentralized research and development (R&D) structures is a particularly dynamic source of innovation. Around 2,500 employees from a range of disciplines based at more than 35 locations contribute to our global R&D network. Our know-how in attractive future-oriented technologies is bundled in Areas of Competence. At an early stage in R&D projects we combine Evonik's expertise in the areas of specialty chemicals, process technology and engineering. This facilitates rapid translation of new processes into efficient industrial-scale production. Our R&D experts also work closely with their colleagues in Marketing and the International Sales team. Our innovations are therefore very closely aligned to the needs of our customers, enabling us to enhance their competitiveness through new or improved products and applications.

Examples of our latest R&D highlights include hollow polyimide fiber membrane modules for cost- and energy-efficient upgrading of biogas obtained from renewable raw materials, an innovative high-performance insulating material for sustainable construction, and a source of methionine to optimize the nutrition of crustaceans. In all, there are around 500 projects in our pipeline.

The large number of first-time patent applications filed by Evonik places it at the forefront of the specialty chemicals sector. In 2012 our total patents and patent applications came to around 26,000. About 260 new patent applications were filed during the year. In view of the strategic importance of R&D, Evonik has raised spending on R&D by an average of 6 percent a year since 2008. In 2012 R&D spending amounted to €393 million, which was 8 percent more than in the previous year. We intend to maintain R&D expenditures at a high level in the future as well. In addition, we have invested around €130 million in the construction of laboratory facilities and pilot plants in the past five years. One focal area here was the erection of two new R&D centers at our site in Essen (Germany). From 2013, more than 180 employees at these new facilities will be working on environment-friendly additives and specialty binders for the paints and inks industry and future-oriented cosmetics products.

R&D in the Evonik Group



Further increase in the pace of innovation

Since product lifecycles in customers' industries are becoming shorter, Evonik has stepped up the pace of innovation through a range of new approaches and activities. For instance, in 2011 and 2012 we continued our policy of becoming more open to external partners in the sense of "open innovation" and stepped up networking with such partners. New strategic alliances were concluded with the University of Minnesota (USA), Jiaotong University in Shanghai (China) and King Abdullah University of Science and Technology (KAUST) in Saudi Arabia. Evonik has long had a large number of cooperation agreements with universities and scientific institutes to ensure that top research findings on sustainable aspects of chemistry, biology and physics are rapidly transferred to the company. These include, for example, the Leibniz Institute for Catalysis at Rostock University in Germany and the Industrial Technology Research Institute in Hsinchu (Taiwan). In 2012 Evonik held its first Open Innovation Fair, a special congress and exhibition attended by about 180 employees and many external service providers. This marked the start of a series of open innovation projects utilizing the possibilities offered by Web 2.0. These include online ideas competitions, both on generally available innovation platforms and in the Evonik intranet, where our employees can make interactive suggestions on how to resolve a specific scientific question.

As a complement to our open innovation approach we are driving forward our corporate venture capital activities. In the next few years we plan to invest up to €100 million in promising start-ups whose technologies match our growth strategy—either directly or indirectly through specialized funds. These investments should give Evonik faster access to completely new technologies outside its current portfolio and cover the main technology trends and regions of significance for our company. In 2012 we invested in the High-Tech Gründerfonds II in Germany, the Emerald Cleantech Fund III, which is focused on Europe and North America, and the North American fund Pangaea Ventures Fund III. These funds specialize in innovative technologies that give priority to new materials, energy and resource efficiency and sustainability. We are also planning an investment in Asia.

Efficient innovation structures and processes

Our operational units fund over 85 percent of R&D spending at Evonik. These expenditures are geared to a stepwise improvement in their core technologies and applications. The Group bears a further 15 percent, which is spent on strategic R&D projects with a mid- to long-term time horizon. Our strategic research to build up new business activities outside our present portfolio is bundled at Creavis Technologies & Innovation (Creavis), which also runs our project houses and Science-to-Business (S2B) Centers.

 Internet
www.creavis.com

In our project houses, experts from several operating units work together for a three-year period on issues that are relatively closely related to Evonik's product and technology portfolio and drive forward research until it is ready for use. When the project house reaches the end of its term, the research findings are commercialized by an internal start-up or our operating units. In 2012 we successfully completed the System Integration Project House and systematically built up the Light & Electronics Project House in Taiwan. Preparations are also under way for a new Composites Project House to develop innovative materials and solutions for lightweight structures. Close collaboration spanning the entire value chain is a key feature of our S2B Centers, which are established for a longer period than the project houses. Here, experts from Evonik work closely on research with external scientists, customers and suppliers. Some of our projects receive funding from the German government, the Federal State of North Rhine-Westphalia and the European Union. We currently have two S2B Centers: the Bio S2B Center, which is developing new biotechnology products and processes based on renewable raw materials, and the Eco² S2B Center, which is working on innovative products and applications in the field of energy efficiency and climate protection.

The Corporate Foresight team at Creavis identifies future business opportunities for Evonik on a 10–15 year time horizon. The focus is on tomorrow's needs: Trend analyses are used to identify challenges that will affect the markets in the future. One example is the increasing number of megacities around the world, i.e. cities with more than ten million inhabitants, and the opportunities that offers for our specialty chemicals activities. As well as providing creative space to work on unconventional solutions, our R&D projects have to meet the same high value-oriented requirements as our investment projects.

We have set up stringent processes in our operating units and at Creavis to allocate the R&D budget to specific projects. I2P® (Idea to Profit)—our all-round project management system—allows efficient identification and evaluation of the entire innovation process.

A strong culture of innovation

Evonik sees itself as an open and learning organization and has anchored this in a long-term innovation management program. Our internal Innovation Award is presented annually in recognition of outstanding application-oriented research achievements. Further, at Evonik's first-ever innovation conference in fall 2012 executives analyzed potential drivers to raise our innovative strength still further.

Sustainable development drives innovation

Evonik accepts its responsibility for its business, the environment and society. We see this as a precondition for a successful future. It is part of our corporate culture and forms an integral part of our innovation strategy. We are keenly committed to expanding the contribution made by our innovative products, systems and solutions to sustainable development. This is implemented through both our operating units and Creavis.

For example, the Bio S2B Center increased its research in the field of white biotechnology by opening two new laboratories in fall 2012. Their focus includes new production routes for vegetable fats and oils from tropical regions and the suitability of plant residues for use as alternative raw materials. The Eco² S2B Center bundles our strategic research in the fields of energy efficiency and climate protection. For example, it developed a method to evaluate the carbon footprint of future products and processes at an early stage in their development. Evonik is also engaged in R&D projects with partners from science and industry. These include LionGrid, which is working on research into decentralized energy storage, and KOWIND, which is developing novel technologies to protect offshore wind turbines. With Munich Technical University we are working on products such as PLEXIGLAS®, paints and adhesives made from renewable raw materials.

Evonik fosters close discussion with scientists and talented youngsters

In the 2012/2013 academic year, Evonik will provide a total of 180 German scholarships to support students at twelve universities. These scholarships, which are awarded by the German government in collaboration with private sponsors, are designed to counter the shortage of skilled staff and encourage more young people to take a university degree. Through the Evonik Foundation we have supported students and doctoral candidates with their research for many years. Regular meetings with these young scientists give them an early insight into day-to-day work in the field of specialty chemicals and positions us as an attractive employer for talented youngsters.

At the Evonik Meets Science forums, which are held regularly in Germany, the USA and Asia, our experts discuss topical scientific issues with leading research scientists. In fall 2012 the opportunities and challenges of megacities were discussed at forums in Darmstadt (Germany) and Shanghai (China).



See also page 103

Supporting junior researchers:
the Evonik Foundation

R&D at Evonik ✓

R&D expenses	€393 million
R&D employees	approx. 2,500
Locations	over 35
R&E projects	approx. 500
No. of new patents submitted	approx. 260
Patents held and pending	over 26,000
Trademarks/pending trademarks	over 7,700
Funding received from the European Union and the Federal Republic of Germany for innovation projects	around €9.2 million

Market-oriented research & development

In 2012 our operating units once again developed and launched major innovative products and processes. Examples include the TEGO® Pep products marketed by the Consumer Specialties Business Unit in the Consumer, Health & Nutrition segment. These highly effective custom-tailored tetrapeptides are a response to consumer requirements to improve the appearance of aging skin. For instance, TEGO® Pep-4-Even treats pigmentation problems and acne lesions. It also alleviates age spots and uneven skin tone. TEGO® Pep-4-17 is an anti-wrinkle tetrapeptide that is also found in human protein and bolsters the skin from within.

As a leading supplier of additives for rigid and flexible polyurethane foam, Consumer Specialties has successfully launched a newly developed silicone stabilizer which significantly reduces foam defects in the rigid polyurethane core in sandwich elements. This improves surface quality, greatly enhancing the appearance of these elements, which are widely used, especially in industrial construction.

The Health & Nutrition Business Unit's site in Halle-Künsebeck (Germany), which celebrated its thirtieth anniversary in 2012, is a hub of Evonik's biotech research. It works closely with Creavis, the Process Technology & Engineering unit and the research organizations in other business units. The Group's expertise in process design for industrial-scale fermentation is bundled at this site. Our experts concentrate in particular on improving biotechnological production processes for the amino acids Biolys® (source of L-lysine), ThreAMINO® (L-threonine) and TrypAMINO® (L-tryptophan), which are used in animal nutrition.

Developing new products for health and nutrition is another focus of innovation. Evonik's mid-term goal is to generate sales of €1 billion with products produced by biotech methods in the Health & Nutrition Business Unit alone. This business unit's activities in the field of functional auxiliaries for pharmaceutical applications comprise technology platforms for methacrylate-based oral drug delivery systems (EUDRAGIT®) and biodegradable lactide polymers for medical products and parental controlled-release medications such as injections and implants (RESOMER®, LAKESHORE BIOMATERIALS™). Further innovative products were brought to the market in 2012. These include EUDRAGUARD BMC, which has been specially developed for use in nutritional supplements. The main applications are masking taste and odor. Further, at the end of 2012 an agreement was signed with the Chinese pharmaceutical manufacturer Changzhou Siyao Pharma to develop a long-acting injectable active ingredient.

 See also page 10 ff.
The bioeconomy

UV-curing coatings have a natural gloss. So far, producing matt versions has proven a challenge. With ACEMATT® 3600, a new matting agent introduced by the Inorganic Materials Business Unit in the Resource Efficiency segment, allows simple and controlled reduction in the gloss of environment-friendly UV-curing coatings. This business unit's in-situ post-processing technology is a single-step process for grinding silica particles and applying the coating. It reduces energy requirements by up to 70 percent compared with conventional surface treatment technologies based on precipitated silicas. No organic compounds or waste are produced at any time in this process.

A growing number of suppliers of components for refrigerators and freezers are using AEROSIL® vacuum insulation panels. AEROSIL® fumed silica has excellent insulating properties and the insulating layer can be produced with a filigree structure. The vacuum insulating panels work on the same principle as a dual-wall thermos flask: the AEROSIL® is vacuum-packed and fused into a multi-layer film with exceptionally high moisture and air resistance. The vacuum results in a five-fold increase in the already good insulating properties of this substance. Vacuum insulating panels therefore make a key contribution to saving energy and climate protection.

An innovation in the VESTANAT® product line marketed by the Coatings & Additives Business Unit allows higher yields in the production of urethane acrylate resins without unwanted by-products, so they can be manufactured more cheaply. Urethane acrylates are used in radiation-curing coatings, for example, for anti-scratch high-gloss surfaces for the housings of cell phones and tablet PCs. The market for such systems is growing very fast, especially in the Asian electronics industry. The new process is very environment-friendly as it does not use organic solvents and requires far less energy than conventional curing methods.

In 2012 Coatings & Additives developed a range of bio-based polyester polyol grades for reactive hot melt adhesives to market maturity. Branded as DYNACOLL® Terra, they are based principally on monomers from renewable resources. Researchers in this business unit established that the monomers obtained from millet, corn and the castor-oil plant are very different from those synthesized from petrochemical feedstocks. This has advantages in areas of timber processing. Hot melt adhesives formulated with bio-based polyester polyols offer good initial adhesion and shorter setting times, yet allow the same time for final processing, which is a new feature.

In the Specialty Materials segment, collaboration between the Performance Polymers Business Unit and a customer has produced a new product generation of low dosage kinetic hydrate inhibitors (LDHI) for natural gas extraction. These are based on a specialty methacrylate and prevent the formation of gas hydrates in pipelines. Gas hydrates are solid, iron-type compounds formed from gas molecules and water, which—depending on their size—can cause cracks, excessive wear or even breakage of a pipeline. A patent application has been filed for this innovation which is far more efficient than existing LDHI systems and conventional methods based on dosing methanol or glycol into the pipeline. Over the years Performance Polymers has steadily improved its integrated technology platform for the production of polyamide 12. With a view to the planned construction of a new polyamide 12 line in Singapore, a further significant improvement in the process in Marl has been achieved. This will greatly improve the selectivity and yield of several steps in the future.

In addition, this business unit is extending its offering of sustainable plasticizers and has started to build up production in Marl (Germany). Production of a phthalate-free plasticizer is expected to start in the second half of 2013. Advanced Intermediates plans successive additions of innovative products to this new generation of plasticizers, including a bio-based plasticizer.

Employees

Our aim is to ensure excellence in HR work, add value for employees and executives and ensure that our HR work is perceived as bearing a “common stamp.” Lean and efficient structures and uniform quality standards for the basis for that. To achieve these objectives, the services provided by Human Resources at the German sites were bundled in three sub-regions effective January 1, 2012 and now operate as “HR Management Germany.” On October 1, 2012 a recruiting center and an advisory center were established. These are the first point of contact for employees on all human resources (HR) issues.

We also aligned our human resources structures and concepts more closely to the business in the growing Asia Region through the “HR in Asia” project. The North America region launched the “HR OnTheMove” project, which is also designed to ensure excellence in Human Resources. Since January 2013, this region has had clearly defined regional and local responsibilities based on our global definition of roles. Rollout to other regions will follow.

As a complement to this, all employees worldwide are being included in a new global SAP HR system through the Global HR Data Core. It delivers reliable master data on employees and the organization to all systems linked to it.

HR strategy and strategic personnel planning

We have aligned our HR strategy to changing global conditions and added two new dimensions to our strategic drivers “Attract,” “Develop,” “Retain” and “HR Excellence.” For the “Leadership” dimension, the HR function is developing uniform processes and tools to support managers in tasks such as open and constructive feedback, and consistent and targeted measures for the development and advancement of employees. “Performance” concentrates on anchoring a healthy and balanced focus on performance in the Group.



For strategic personnel planning, we use the system that was adopted as standard in 2011 to develop dynamic scenarios that map quantitative and qualitative changes in our headcount and future personnel requirements. A total of 2,888 new employees were hired in 2012. In addition, around 750 young people were taken on 2012. 550 of them are receiving vocational training for our needs, 100 are being trained for other companies and 100 are on preparatory programs.

Employees worldwide

Employee structure

At year-end 2012 the Evonik Group had 33,298 employees, around 34 percent of whom were employed outside Germany. The average age of the workforce was 41.2 years. Compared with year-end 2011, there was a marginal decline of 258 in our headcount. The growth-driven increase in the number of employees in some units was countered by the divestment of the colorants business, the transfers of undertaking in the Real Estate segment to the Vivawest Wohnen joint venture, and the divestment of our stake in Evonik Sanzheng (Yinghou) Fine Chemicals Co., Ltd. in China. The unplanned fluctuation rate was 2.4 percent Group-wide in 2012. 417 employees tendered their notice and left the Group. Other major factors in employee fluctuation were parental leave and long-term illness. Restructuring can only be implemented successfully if there is a viable agreement with Evonik employees and their representatives and agreement can be reached on the necessary changes to Works Agreements.

Unplanned staff fluctuation in 2012¹⁾

	Fluctuation rate in %	Unplanned turnover, (no. of employees)
By region		
Germany	1.9	415
Other European countries	3.3	92
North America	4.2	158
Central and South America	6.2	26
Asia-Pacific	2.1	96
Middle East, Africa	4.3	4
By gender		
Female	3.5	272
Male	2.0	519
By age		
Under 30	2.8	179
30 to 50	2.6	495
Over 50	1.4	117
	2.4	791

¹⁾ Reference base: employees as of December 31, 2011.

Employee structure

	2010	2011	2012
Total employees	34,407	33,556	33,298
of whom female	7,749	7,863	7,857
of whom male	26,658	25,693	25,441
of whom apprentices in Germany	1,840 ¹⁾	1,811 ¹⁾ 2,165 ²⁾	1,828 ¹⁾ 2,143 ²⁾

¹⁾ Apprentices with a training contract with Evonik.

²⁾ Apprentices with a contract with Evonik, third-party training and the "Start in den Beruf" program to prepare young people for work.

The proportion of female employees is around 24 percent. Women held around 18 percent of jobs at executive levels 1 to 3 and 8 percent of jobs at the top two executive levels.

Employees by segment

	Dec. 31, 2012	Dec. 31, 2011
Consumer, Health & Nutrition	6,821	6,384
Resource Efficiency	5,755	6,381
Specialty Materials	6,134	6,846
Services	11,900	10,946
Real Estate	617	1,135
Other operations	2,071	1,864
Evonik	33,298	33,556

Employees by region¹⁾

	2010		2011		2012	
	Number of companies	in %	Number of companies	in %	Number of companies	in %
Europe	24,965	73	24,735	73	24,705	74
thereof Germany	21,894	64	21,909	65	21,969	66
thereof other European countries	3,071	9	2,826	8	2,736	8
Americas	4,400	12	4,214	12	4,226	12
thereof North America	3,955	11	3,795	11	3,790	11
thereof Central and South America	445	1	419	1	436	1
Asia-Pacific	4,873	14	4,513	14	4,255	13
Middle East, Africa	169	1	94	1	112	1
	34,407	100	33,556	100	33,298	100

¹⁾ At the start of 2012 the Asia region was renamed Asia-Pacific and the "Other" region was renamed Middle East, Africa. Some countries that were previously allocated to the Asia region have been included in Other European countries since 2012. Similarly, the Middle East, which was previously allocated to the Asia region, and Africa, which was included in "Other" are now allocated to the Middle East, Africa region. Australia, New Zealand and Oceania have been transferred from "Other" to the Asia-Pacific region. Mexico and the Bermudas are now included in Central and South America rather than North America. The prior-year figures have been restated accordingly.

Age structure in the Evonik Group



To prevent child labor, we check age as part of the recruitment process. Our youngest employees are 15-year-olds on vocational training courses.

Temporary employees

We work with staffing agencies to cover short-term or temporary bottlenecks. We only work with agencies that have a valid permit. To ensure adequate remuneration of temporary workers, we only work with suppliers in Germany who are covered by a collective agreement with a labor union that is affiliated to the German Confederation of Trade Unions (DGB). In 2013 we integrated this practice formally into our master agreements with staffing agencies. While temporary workers are deployed at an Evonik site, we check that they are covered by the same social and safety standards as our permanent workforce. That includes, for example, subsidized meals in employee canteens, inclusion in any necessary safety instruction and safety training, and wearing generally required personal protective equipment.

The chemical industry employs fewer temporary workers than other sectors of manufacturing industry because it generally needs highly qualified staff. As of December 31, 2012, 673 temporary workers were employed at Evonik in Germany (3 percent).

Structural change—a single employer

In 2011, the management of many plants in Germany was transferred to Evonik Industries AG. Effective April 1, 2012, the management of all plants operated by Evonik Goldschmidt Rewo GmbH, Evonik Oil Additives GmbH, Evonik Technochemie GmbH and Evonik Tego Chemie GmbH was also transferred to Evonik Industries AG. Evonik Industries AG is now the uniform employer for around 14,000 employees at these plants. The service companies Infracor GmbH and Industriepark Wolfgang GmbH will be transferred to this model on July 1, 2013. As a result of the associated transfers of undertaking, as of this date Evonik industries AG will assume all rights and obligations pursuant to the existing employment contracts. The employment contracts and the provisions they contain will remain in force. The employee representation structures are being adapted to the new corporate structure.

Finding and fostering the right talents

Sourcing@Evonik

Evonik's new employer brand highlights its strengths as an employer. A new global employer branding position was drafted in 2012 and introduced in 2013. Our promise "Exploring opportunities. Growing together" highlights the wide range of global development and career opportunities offered by the Group and the importance of team spirit, international collaboration and economic growth. As part of our new recruitment strategy we also aim to drive forward targeted cooperation with schools and universities and utilize modern recruitment channels such as social media. We have therefore supplemented our German Facebook presence, which was established in 2011, with a US presence and will be setting up an official presence on LinkedIn and Xing in 2013.



Internet

www.facebook.com/evonik

Recruitment of employees from the labor market in 2012¹⁾

	Number of employees	in %
By region		
Germany	1,188	5.4
Other European countries	243	8.6
North America	338	8.9
Central and South America	43	10.3
Asia-Pacific	1,050	23.3
Middle East, Africa	26	27.7
By gender		
Female	798	10.1
Male	2,090	8.1
By age		
Under 30	1,108	17.4
30 to 50	1,611	8.6
Over 50	169	2.0
	2,888	8.6

¹⁾ Reference base: employees as of December 31, 2011.

Scholarship program

Evonik offers attractive scholarships to high-performers who wish to study for a bachelor's degree after completing their apprenticeship or a master's degree after earning a bachelor's degree. The aim is to retain able employees in the Evonik organization and to jointly shape their professional future from an early stage. Sixteen scholarships were awarded to high-performing former apprentices in 2012.

Preparing for work, project days and internships

In 2012, Evonik offered around 100 young people an opportunity to take part in the pre-apprenticeship program "Start in den Beruf" established more than ten years ago by the IG BCE Industrial Union and the German Chemical Industry Employers' Federation (BAVC). More than 600 young people have completed this program at Evonik since 2001. Just over 66 percent of them subsequently started an apprenticeship, 7 percent gained places on other preparatory programs and 4 percent obtained other types of employment.

Evonik offers special project days and internships for school students. These attracted more than 2,600 boys and girls in 2012. Counting all training locations that participate in this program, support for school students on these programs totaled 5,500 days in 2012. That was about 45 percent of the total time invested by our vocational training organizations in preparing school students for work and supporting university students.

Vocational training

Vocational training remains a fundamental component of our recruitment strategy. In Germany, around 650 young people embarked on vocational training on some 40 courses at 20 sites in 2012, with 550 of them being trained directly for our needs and around 100 being trained for other companies. In all, there were more than 2,100 apprentices on vocational training or other preparatory programs at year-end 2012. Apprentices therefore still account for over 9 percent of our workforce in Germany, which is above the national average. In 2012, we invested around €52.8 million in vocational training.

We once again offered over 50 percent of apprentices who completed their training a permanent employment contract and also extended our offering of combined training courses. A total of 184 young people are studying for a bachelor's degree in scientific and administrative disciplines in addition to a vocational training course leading to a qualification recognized by the Chamber of Trade and Industry.

 **Internet**
Career/Your Opportunities/
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CR See also page 22 ff.
Learning by playing

We are one of the first companies in Germany to give corporate responsibility a firm place in our vocational training courses. In a three-year project we developed and tested suitable modules to integrate sustainability into vocational training. Following conclusion of this project, the vocational training units are now responsible for training in CR.

In China, we have fostered the training of young people for many years through our cooperation with the Shanghai Petrochemical Academy (SPA). Our Germany region provides support through a Group-wide vocational training library with around 100 different materials in Mandarin. In North America, a pool of training materials has been prepared for the multi-user site in Mobile (Alabama, USA) and the roughly 300 English-language learning media are now available in the vocational training library.

Ongoing education and training

Successful employees are vital for Evonik's success. Our wide-ranging development programs therefore focus on ongoing education and training that fosters the personal competencies and abilities required of our employees and supports the strategic objectives of our human resources work.

Nationally and internationally we use web-based communication and training platforms. Around 25,000 employees utilized this offering, undertaking more than 24,500 hours training in all. Examples include training modules on IT compliance, which were undertaken by around 20,000 employees. In addition, a further 213,000 training units on occupational safety and environment protection were completed. In Germany, employees received more than 250,000 hours of personnel development and ongoing training, mainly in face-to-face training sessions. That was more than 17 hours for every attendee, including a small number of contractors' employees and some participants from outside Germany.

The corresponding figure for China (Evonik Degussa Specialty Chemicals Shanghai Co., Ltd. and Evonik Degussa China Co., Ltd.) was around 16 hours. As in Germany, the offering includes a special orientation program for new employees and leadership programs for employees in more senior positions.

Talent management—Development at all levels

In the competition for the ablest employees, Evonik aims to utilize talent employees from within the company. In 2012 we supplemented our established talent management for succession planning of Group executives by global coordination of the development process for all talents in order to fill middle management positions. The aim is to define specific development steps on the basis of regular discussions between employees and line managers and to place career planning on a systematic basis. We are therefore integrating talent management more closely into executive training to highlight its key role in this process.

Executives—Fostering talent from within the company

In 2012 we again undertook a wide range of activities to foster talented employees, from established programs and collaboration with well-known business schools through leadership programs for all management levels, to discussion forums for top executives and upcoming managers, and the international Management Talents Training program for middle managers.

Further meetings of decision-makers were held in 2012 to discuss talents and succession planning for executive functions within the Group. The aim was to gain an overview of present and future executives to determine specific development needs. Since executives need experience of different cultures, functions and units, we use an "on-the-job" development approach to achieve this. In 2012 we once again used job rotation for 20 percent of talents earmarked for senior executive positions in the Group so they can gather experience of other functions, organizational units and cultures. In parallel with this, we launched the new Evonik Executive Development Program devised in collaboration with Wharton Business School. This seven-month program spanning three continents enables top executives to broaden their personal competencies.

In 2012 our TalentDays focused on the definition of values. 120 talents built a therapeutic meeting place for the "Lebenshilfe" charity in Hattingen, an experience that showed them how common values can be translated into specific action on a day-to-day basis.

Diversity as a driver for creativity and innovation

We regard diversity as a corporate value. It provides a sustainable basis for ideas and innovations and thus makes the company more competitive. We define diversity as the interaction of different nationalities, genders, educational backgrounds, professional experience and age structures. To reinforce diversity in management, the Diversity Mindset workshops held for top management in 2011 were cascaded down to the next levels in the hierarchy in 2012. At the same time, the Executive Board integrated diversity into the process of agreeing objectives with all Group executives. WoMentoring, a new program to foster female managers and specialists was launched. During this 18-month program mentees receive individual support and advice from experienced Evonik managers. This builds on the Women@Work training, which was included in the training catalog in 2012. Overall, 120 women from various areas have already taken part. In 2012 we drove forward Women@Work, which also provides a new network for our female executives and specialists. Nationality was the topic for our second Diversity Round Table. Dr. Engel, Chairman of the Executive Board, invited six talents from four countries to discuss aspects of an international organization, approaches at Evonik and quotas for women. Our first Diversity Day in December 2012 gave about 120 participants from all areas of the Group an opportunity for an extensive exchange of experience. They developed creative ideas on how to anchor diversity in our corporate culture in the future.

 See also page 30 ff.
Materiality analyses

Personnel expense and social security contributions

Personnel expense for the continuing operations in the Evonik Group totaled €2.68 billion in 2012, a rise of €47 million (1.8 percent) compared with 2011. Provisions for pensions are established to cover benefit plans for retirement, disability and surviving dependents' pensions. The benefit obligations vary depending on the legal, tax and economic circumstances in the various countries in which the companies operate. The level of the benefit obligations generally depends on length of service and remuneration. Germany accounted for around 93.7 percent (2011: 93.6 percent) and thus the vast majority of provisions for pensions on the reporting date. At the German companies, occupational pension plans are predominantly defined benefit plans. They are primarily funded by provisions and pension fund assets. In 2010 some pension obligations were transferred to a contractual trust arrangement (CTA). Further funding was allocated to this CTA in 2011 and 2012. The pension plans at foreign companies may be either defined contribution or defined benefit plans.

Personnel expense

The breakdown of personnel expense in the reporting period was as follows:

in € million	2012	2011
Wages and salaries	2,168	2,140
Social security expenses	326	315
Pension expense	156	149
Other personnel expense	25	24
	2,675	2,628

Proportion of employees with access to health insurance¹⁾

in %	2012			2011 ²⁾		
	Statutory health-care system (basic)	Company plan	Mixed plans	Statutory health-care system (basic)	Company plan	Mixed plans
Germany	100	0	0	100	0	0
Other European countries	32	10	58	98	0	65
North America	4	96	0	8	92	1
Central and South America	27	0	73	97	0	88
Asia-Pacific	32	14	54	84	9	49
Middle East, Africa	2	38	42	62	24	18

¹⁾ Deviations from prior year possible due to process improvements and changes in the regional structure (see page 73).

²⁾ Multiple entries possible; reflects regional structure in 2011.

Voluntary social benefits are offered to employees in all regions in which Evonik has a presence. The benefits offered by statutory health insurance vary greatly from one region to another. Where state health-care provision is inadequate, we offer our employees a company health insurance plan or supplement the statutory offering.

Disabled employees account for 5.9 percent of the workforce at Evonik in Germany. That is above the quota of 5 percent set for Germany.

Except in a very few cases, there are also state pension plans and a large number of company pension plans, which differ from region to region. In addition to employer-financed models, these include models financed solely by employees and mixed forms.

Proportion of employees with access to a company pension plan¹⁾

in % (multiple entries possible)	2012			2011 ²⁾		
	Employer-financed	Employee-financed	Mixed forms	Employer-financed	Employee-financed	Mixed forms
Germany	3	5	86	42	35	85
Other European countries	41	1	38	50	0	33
North America	4	0	96	100	0	100
Central and South America	26	0	67	0	0	8
Asia-Pacific	13	0	69	9	0	8
Middle East, Africa	1	0	71	0	0	92

¹⁾ Deviations from prior year possible due to process improvements and changes in the regional structure (see page 73).

²⁾ Multiple entries possible; reflects regional structure in 2011.

Global realignment of remuneration systems

In 2012 we continued the global realignment and harmonization of our remuneration systems, which we embarked on in 2011. In almost all regions and countries in Asia, we have completed the evaluation of all relevant functions on the basis of the Evonik Global Grading System, bringing a significant increase in transparency and harmonization. The plan is to roll this out to Europe, North America, the Middle East, Africa, and Central and South America in 2013.

As a global corporation, Evonik offers its employees market- and performance-oriented remuneration. An evaluation of the main managerial and specialist functions provides a basis for comparability and systematic alignment to the market.

The focus here is on the function rather than on individual employees. Remuneration is therefore based on objective criteria such as responsibility, knowledge and intellectual input; personal characteristics such as gender, age, etc. do not have any impact.

Employee participation 2012—sharing in the company's success

An employee participation plan was offered to employees in Germany for the fifth year in succession. Around 9,000 of the eligible employees (including apprentices) purchased participation rights with a total value of around €17.7 million. Although the formula used to calculate the return was adjusted to take account of the reduction in global interest rates, the participation rate rose to around 40 percent (2011: 34 percent). With a subsidy of €315 per participant, the total amount subsidized by the company reached a new record. For legal and tax reasons, the employee participation program only exists in this form in Germany.

Irrespective of this, around 92 percent of our sites worldwide have performance- and profit-based incentive systems, which generally take the form of supplementary payments and/or bonuses. These systems cover around 99 percent of our employees (excluding apprentices). At some German locations, there are also incentive systems for apprentices, which are generally performance-based.

Working together as partners

Respect for workers' and human rights

Evonik accepts the United Nations Declaration of Human Rights and is a member of the UN Global Compact. We have given an undertaking to foster human and workers' rights, avoid discrimination and corruption, and protect people and the environment. This is integrated into our Code of Conduct and Global Social Policy, which forbid any form of discrimination on the basis of origin, race, religion, age, gender, sexual orientation and disability.

 See also page 35
Code of Conduct and Global
Social Policy

Employees who feel they have been discriminated against have the right to lodge a complaint. Information on the basic procedure is normally provided by internal media, at information events and in personal discussions. Contacts for reporting cases of discrimination are available in all regions. Except in Central and South America, all regions have activities to avoid discrimination, which are accessible to all employees. About 80 percent of our employees have access to measures to integrate foreign employees and more than two-thirds have access to training in dealing with foreign employees. No cases of discrimination were reported in 2012.

We raise the sensitivity of our procurement staff in dealing with potential suppliers through training and our procurement terms document our expectations they suppliers will comply with our standards.

Trustful collaboration

The company's success relies to a significant extent on trusting collaboration between representatives of the management and employees. This collaboration takes account of operating conditions and the laws applicable in the various countries. Employee representatives receive timely information on significant changes and are involved in change processes.

In Germany, all sites have employee representation: works councils are empowered by law to represent non-exempt and exempt employees, while senior staff committees are the legitimate representatives of senior executives. The Group Works Council and Group Senior Staff Committee are responsible for issues affecting the employee groups they represent that span several sites. Employee representatives receive timely information on key changes in the company.

Cross-border interests are represented by the Evonik Europa Forum, which is composed of employee and employer representatives. Worldwide, over 95 percent of our employees work in companies with employee representation. About the same proportion are covered by collective bargaining agreements or other collective rules governing remuneration. Evonik does not restrict employees' rights to unionization, nor freedom of assembly and the right to collective bargaining.

Employee survey

In November 2012, around 31,500 employees in more than 50 countries were invited to take in the biennial Group-wide employee survey. Building on the results of the 2010 survey, which led to more than 250 improvements, the second survey included questions on aspects that employees consider to be particularly important: workloads, health, and diversity.

Participation increased to 83.4 percent (2010: 78.8 percent). Online participation more than tripled to 69.2 percent. The aim is to increase this further in the future as it cuts costs and is also more environment-friendly than printing, mailing and using paper questionnaires. In addition, the results are available faster, so improvements can be introduced more quickly. There was a significant improvement in the Commitment Index, which shows the sentiment of employees at Evonik. This indicates that employees accept and support the Evonik's clear focus on specialty chemicals. Although identification with the company and its values is good, there is still considerable scope for improvement. Action will now be taken on issues such as health performance, excellent leadership and career and succession planning.

Employee appraisal interviews

Regular appraisal interviews are an important element in employee development and a central management tool. They center on a review of the past year and look ahead to the coming year. These interviews are structured using a uniform Group-wide standard based on our competency model. Future challenges, tasks and assignments and the potential to take on more demanding tasks are discussed, and specific development activities are agreed and recorded in writing. The employee and his or her line manager bear equal responsibility for tracking and implementing the agreed measures.

360° feedback—A top-down feedback culture

360° feedback has become established with managers at all levels in recent years as a tool for employee and organizational development. Feedback is given from a variety of angles: co-workers, colleagues, the employee's line manager and other people such as customers assess the individual's competencies and conduct on the basis of the Evonik competency model. This individual feedback is used for personal development, while evaluation in the group strengthen reflection of the strengths and development needs of specific teams or units. Following the example set by the Executive Board in 2011, 360° feedback was conducted for executives in 2012.

The process is being continued to enhance the feedback culture in the company. The aim is to utilize opportunities for feedback in day-to-day working situations and actively address the feedback received.

A family-friendly company

Evonik sees a family-friendly management policy as part of its value-oriented human resources strategy and an expression social responsibility. It aims to raise the compatibility of working and family life and align them optimally to employees' needs.

In Germany, we have an increasing range of regional child-care and vacation offerings for employees' children. Internationally, the focus tends to be on caring for children in the event of illness. To help employees balance their responsibility for caring for sick and elderly relatives, in 2012 we extended our range of services in this area. Our new cooperation partner Amiravita GmbH offers support for employees in Germany who need to care for relatives by providing personal advice and psychological counseling. Internationally, our sites participate in regional initiatives. For example, in Brazil we support the family-friendly company campaign. Worldwide, around 96 percent of employees have access to initiatives to help them combine working and family life.

Having been certified as a family-friendly company by the non-profit Hertie Foundation in 2009, we have given a voluntary undertaking to drive forward these policies. All the targets set were achieved or exceeded so we were successfully re-audited in 2012. The goals for the next three years include increasing the number and quality of the offers available and giving family-friendliness an even firmer place in our corporate culture and leadership behavior.

In 2012, a total of 188 young people took part in our "New Horizons" exchange program for employee's children (2011: 127). On December 5, 2012 this program received the Human Resources Excellence Award for outstanding achievements in personnel management in Berlin. This award is presented annually by the Human Resources Manager magazine published by the German Association of HR Managers (BPM) for unusual and innovative strategies.

731 employees were on parental leave in 2012. About one-third of them were already on leave at the turn of 2011/2012. The proportion of male employees was 46 percent. In 2012 they took an average of 2.6 months parental leave (women: 4.6 months)¹⁾. Of the employees who returned to work after parental leave in 2012, on average, three times as many took up full-time employment as part-time employment. The full-time to part-time ratio for women returning to work was 2:1. As a family-friendly company we are proud that, with a few exceptions, the employees who returned to work after parental leave in 2011 were still working for us one year later.

well@work—employability and quality of life

Evonik needs healthy, motivated and satisfied employees if it is to achieve its ambitious growth targets. Our human resources strategy is therefore geared to establishing a healthy performance culture throughout the Group. The well@work initiative is designed to strengthen the ability of our employees to work and—as an inseparable part of that—improve their quality of life.

The main tools for this initiative, which was introduced first in Germany, are set out in a General Works Agreement. They include sensitization workshops for managers, training programs for employees and health check-ups. All measures are geared to a sustained impact and efficiency.

The JP Morgan Corporate Race in 2010 marked the start of the Group's well@work initiative. It will be rolled out internationally in 2013, taking into account cultural factors.

Around 98 percent of our employees have access to company-run social and employee counseling services at our sites. They provide advice, among other things, on workplace-specific problems, health issues and personal and family matters.

 Internet
www.berufundfamilie.de

 See also page 100
Workplace health management through well@work

¹⁾ Definition altered compared with 2011.

Worktime models by region 2012¹⁾

in %	Single shift, full-time		Single shift, part-time		Multiple shifts, full-time		Multiple shifts, part-time	
	fixed/ inflexible	flexible	fixed/ inflexible	flexible	fixed/ inflexible	flexible	fixed/ inflexible	flexible
Germany	2/2	81/63	0/0	72/8	15/15	36/11	7/1	33/1
Other European countries	33/23	27/26	26/3	4/1	46/39	6/6	27/2	0/0
North America	52/15	52/36	0/0	51/1	48/48	0/0	0/0	0/0
Central and South America	95/92	26/2	60/0	0/0	5/5	0/0	0/0	0/0
Asia-Pacific	55/55	15/15	0/0	0/0	30/30	0/0	0/0	0/0
Middle East, Africa	29/29	71/71	0/0	0/0	0/0	0/0	0/0	0/0

¹⁾ Figures before the slash indicate the fundamental option of utilizing this model. These data were not part of PwC's limited assurance engagement. Figures after the slash show actual take-up of this model. Restricted comparability to 2011 due to changes in regional structure (see page 73); multiple entries not possible.

Extended periods of leave¹⁾

in %	Extended unpaid leave > 3 months	Extended paid leave > 3 months
Germany	100/0	81/0
Other European countries	68/0	5/0
North America	96/0	96/0
Central and South America	74/0	74/0
Asia-Pacific	18/0	1/0
Middle East, Africa	0/0	0/0

¹⁾ Figures before the slash indicate the fundamental option of utilizing this model. These data were not part of PwC's limited assurance engagement. Figures after the slash show actual take-up of this model. Restricted comparability to 2011 due to changes in regional structure (see page 73); multiple entries not possible.

Working hours and vacation entitlements by region in 2012¹⁾

	Weekly working hours		Vacation (days p.a.)	
	Permissible statutory working hours	Evonik	Working hours permitted by law	Evonik
Germany	Up to 48	37,5–40	24 ²⁾	29–30 ³⁾
Other European countries	35–48	35–45	14 ²⁾ –30 ³⁾	15 ³⁾ –51 ⁴⁾
North America	44 – no Limits	40–42	0–10 ⁴⁾	10–30 ³⁾
Central and South America	40–48	40	8 ³⁾ –30 ⁴⁾	14 ³⁾ –30 ⁴⁾
Asia-Pacific	37,5–48	37,5–48	5 ⁴⁾ –22 ³⁾	5 ⁴⁾ –35 ²⁾
Middle East, Africa	37,5–40	37,5–40	15 ³⁾ –30 ⁴⁾	20–22 ³⁾

¹⁾ Deviations from prior year possible due to process improvements and changes in the regional structure (see page 73).

²⁾ Work days (Monday to Saturday).

³⁾ Work days (Monday to Friday).

⁴⁾ Calendar days.

The respective regulations include country-specific regulations, for example, on the basis of age or tenure.

The environment

Our goal is to reduce emissions of greenhouse gases, not just from production, but as a concerted effort at all stages in the value chain. Environmental protection starts with the development of new products and the planning of new production facilities. We steadily strive to improve production processes, utilize resources more efficiently and reduce environmental impact. We offer our customers energy-efficient solutions that, among other things, help reduce greenhouse gas emissions.

 See also page 18 ff.
Life cycle assessments

Our management approach

Starting from our corporate Environment, Safety, Health and Quality (ESHQ) Values, we develop Group-wide policies and procedures to manage environmental issues. The operational units and the Site Services Business Unit are responsible for implementing these regulations. They conduct regular audits to ensure they are applied by our sites and regions.

In addition, the Environment & Responsibility Department at the Corporate Center checks compliance with Group regulations. Twenty-four audits were performed worldwide in 2012. Based on the findings and on analyses of internal and external monitoring activities, site inspections and reviews, talks are held on possible improvements and their implementation. The Executive Board is informed annually of the outcome of these audits.

Environmental protection costs and expenses for environmental protection equipment

We invested €39 million in 2012 (2011: €48 million) to achieve a further improvement in environmental protection. Investment in environmental protection is divided among a large number of individual investments in effective end-of-pipe technologies and measures integrated into plants and processes.

The decline in investment was mainly attributable to the divestment of the carbon black business. Operating costs for environmental protection were unchanged at €251 million in 2012.

Environmental protection costs/investment in the core specialty chemicals business

in € million	2008	2009	2010	2011	2012
Operating costs for environmental protection	259	259	264	251	251
Investment in environmental protection	44	43	36	48	39

Environmental targets

Evonik is committed to making a contribution to climate protection, minimizing the environmental impact of its business activities, and steadily improving its environmental protection performance. Consequently, we set targets for reductions in key parameters for our core specialty chemicals business between 2004 and 2014.

- Greenhouse gases: reduce specific energy-related emissions of greenhouse gases by 20 percent
- Water consumption: reduce specific water consumption by 20 percent
- Production waste: reduce specific production waste volume by 20 percent

For many years we have had management processes and extensive emissions controlling to monitor fulfillment of these targets. We achieved the goals for all three parameters in 2012—two years earlier than planned. That is attributable to the commitment of our employees, who facilitated this successful performance through a large number of technical and organizational measures. Our teams are therefore working on demanding new targets for the next period.

Target attainment in the core specialty chemicals business

Change in % compared with 2004 ¹⁾	2004	2008	2009	2010	2011	2012	Target for 2014
Specific greenhouse gas emissions ²⁾	100	87	88	82	81	80	80
Specific water consumption	100	81	83	75	70	69	80
Specific production waste	100	84	72	79	79	77	80

¹⁾ Continuing operations, including data for the Yingkou site in China, which was divested as of December 25, 2012, and pro forma data for 2004–2009 for the site in Tippecanoe (USA), which was acquired at the start of 2010.

²⁾ Excluding CO₂ emissions from chemical processes.

Production inputs and output

Production inputs dropped 14 percent to 8.16 million metric tons in 2012, while output declined 6 percent to 9.71 million metric tons. This was mainly attributable to the divestment of the carbon black business. Renewable resources accounted for almost 9 percent (0.73 million metric tons) of total production inputs in 2012. The rise compared with 2011 (0.69 million metric tons) was mainly due to the expansion of capacity for the feed additive L-lysine in North America, which was successfully completed in fall 2012. Production capacity at the site in Blair (Nebraska, USA) was doubled in two stages to 280,000 metric tons a year.

Most of the renewable resources used in 2012 comprised dextrose and saccharose, which are used primarily in fermentative production of amino acids. Natural fats and oils and their derivatives are used to produce precursors for the cosmetics, detergents and cleaning agents industry and in technical processing aids.

Production volumes and inputs in the core specialty chemicals business

in million metric tons	2008	2009	2010	2011	2012
Raw material inputs	10.3	9.06	10.1	9.51	8.16
of which renewable raw materials	0.79	0.64	0.68	0.69	0.73
Output	10.79	9.26	10.61	10.35	9.71

Energy inputs

Compared to the previous year, energy inputs declined by 3 percent in 2012 to 89.48 petajoules. However, the trend varied depending on the type of input. While some coal-fired power plants in Marl (Germany) were only available for use on a restricted basis in 2011, no overhauls were performed in 2012. The coal-fired power plants operated very well and availability was high. At Tippecanoe (Indiana, USA), coal used in the generation of steam has been replaced entirely by natural gas. The volume of steam sold to third parties dropped considerably, and the volume of electricity sold was also slightly lower, mainly because of the divestment of the carbon black business. Consequently, there was no reduction in the ratio of net to gross energy inputs.

Looking solely at the development in the continuing operations (core business, deconsolidation of, among other activities, the carbon black business), the 2 percent reduction in specific gross energy inputs from 9.37 to 9.22 petajoules per million metric tons output in 2012 shows a marked improvement in energy efficiency.

We are working steadily to make energy supply more efficient, improve production, and optimize our integrated energy supply and energy management systems. Although it is becoming increasingly difficult to make further improvements, we are constantly looking for savings potential. Our employees are involved

in this through our company suggestion plan, special task forces and workshops. Alongside pragmatic approaches, we encourage them to come up with unconventional solutions. In addition, the operating units are supported by specialist departments such as Operational Excellence (OPEX), which look for ways of raising the productivity and energy efficiency of production-related business processes.

To ensure energy-efficient operation, we have established an integrated structure for many of our chemical processes. These ensure intelligent linking of energy requirements and production. For example, steam is generated on a decentralized basis in exothermic reactions in many chemical plants and supplied to other plants via steam networks. This reduces steam production in the power plants, which in turn reduces consumption of fossil fuels. In some cases, excess steam is also used for internal power generation. Cooperating with external steam suppliers can also help reduce pressure on resources. For example, since July 2012 the site in Darmstadt (Germany) has sourced its steam from a nearby waste-fuelled heating power plant operated by Heag Südthessische Energie AG (HSE).

Another example is the use of alternative liquid and gaseous fuels from production to generate energy. We also use a variety of incineration plants for waste, treatment sludge, exhaust gas and wastewater incineration plants to generate steam. Alternative fuels accounted for around 8 percent of total energy inputs in 2012.

Energy inputs in the core specialty chemicals business

in petajoules	2008	2009	2010	2011	2012
Gaseous fossil fuels	33.59	31.14	33.88	35.63	32.72
Solid fossil fuels	26.71	23.64	25.35	22.45	23.93
Liquid fossil fuels	1.03	0.69	0.44	0.40	0.27
Alternative fuels	9.81	7.44	7.57	7.16	7.42
Power, external input ¹⁾	17.32	14.43	16.07	19.89	18.98
Power, external output	8.52	6.72	8.43	11.91	11.77
Steam, external input	6.15	5.64	7.16	7.09	6.18
Steam, external output	14.99	14.01	14.87	13.46	10.51
Specific energy input, gross	94.62	82.98	90.47	92.62	89.48
Specific energy input (net) (after subtraction of output)	71.10	62.25	67.16	67.25	67.20

¹⁾ Including captive hydroelectric power generation.
Prior-year figures restated.

Emissions into the air

Greenhouse gas emissions

Greenhouse gas emissions totaled 9.1 million metric tons in 2012, which was far lower than in 2011 (10.8 million metric tons). Both direct and indirect CO₂ emissions from energy sources are included in these figures. The 16 percent reduction is mainly due to changes in the energy mix, for example, the use of natural gas rather than coal. Moreover, energy initiatives and a wide variety of individual measures also improved energy efficiency. For example, a new turbine that came into service in Worms (Germany) converts excess steam from the site into electricity. Last but not least, the divestment of the carbon black business contributed to the reduction.

In 2012, specific greenhouse gas emissions were 10.5 percentage points lower than in 2011. In accordance with the Greenhouse Gas (GHG) Protocol, these CO₂ emissions (Scope 1) include emissions from energy generation, production, and administrative facilities. Emissions from Evonik's fleet of business vehicles are also included. The influence of the last two of these emissions sources is extremely low at around 0.0078 million metric tons CO₂ equivalents (= 0.09 percent), and therefore has a negligible impact on the Group's emissions.

Indirect CO₂ emissions (Scope 2) come from the purchase of energy. The table shows the CO₂ emissions associated with the purchase of electricity and steam as both gross and net values. The net figure shows the position after subtracting electricity and steam output for third parties from total inputs. That enables us to eliminate the proportion of energy-related CO₂ emissions attributable to third parties at our large multi-users sites in order to produce company-specific indicators.

Greenhouse gas emissions in the core specialty chemicals business

in thousand metric tons CO ₂ equivalents ¹⁾	2008	2009	2010	2011	2012
Scope 1					
CO ₂ ²⁾	8,947	7,738	8,484	7,430	5,879
CH ₄	17	17	15	15	14
N ₂ O	74	74	68	129	63
HFC	9.8	8.5	7.3	7.7	7.0
Scope 2					
CO ₂ gross	2,800	2,351	2,746	3,252	3,126
Scope 1+2, total (gross)	11,848	10,189	11,321	10,833	9,090
Total³⁾ Scope 2					
CO ₂ net	654	523	715	907	973
Scope 1+2, total (net)	9,702	8,361	9,290	8,489	6,937
Output in million metric tons	10.79	9.26	10.61	10.35	9.71
Specific greenhouse gas emissions (gross)					
in metric tons CO ₂ equivalents per metric ton output	1.10	1.10	1.07	1.05	0.94

¹⁾ GWP factors: CO₂: 1, N₂O: 310, CH₄: 21, HFC: 140–11,700, PFC: 6,500–9,200.

²⁾ Prior-year figures restated.

³⁾ Total Scope 2: Power and steam sourced externally less power and steam supplied to third parties.

The European facilities that fall within the scope of the European Union's Emissions Trading System (EU ETS) emitted 3.1 million metric tons of CO₂ in 2012 (2011: 3.6 million tons CO₂). Emissions trading only covers direct (Scope 1) CO₂ emissions from the chemicals plants covered by the EU ETS. The binding allocation of free allowances for the third trading period (2013–2020) is expected to take place in the first half of 2013. Political endeavors to push up the price of allowances, which has recently dropped significantly, are only likely to have an impact—if at all—during 2013.

Evonik Carbon Footprint (ECF)

Climate change is confronting society, politicians and industry with new challenges, which Evonik is addressing. As well as production, these challenges affect other phases in the product lifecycle, from the extraction of the raw materials to their disposal after use. In addition to logging direct emissions of greenhouse gases from its core specialty chemicals operations, since 2008 Evonik has also analyzed selected categories of indirect greenhouse gas emissions and their distribution among different emissions sources along the value chain. The method used for this is based on the Greenhouse Gas (GHG) Protocol Corporate

Standard. The key parameter is the carbon footprint or CO₂e footprint. This shows the volume of greenhouse gases emitted by a company, process or individual product (CO₂ equivalents, in other words CO₂ and other greenhouse gases defined in the GHG Protocol Corporate Standard). The change in greenhouse gas emissions from the core specialty chemicals business—excluding the usage phase of Evonik’s products—is shown in the following table. This covers Evonik’s energy and process emissions, the vehicle fleet and air-conditioning of offices (Scope 1), purchased electricity and heat (Scope 2), purchased production inputs, inbound and outbound transportation, commuting by employees, business trips, and the disposal and recycling of the products sold (Scope 3). It excludes, among other things, the usage phase of Evonik’s products. The figures for 2009 to 2011 exclude the carbon black business that was divested in 2011. The comparative data for 2008 include the scope of consolidation of the core specialty chemicals business as of December 31, 2008, i.e. including the carbon black business.

Change in greenhouse gas emissions in Evonik’s core specialty chemicals business

in million metric tons	2008	2009	2010	2011
CO ₂ e emissions	25.2	19.7	24.2	24.1

As well as greenhouse gas emissions, the CO₂e savings made by using selected “beacon products” from Evonik have been calculated. The savings are calculated by comparing total emissions during the lifecycle of Evonik’s products with those for comparable established alternatives without Evonik products.

Greenhouse gas savings during the lifecycle of applications using products sold by Evonik in each year

in million metric tons	2008	2009	2010	2011
CO ₂ e reduction	43.5	38.3	45.1	47.1

The Evonik Carbon Footprint (ECF) should not be compared directly with the CO₂e savings because it refers to emissions relating to our business operations to produce our products, normally intermediates. These include our own production and supply chain emissions but not the usage phase of our products. By contrast, the savings are calculated by comparing the lifecycle emissions of applications of selected Evonik products with those of applications with corresponding reference products.

A limited assurance review has been conducted of the ECF and the calculation of greenhouse gas savings and they have been reported, among other things, to the Carbon Disclosure Project (CDP).

The Carbon Footprint Estimation (CFE) method developed by Evonik, which has been assessed by external experts, is used to quantify and evaluate new products. It also allows standardized evaluation of research and development projects to assess greenhouse gas emissions at all subsequent phases of the product lifecycle. This ensures that different projects at Evonik can be compared using comparable criteria. In 2012 this method was applied to strategic research at the Eco² Science-to-Business Center.

 **Internet**
www.cdproject.net

 **Download**
The ECF-Brochure and CFE-Brochure can be viewed in the Responsibility section at www.evonik.com

Carbon Disclosure Project

Climate change is also of economic significance to companies. Those that confront the challenges, systematically integrate them into their business strategy, and take them into account in the alignment of their product and service portfolios can leverage growth potential. The aim of the Carbon Disclosure Project (CDP) is to ensure maximum transparency and comparability in this area. The CDP is supported by more than 700 institutional investors who together manage assets totaling more than US\$80 trillion. It is therefore the world's largest and most important initiative by the financial industry relating to climate change as an investment criterion.

In 2012 Evonik (excluding the Real Estate segment) participated in the CDP-Mittelstandsinitiative for the first time and immediately gained the highest quality level for extensive and transparent reporting with a disclosure score of 81 out of 100 points. However, we are not satisfied with that. In November 2012 we took a decision on further elements of a transparent and exacting climate strategy and initiated further structural measures. These include implementing climate responsibility at Executive Board level and installing a climate-specific opportunity/risk matrix as part of our risk management system.

We continued to work on the Evonik Carbon Footprint in 2012. In particular, we track the potential to optimize CO₂e emissions in our value chain. For a range of products, we also look at reduction in emissions resulting from the use/benefits of these products for our customers compared with alternative products and applications. At the same time, we work with our suppliers in an effort to achieve a continuous improvement in the CO₂e backpack of our inputs. We plan to have further indirect CO₂e emissions and selected projects reviewed by an audit firm.

Other emissions into the air

We use a variety of technical and organizational measures to control and minimize air pollution. Thanks to our environmental management systems, we can guarantee that the statutory limits are monitored and adhered to, and that corrective action is taken if they should deviate from the norm. Relevant sources of emissions are constantly monitored in accordance with statutory requirements. Our production and exhaust gas treatment facilities are fitted with emissions monitoring devices and the data are evaluated regularly. To keep the air clean, exhaust gases are returned to the production process. Other measures include thermal processing of residual gases with a high calorific value (to replace natural gas), effective integrated and additive environmental protection measures, and taking emissions into account when planning new facilities. For example, our power plants use electro-filters to remove particulates from flue gases. NO_x removal is achieved with catalysts while sulfur is removed by scrubbers and then precipitated. Emissions reduction in our production plants relies on a variety of treatment systems based on different processes such as condensation, adsorption and thermal and catalytic incineration processes.

The range and volume of emissions depends largely on the characteristics of the fuel mix used for energy generation and chemical production processes.

 See also page 115 f.
About this report

The divestment of the carbon black business resulted in a sharp reduction in both CO₂ emissions and other emissions into the air in 2012, particularly SO₂, NO_x, CO and particulates. The remaining SO₂ and NO_x emissions are largely associated with combustion processes in energy generation. Portfolio adjustments were mainly responsible for the sharp drop in CO emissions (–79 percent), along with the almost complete elimination of emissions of ozone-depleting substances since 2010.

The increase in emissions of heavy metals in 2012 was within the analytical tolerance range.

Other emissions into the air in the core specialty chemicals business

in metric tons	2008	2009	2010	2011	2012
Carbon monoxide (CO)	103,359	87,141	7,557	4,936	1,017
Sulfur oxides (SO _x /SO ₂)	35,029	27,335	30,959	19,463	3,652
Nitrogen oxides (NO _x /NO ₂)	11,639	9,449	11,313	9,074	4,963
NMVOC	1,567	1,300	1,297	1,172	1,019
Particulates	1,273	1,064	1,188	872	441
Heavy metals (As, Cd, Cr, Cu, Hg, Ni, Pb, Zn)	0.78	0.73	0.84	1.16	1.38
Emissions of ozone-depleting substances ¹⁾ in metric tons CFC-11 equivalents	15.6	15.6	0.04	0.05	0.05

¹⁾ Ozone depletion potential (ODP) is a relative parameter indicating how dangerous substances are for the ozone layer compared with the reference substance, fluorinated hydrocarbon R11 (trichlorofluoromethane).

Water data and emissions into water

Evonik has a long tradition of using water responsibly. In 2004 we set specific targets for reducing water consumption in our core specialty chemicals business. The availability of water is a basic precondition for chemical production. The different sources of water at our sites are treated using a range of different methods so they are suitable for different uses. Water is mainly used for cooling and process purposes in production facilities, to generate steam in power plants and for sanitary requirements. To enhance efficiency we have set up integrated supply systems with graduated water qualities. For example, we use water that is no longer suitable for cooling purposes to rinse filters or in industrial cleaning processes. The water that evaporates from cooling cycles is often replaced by condensate or recycled drinking water.

Total water consumption was 4 percent lower in 2012 than in 2011. This was due to a sharp reduction in the use of surface water, partly as a consequence of production shutdowns, divestments and temperature-related seasonal fluctuations in cooling water requirements. About two-thirds of the water used in 2012 was surface water, mainly from rivers.

Water intake by source in the core specialty chemicals business

in million m ³	2008	2009	2010	2011	2012
Drinking water ¹⁾	15.7	14.7	17.2	17.3	16.4
Groundwater	124.0	113.2	87.3	84.2	83.0
Surface water	240.5	201.2	214.2	200.2	190.0
Rainwater	2.4	2.4	2.4	2.2	2.2
Other ²⁾	12.9	5.8	7.6	6.2	5.6
	395.5	337.4	328.8	310.0	297.1

¹⁾ Water from municipal or other utilities.

²⁾ Various sources.

Around 95 percent of water consumption in 2012 was for cooling. The calculation of the proportion of total amount of water used for cleaning includes the amounts used in closed cooling circuits. In 2012, a good 80 percent of cooling of production facilities used closed-circuit systems with re-cooling facilities. The remainder was cooled using through-flow systems. Cooling circuits save considerable amounts of fresh water compared with through-flow cooling, and generally save costs. Only amounts lost by evaporation are replaced. However, potentially higher energy requirements for the circulation and evaporation of the water in cooling circuits and safety criteria (for example, in the event of leaks) have to be taken into consideration.

Water consumption in the core specialty chemicals business

in million m ³	2008	2009	2010	2011	2012
Cooling, without cooling circuits	322	274	252	241	230
Cooling circuits	944	917	1,099	1,124	1,101
Production ¹⁾	73	64	73	69	67
in %					
Cooling	95	95	95	95	95
Production	5	5	5	5	5

¹⁾Including drinking water and water for sanitary requirements.

In 2012, as in previous years, the majority (73 percent) of the water discharged from our drainage systems into the environment was uncontaminated water from through-flow cooling systems. In some cases, production effluent is pretreated in production facilities before full treatment in in-house or municipal wastewater treatment plants.

Water discharge in the core specialty chemicals business

in million m ³	2008	2009	2010	2011	2012
Through-flow cooling water (uncontaminated)	299.9	249.9	227.8	217.7	213.6
Process effluent	64.0	59.9	66.7	72.7	62.8
Drinking water and water from sanitary installations	1.7	1.5	1.7	1.3	1.6
Other	0.6	0.8	5.4	6.3	13.0
	366.2	312.0	301.6	298.0	291.0

The difference between water intake and water discharge is due to the fact that some water is released as steam or used in products.

Emissions into water

In wastewater management, our maxim is "avoid over process over eliminate." Therefore, we endeavor to minimize wastewater volumes when planning new production facilities. That takes pressure off the environment and reduces the cost of treatment. In the operational phase, we strive to improve process systems to minimize or eliminate wastewater volumes.

We have also set high safety standards for the disposal of wastewater. We use separate drainage systems that prevent contamination of cooling water and ensure that production effluent is not diluted by cooling water. We have also built high-performance collector systems as part of our water protection measures. These are used for intermediate storage of peak wastewater loads that could overburden the wastewater treatment facilities. In this way, wastewater can subsequently be fed gradually to the treatment plants for

environment-friendly disposal. We also incinerate some treatment sludge in our own facilities, and use the heat from the resulting incineration gases to generate steam. Wastewater discharged from our sites is carefully monitored by regular sampling and continuous measuring equipment. In addition to in-house monitoring, we are subject to supervision by the authorities, in the form of unannounced control visits to verify compliance with discharge limits.

The chemical oxygen demand (COD) and total nitrogen and AOX loads in wastewater were unchanged from the previous year, or showed only slight fluctuations. The drop in the total phosphorus load (phosphates expressed as phosphorus) was within the analytical tolerance range. Heavy metal emissions were higher in 2012 than in 2011, mainly because of a rise in zinc loads in wastewater. Zinc compounds are used as corrosion inhibitors in cooling towers.

Wastewater loads¹⁾ in the core specialty chemicals business

in metric tons	2008	2009	2010	2011	2012
COD	6,764	5,558	5,960	4,890	4,787
N	523	475	468	484	447
P	66	46	116	114	96
AOX	2.0	1.6	1.6	1.6	1.8
Heavy metals (As, Cd, Cr, Cu, Hg, Ni, Pb, Zn)	4.3	4.0	5.4	4.5	5.5

¹⁾The data show the accumulated volumes of wastewater at all sites. Alongside direct discharges into receiving water, proportionate indirect discharges are included.

Waste

Our waste management priorities are as follows:

- The first priority is to avoid waste through continuous process improvements and the development of integrated production systems.
- If this is not possible, waste should be recycled or used to generate energy.
- As a last resort, it should be disposed of safely.

Avoiding and minimizing waste is important to us for economic as well as ecological reasons. We therefore constantly strive to improve our operating processes. Examples include internal recycling of substance flows and the use of highly specialized catalysts to increase yields and reduce secondary reactions. Waste from production processes generally means a reduction in the production yield and therefore—irrespective of the disposal costs—a financial loss.

Linking up production facilities at our integrated production sites means that some waste products can be recycled internally. That includes uses hydrocarbon residues at our largest site in Marl (Germany) as a substitute for heating oil in the gas synthesis plant, and the reprocessing of waste sulfuric acid in a sulfuric acid plant. Alongside reprocessing, waste with a high calorific value can be used to generate energy. Large quantities of waste are used as a replacement for fossil fuels, especially in the power plants and the hazardous waste incineration plant in Marl (Germany). Treatment sludge can also be reused within the integrated production structure. After dewatering, in Marl it is incinerated in a separate incineration plant, which naturally includes flue gas treatment. Some of the exhaust gases from the production plants are used as replacement fuels. The incineration gases are then used to generate 20 bar steam.

Waste in the core specialty chemicals business

in thousand metric tons	2008	2009	2010	2011	2012
Hazardous production waste	189	141	176	196	190
of which reprocessed	94	75	100	103	101
of which disposed of	95	66	75	93	89
Non-hazardous production waste	207	152	189	168	160
of which reprocessed	135	100	131	111	104
of which disposed of	72	52	57	57	56
Hazardous building and demolition rubble	20	9	5	13	32
of which reprocessed	7	1	1	2	4
of which disposed of	13	8	4	11	28
Non-hazardous building and demolition rubble	88	61	55	125	96
of which reprocessed	68	48	38	72	65
of which disposed of	20	13	17	53	31
	503	362	424	501	478

In 2012 the total amount of waste was 5 percent lower than in 2011, mainly due to a substantial reduction (–23 percent) in non-hazardous building and demolition rubble. In 2011 all chemical production plants and buildings at the Münchsmünster site were demolished. Hazardous building and demolition rubble increased by 146 percent in 2012, mainly because of demolition of the carbon black plant that had been shut down in Botlek (Netherlands). Hazardous production waste was 3 percent lower than 2011 while non-hazardous production waste declined by 5 percent. This was due to a number of individual measures, production stoppages, and the completion of special treatment measures.

Waste management in the core specialty chemicals business

in thousand metric tons	2008	2009	2010	2011	2012
Incineration with recycling of heat energy	80	42	56	52	49
Disposal by incineration	90	70	76	95	84
Recycling (including composting)	195	142	144	182	164
Landfill	75	34	43	48	57
Chemical/physical/biological treatment	30	17	14	20	24
Other disposal methods	5	18	20	51	37
Other reprocessing methods	29	39	72	54	63
	503	362	424	501	478

The percentage of waste reprocessed rose to 59 percent in 2012, a slight increase of one percentage point compared with 2011. The reprocessing ratio comprises recycled substances, incineration with recycling of heat energy, and other disposal methods. Major examples of recycling at Evonik are the reprocessing of PLEXIGLAS®, which can be almost completely recycled, and the recycling or multiple re-use of precious metal catalysts and industrial packaging.

 **Further information**
CR Report 2011, page 86 f.
CR Report 2010, page 61 f.

Biodiversity and ecosystem services

What does biodiversity mean? It refers to the diversity of species, sub-species and habitats that form the basis of life on our planet. The Millennium Ecosystem Assessment, a global study performed in 2005, made it clear the biodiversity is at risk. It is scientifically proven that any loss in biodiversity diminishes the quality of goods and services which ecosystems provide. The chemical industry benefits from these ecosystems. Examples include the availability of clean water and renewable raw materials, as well as ecosystem services which regulate and maintain the quality of air, water and soil.

The sustainable use of natural resources is Evonik's primary means of conserving biodiversity and ecosystems. We foster the sustainable use of resources by means of our certified environmental management (ISO 14001), the continuous optimization of the energy and resource efficiency of our processes, our long-term environmental objectives, and our innovative products.

To highlight the importance of biodiversity and ecosystems for our core business, in 2012 we conducted a biodiversity check on two business lines. The Biodiversity Check developed by the European Business & Biodiversity Campaign (EBBC), a consortium led by the Global Nature Fund, provides an overview of how a company or individual areas of business impact biodiversity. The check is based on the objectives of the United Nations Convention on Biological Diversity (CBD) and examines, among other things, the company's premises, procurement, product development and production, logistics and transportation, and products.

 **Internet**
www.business-biodiversity.eu
www.cbd.int

A major result of the check is that the production conditions for some renewable raw materials need to be monitored closely. These include palm oil. Since 2010 Evonik has been a member of the Roundtable on Sustainable Palm Oil (RSPO), which aims to place global production of palm oil on a sustainable basis in the long term, for example, by fostering the sustainable production and use of palm oil through cooperation between palm oil plantations and the subsequent supply chain. Evonik supports this process and aims to ensure that from 2015 the Personal Care Business Line switches to palm oil derivatives certified as complying with the RSPO sustainability criteria. In 2012 Evonik set up a steering committee to oversee this process. Its role includes clarifying the technical and commercial issues that have not yet been resolved. It expects to start using initial quantities of certified raw materials from 2013.

 **Internet**
www.rspo.org

Another important finding is that responsible use of water is particularly important in this context. In 2012 we conducted an initial analysis to identify regions where poor availability of water could represent a risk for the local community and for Evonik. Using the Global Water Tool of the World Business Council for Sustainable Development (WBCSD) and data supplied by the World Resources Institute (WRI), we concluded that 14 percent of our production facilities are in regions that could be affected by water shortages or extreme water shortages in the period to 2025. Since the majority of the water consumed by the Evonik Group is for cooling purposes and is returned to the ecosystem after use, at present we do not compete directly with water for drinking and irrigation purposes. Nevertheless, the analysis will be used to improve decisions on potential investments by ensuring timely identification risk factors and alternatives.

Alongside our own biodiversity checks, in 2012 we played an active role in preparing "Biodiversity and Ecosystem Services—What are they all about?" a report published by the European Chemical Industry Council Cefic. This report shows the relevance of biodiversity and ecosystems for chemical companies. It looks at the main corporate influences on biodiversity and dependence on ecosystems along the value chain and derives risks and benefits.

 **Internet**
 Industry Support/Responsible
 Care for SMEs at
www.cefic.org

Evonik site	Country	Status of conservation area (adjacent)
Marl	Germany	92/43/EEC area
Hanau	Germany	92/43/EEC area
Wesseling	Germany	92/43/EEC area
Lülsdorf	Germany	92/43/EEC area
Gramatneusiedl	Austria	92/43/EEC area
Lenzing	Austria	national
Mobile	USA	national
Janesville	USA	national
Portland	USA	national
Morrisburg	Canada	national
Americana	Brazil	national

To achieve a better understanding of locale-specific aspects of biodiversity, in 2011 we established for the first time which of our sites border a conservation area protected by national or international conservation status, and whether or not our operations at these sites have a significant impact on the biodiversity of the conservation areas in question.

In 2012, four sites in Germany and one in Austria were adjacent to conservation areas that are protected by the European Union's Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Council Directive 92/43/EEC). Six sites in other countries are adjacent to conservation areas that are regulated by country-specific legislation. Evonik did not identify any significant impact on the biodiversity of these conservation areas in 2012. Although treated wastewater is discharged into the Lippe and Rhine rivers from our sites in Marl, Wesseling, and Lülldorf (all in Germany), the pollutant loads do not exceed the permissible levels.

Safety and health protection

Safety is a top priority at Evonik. Our objective is to protect our employees, local residents and the environment, from any potential negative impact of our activities. We use indicators to monitor occupational and plant safety. These leading indicators show where action needs to be taken.

 See also page 60 ff.
Product stewardship

 See also page 98 f.
Occupational safety

Plant safety

Process safety at our production installations is analyzed in detail at regular intervals to identify risk factors. These analyses are based on the principle of dual control and independent experts are also involved. They take account, in particular, of how people handle the risks and hazards in our plants. We regularly review our management systems and processes, and undertake further development where this is expedient. The findings are presented to working groups as "lessons learnt." We are presently defining a binding process to secure the quality of safety analyses on chemical processes at our production facilities and improve safety-related management systems in plant overhauls and modifications. In this way, we aim to bring about a further improvement in plant safety. Our internal incident management system, which includes a corporate reporting center and contingency communications, is also being reviewed and revised. In 2013 we intend to set up a central risk management system focusing on the risk of production stoppages.

A Global Process Safety Competence Center (GPSC) was established at the start of 2012. Its task is to ensure that safety experts and the methods used to analyze process safety in our production plants meet uniformly high quality standards. To this end, all internal experts are grouped in a global competence network, and additional experts are made available for the many investment projects associated with our global growth initiative. In the future, only experts approved by the GPSC will be able to undertake safety analyses of production facilities that work with hazardous substances and processes. The GPSC will also draw up a binding Group-wide policy on the procedure for safety analyses. Management systems for safe operation of production plants, overhauls and modifications are constantly being refined. In this, we take account of lessons learnt from incidents. For constant monitoring of plant safety we use a key performance indicator which, analogously to the accident frequency indicator for occupational safety, covers incidents involving the release of substances, fire or explosion, even if they cause little or no damage.

Since the beginning of 2012, this indicator has been reported on the basis of harmonized criteria for the European chemical industry (based on the criteria defined by the European Chemical Industry Council, Cefic). These criteria do not differ significantly from those previously used by Evonik to document such incidents. Comparability is sufficient to ensure that improvements versus the past can be tracked. Using the old system, the indicator was 36 points (2011: 52 points), confirming a steady improvement since its introduction in 2008 (reference base = 100 points). The new, refined indicator is agreed within the sector and will provide a uniform basis for external reporting. It is calculated from the number of events per million hours worked in the Group's production facilities. As a result of the change in the calculation base, the plant safety indicator for 2012 was 46 points. The first indicator, calculated for 2008, remains in place as the reference.

Transportation safety and logistics

An established logistics concept and reliable partners are vital for the safe transportation of goods. The procurement of our logistics services (transportation by air, ocean, inland waterway, road and rail) is based on the principle of offering favorably priced modes of transportation, routes and services that meet both our customers' requirements and legal provisions. Expedient, future-oriented environmental and transportation strategies are essential and are steadily being improved with a view, among other things, to the principles of Responsible Care. Our aim is to achieve a sustainable reduction in CO₂ emissions in all methods of transportation by using smart and innovative logistics systems and solutions. The most suitable means of transportation is selected by consultation between the business units and the Logistics department. The benefits of different modes of transportation differ so they cannot necessarily be substituted at will. Internationally, the highest CO₂ emissions come from transportation by air, water and road. Accordingly they involve the highest logistical efforts in order to achieve a measurable reduction in CO₂ emissions. As a "green" method of transportation, railroads are predestined for the future shift in transportation, especially away from trucks. However, a general revitalization of rail services is needed in order to achieve this.

Evonik's transportation-related CO₂ emissions amounted to 0.463 million tons (2011), 1 percent less than in the previous year. Determination of CO₂ emissions is based on an international standard, the activity-based approach developed by Professor McKinnon. The calculation takes account of annual tonnage transported by each mode of transportation, average distance transported and transportation-specific emissions factors. Since these emissions factors do not include the provision of fuel, Evonik adds a fuel margin based on guidelines issued by the Association of German Freight Forwarders and Logistics Operators (DSLVL).

Tender processes are based on carrier profiles defined by Evonik (process and service specifications for freight forwarders). These contain defined sustainability indicators (targets: evaluation, measurability, added value) designed to achieve a sustained reduction in CO₂ emissions and increase the transparency of the logistics process. The Safety and Quality Assessment System (SQAS) which is shared with other members of Cefic is used to check that our logistics service providers meet high safety and quality standards.

We are constantly examining the ability to use different modes of transportation. In 2012 we therefore joined the Clean Shipping Network, a Swedish forum dedicated to enhancing the transparency with regard to the environmental and pollutant impact of international ocean freight. In a tender for road transportation for business with Turkey, we successfully specified CO₂ equivalents and required the forwarder to plant 10 trees per one hundred shipments. As a result of this cooperation, 300 trees were planted in Germany and Turkey. Another possibility is the possible shift in energy used in rail transportation to 100 percent CO₂-free power from renewable energies in Germany.

In 2012, shipments of goods totaled 9.0 million metric tons (2011: 9.61 million metric tons). Hazardous materials accounted for 62 percent of the total, while 38 percent comprised other goods. The decrease in outgoing shipments was mainly due to the divestment of the carbon black business.

Outgoing shipments of hazardous materials in the core specialty chemicals business ✓

in thousand metric tons	2010	2011	2012
Air	0,6	0,5	0,4
Ocean	530	807	581
Inland waterway	1,108	912	984
Rail	833	882	760
Pipeline	1,578	1,601	1,620
Road	1,596	1,559	1,634
	5,646	5,762	5,579

Outgoing shipments of other goods in the core specialty chemicals business ✓

in thousand metric tons	2010	2011	2012
Air	6	5	3
Ocean	916	768	880
Inland waterway	24	20	11
Rail	365	256	179
Pipeline	103	66	24
Road	3,000	2,733	2,342
	4,414	3,848	3,439

Based on the Responsible Care reporting criteria set by the German Chemical Industry Association (VCI) we had no transportation-related incidents to report for Germany. Our internal, Group-wide reporting system shows a total of 22 transportation incidents worldwide in 2012, including 11 in Germany. Only seven of these occurred on the roads. Despite increasing traffic density, for the third consecutive year we were able to report a very low number of road transportation incidents relative to the volume of goods shipped. This was doubtless partly due to the increased initial and ongoing training offerings in the area of logistics on topics such as securing loads.

Corporate security

Evonik's emergency management team was not activated in 2012. In 2011 it was called into action in the wake of the earthquake and subsequent tsunami in Japan. We continued the steady development of the Group Emergency Management Plan. Cefic and the German Chemical Industry Association (VCI) have incorporated security into their Responsible Care initiative. The European Responsible Care Security Code describes and stipulates management practices. Evonik's management system for Group security meets, and where appropriate, supplements this standard.

In addition, Evonik is continuing to monitor the situation in the Middle East and North Africa (MENA region). Emergency management for this region was revised thoroughly in 2011.

Occupational safety

The safety of our employees and avoiding accidents remain key elements of our corporate responsibility. Even so, four employees died at Evonik in 2012. There were no fatal accidents in the previous year.

In March, two employees died in explosion and fire during start-up of the CDT plant in Marl (Germany) following a major overhaul.

CDT is a precursor for the production of high-performance polymers, especially polyamide 12 which are used, for example, in the automotive industry. The public prosecutor in Essen (Germany) immediately instigated an investigation into the accident. As of the editorial closing date, this was being pursued against "unknown." In keeping with the provisions of the German Hazardous Incident Ordinance, Evonik commissioned an independent appraiser to investigate the causes of the accident. The findings show that it was caused by overdosage of a catalyst. Further, Evonik commissioned an independent institute to define additional safety precautions for the new plant, based on the findings of this report, in order to rule out a similar incident in the future. All recommendations made have been incorporated in full in the rebuilt plant.

 See also page 95
Plant safety

An employee died in a traffic accident in Marl (Germany) and at our site in Greensboro (North Carolina, USA) an accident occurred while maneuvering a truck.

Measured by accident frequency (number of accidents at work involving company employees and contractors' employees under Evonik's direct supervision per million hours worked), our occupational safety performance improved slightly year-on-year to 2.0 (2011: 2.1). Excluding the Real Estate segment, accident frequency in our core specialty chemicals operations was 1.4, which was below the previous year's level and also under our target of 1.5.

Accident frequency¹⁾

	2010	2011	2012
Chemicals business, including services	1.3	1.5	1.4
Real Estate (residential)	2.3	1.1	– ²⁾
Real Estate (other activities)	42.0	28.2	29.8
	2.1	2.1	2.0

¹⁾ Number of accidents involving Evonik employees and contractors' employees under Evonik's direct supervision per one million working hours, which have resulted in lost working hours.

²⁾ No figures are available due to the transfer of employees to Vivawest Wohnen GmbH.

In this area, we achieved the target of 1.5 set for 2014 for the fourth consecutive time. The distribution of occupational accidents by cause has hardly changed for many years. The most frequent causes are falls, tripping and slipping, and contact with machinery and materials.

The average number of lost working hours resulting from accidents is 130 which—according to our research—is below the national average (2011: 152). If this figure remains constant over the years, that can be regarded as positive. We are engaged in an intensive dialog with business units and sites whose accident performance has deteriorated and agree specific and targeted measures with them. Technical measures and workplace organization that foster safety have precedence over technical and personal protective measures. All employees are issued with any necessary protective and other equipment required for their jobs. Plant and job-specific instruction and ongoing training ensure that employees are prepared for present and future requirements. Our corporate policies are built on these principles. They are implemented through the local management systems at all our sites. An audit system regularly checks their implementation. At the end of 2011 we conducted a survey of about 50 percent of employees worldwide on safety culture and occupational safety. Our employees' assessments provide a basis for dialog between managers and employees at our sites about causes, influences and improvements. In 2012, dialogs of this type were held at almost all plants that

took part in the survey. A number of overarching issues were also identified. One was that both local employees and plant managers have observed that contractors working at our sites do not always meet our occupational safety standards. We will be therefore be working on occupational safety as part of our contractor management in 2013. The experience gained from this survey and the incidents that occurred last year also led to a decision to launch a Group-wide initiative on safety culture in 2013. As a kick-off we will be developing a uniform safety guideline and setting out our expectations of a good safety culture and good leadership for our managers and employees.

Health protection

Evonik has adopted an all-round approach to protecting and promoting health. This covers its employees, working conditions, products and the general working environment and includes high-quality medical care where necessary, applying ergonomic and health-related measures to structure working conditions and a functioning emergency management system at plant level.

Health management and contingency planning go hand-in-hand

To foster and maintain the health and employability of our employees over the long term, we also offer a selective range of health management measures. These are part of the Group-wide well@work initiative and are designed to help employees influence their health through their lifestyle.

The Corporate Policy on Occupational Health and Health Promotion sets binding worldwide standards for assessing health hazards, occupational medicine, emergency medical response, preventive check-ups, workplace ergonomics, rehabilitation and reintegration, health promotion in the workplace and dealing with alcohol and drug abuse.

In Germany, in particular, there are Works Agreements on health topics. At our German sites we have Occupational Safety Committees composed of employer and employee representatives, safety specialists, safety officers and occupational medicine specialists. They meet at least four times a year to discuss issues relating to occupational safety and the protection of health. In addition, most German sites have an interdisciplinary health task force that looks at local implementation of health promotion measures. There are comparable bodies at sites outside Germany as well. Communication and sharing of information among those responsible for health issues across our sites is ensured by our annual International Occupational Health Conference and a conference of corporate medical officers.

Fulfillment of these requirements is checked regularly by corporate audits and regional ESH audits. In 2012 these activities were supplemented by a regional report on the Greater China region. Evonik plans to introduce a performance index for occupational health in 2013. In the first step, this indicator will be calculated for all major sites, and for all sites in the North America and Greater China regions. For our German sites, we also calculate a health ratio, which was 95.1 percent in 2012. This shows the number of expected working hours minus hours lost due to sickness.

Emergency medical management

The Group-wide standard on Medical Incident and Emergency Management defines the basic emergency medical management arrangements for the sites. The exact equipment and human resources required at each site depend on production-related risks and the quality of the local infrastructure (e.g. emergency services and hospitals). Specific treatment instructions are defined for accidents involving contact with chemicals. Emergency medical management also includes pandemic plans and regular exercises.

A extensive preventive program is in place for employees on business trips and foreign assignments, including a global emergency management system for medical problems or risks to personal safety.

Workplace-related preventive healthcare

Based on the results of our hazard assessment, we aim to take suitable preventive measures to avoid work-related illnesses and health problems. Wherever possible, technical and organizational measures have priority over the use of personal protective equipment. Information and training of employees in the risks and preventive measures play an important role. The efficacy of our preventive occupational healthcare measures is checked regularly.

Evonik regularly reports occupational illnesses. In the past, this took the form of absolute figures. In 2012 we switched reporting on employees in our specialty chemicals segments to an Occupational Disease Rate (ODR). This brings us into line with international standards and requirements and improves comparability. The ODR shows the number of recognized occupational illnesses per million hours worked. The calculation includes all new cases of recognized occupational illnesses in the reporting year, including latent illnesses (i.e. those where the causes lie well in the past). The ODR for 2012 was 0.16. For comparison, absolute cases of recognized occupational illnesses in 2012 was 9 (2011: 18).

Workplace health management through well@work

In the area of health management, Evonik has basic long-term programs on five topics: physical exercise, nutrition, stress & work-life balance, addiction, and avoiding infections. The aim is to encourage a healthy lifestyle. Our mid-term goal is to introduce offerings on these five basic themes at all of our sites. Special attention is paid to measures to uphold mental health. In 2012 we introduced a program in China to support employees and their families in the event of social problems. At our sites in Wesseling and Hanau in Germany, we tested two concepts to improve stress resistance.

These basic programs are supplemented by short-term campaigns on topics that alter each year, general health check-ups or screening to identify treatable illnesses and risk factors. Focal areas in 2012 were "back health," "sleep and snoring" and "obesity and metabolism." Our Fit-for-Life seminars aim to maintain employability and wellbeing in the long term. In 2013 these seminars will be extended as part of the well@work program and will be open to all employees.

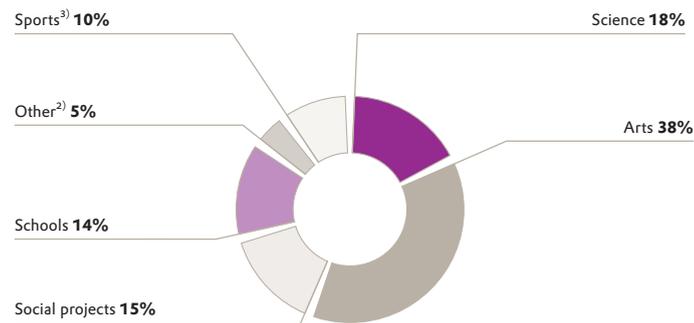
 See also page 81
well@work-employability
and quality of life

Society

Evonik regards itself as a corporate citizen. As well as supporting society by our corporate activities, we therefore want to play a role in the general social and political debate. As a donor and sponsorship partner, we support science, culture, education and social projects.

Donations and sponsorship

Donations and sponsorship of public projects in 2012¹⁾ ✓



¹⁾ Expenditures by the Corporate Center, business units and Innovation Management. Total: approx. €7.2 million.

²⁾ Includes donations of €120,000 to political parties in Germany: €45,000 to the SPD, €50,000 to the CDU/CSU and €25,000 to the FDP.

³⁾ Excluding sponsorship of the Borussia Dortmund and MSV Duisburg soccer clubs.

Uniting communities: our sponsorship of the arts

Supporting culture and the arts is a central area of Evonik's social commitment. We are convinced that the arts foster social cohesion through their association with a common tradition, but at the same time provide important impetus for the future. In many cases, public funding for cultural activities is being cut back. We therefore regard our engagement in this area as particularly important.

Evonik is one of largest sponsors of the arts in the German federal state of North Rhine-Westphalia, but our commitment reaches far beyond this state. For example, as a sponsor of the Jewish Museum in Berlin, we supported the "intonations" chamber music festival which brought the renowned Jerusalem International Chamber Music Festival to Berlin for the first time in 2012. We have a second cultural focus in the Berlin area as sponsor of Villa Schöningen in Potsdam, which organizes ambitious contemporary art exhibitions.

We have been the main sponsor of the Ruhr Festival for many years. This is regarded as the oldest and biggest theater festival of its kind in Europe and offers top-class national and international productions for a broad range of audiences.

The Christmas concerts with the International Bach Academy from Stuttgart (Germany), which Evonik organizes in the Essen Philharmonic Hall also have a long tradition.

In addition, Evonik supports the Küppersmühle Museum (MKM) in Duisburg (Germany), a modern art museum that is an important cultural attraction in the Ruhr district.

Enthusing children: our commitment to education

Fostering education and training is important to Evonik. We have a wide range of initiatives and projects to support preschools, schools and other educational institutions.

As one of the leading specialty chemicals companies, we are particularly interested in making a contribution to society in the areas where we have the greatest expertise. Our aim is to boost education in science and technology. In this area we adopt all-round approach that is designed to have an impact from preschool to doctoral level.

Many children show an interest in science and technology at a young age and strive to gain a better understanding of the world they live in. We want to foster their natural curiosity by arousing their interest in science in preschools and elementary schools. Long-term and thus sustained commitment is our goal. Our educational initiatives are carefully structured and linked. For example, we have set up a "Kids' University" and offer employees' children an opportunity to attend "science camps."

Ten years ago, we established Young Spirit, a corporate initiative that encourages our employees to actively take on responsibility in the community. At present, around 150 employees participate in this voluntary initiative. Armed with Evonik materials, they visit preschools and schools and carry out easily understandable experiments with the children.

They receive training for this task and meet up once a year to share their experience and develop new ideas. This is a nationwide initiative, with a clear focus on the Rhine-Ruhr and Rhine-Main regions. For example, Young Spirit champions visited an elementary school in Hanau on the regional sustainability day to interest children in sustainable use of water and excite them about chemistry and science. Since 2011 students from the Young Chemists Forum have also been involved in Young Spirit.

There are plans to extend the present initiatives. One example is the alliance with Big Brothers, Big Sisters Germany that we launched in 2012. This program arranges voluntary mentors for children. The aim is to support children and give them ideas and incentives that will foster their development. We want to encourage employees to take part in this program.

As an international chemicals company, Evonik is committed to educating children around the world. Together with other international chemical companies, since 2007 we have held a Chemical Show for children in Tokyo. In 2011 we extended our commitment in collaboration with the charity Save the Children Japan (SCJ) to childcare facilities in areas hit by the earthquake.

Our path to educational sponsorship: the Evonik Cyber Classroom

We are convinced that complex scientific content is easier to understand if it is presented visually rather than by textbooks and conventional face-to-face teaching. Together with Visenso, a Stuttgart-based company that specializes in 3D technology, we have therefore developed an interactive learning system.

We have already equipped ten schools in Germany with a "virtual classroom" of this type and developed ten chemical modules in collaboration with teachers. With the aid of 3D spectacles, molecules and chemical reactions can be presented in the classroom in 3D.

The modules are also available in English, Flemish and French and this innovative modular system was presented to the general public for the first time at the Frankfurt Book Fair in 2012.

 Internet
www.bbbsd.org

As an international chemicals company, Evonik needs excellently qualified professionals. We therefore participate in the German scholarship program organized by the Federal Ministry for Education and Research. The scholarships, which are awarded by the government in collaboration with private sponsors, support talented students. In the 2012/2013 academic year, Evonik is providing 180 scholarships at twelve universities.

 **Internet**
www.deutschland-
stipendium.de

Supporting positive development: our sports sponsorship

Evonik is the main sponsor of the professional soccer club Borussia Dortmund (BVB) and also provides some support for the second league club MSV Duisburg. In 2012, we agreed to extend our cooperation with BVB until 2016.

Part of our sponsorship is for the Evonik BVB Soccer School, which runs soccer courses for boys and girls aged between seven and thirteen. We are convinced that enthusiasm for sports and the enjoyment of physical exercise foster the mental as well as the physical development of children. For this reason we are also a partner for an initiative that allows elementary schools to organize additional sports instruction.

More than 5,000 children have received soccer instruction since the establishment of the Evonik BVB Soccer School in 2011. In summer 2012 this school extended its offering to Japan, where more than 200 children attended its courses in Tokyo and Yokohama.

We offer charities such as roterkeil.net and Kindernothilfe an opportunity to use the BVB stadium as a platform to advertise their work.

The proceeds of a BVB benefit match, supplemented by donations by Evonik employees and the company, were used to build a childcare center in the Japanese town of Higashi-Matsushima, much of which was destroyed by the tsunami. The childcare center, which was opened in late 2012, offers 120 children a space to play and learn.

Supporting junior researchers: the Evonik Foundation

For many years, the Evonik Foundation has awarded scholarships to excellent young researchers to support their work on dissertations and theses. The Foundation concentrates on supporting students in the final phase of their studies because upcoming scientists cannot obtain state support for this stage in their education. Being awarded a scholarship is always a major motivational boost for the young scientists.

Alongside financial support, the Foundation places great emphasis on providing personal support in the form of a mentor from Evonik's research departments. Mentors are specialists who can give the young scientists an insight into our company and a chance to build valuable contacts. The young people are also invited to attend HR programs organized by Evonik. The Evonik Foundation awarded 20 scholarships in 2012.

As well as supporting students, the Evonik Foundation aims to interest the youngest members of society in chemistry. Elementary school children can experience chemistry interactively at Professor Proto's Fantastic Institute. Videos and comics demonstrate simple, readily understandable experiments that the children can perform themselves. Professor Proto also has a Facebook presence. Regular and up-to-date postings give parents and teachers ideas on how they can explore the exciting world of chemistry with their children.

 **See also page 68**
Evonik fosters discussion
with scientists and talented
youngsters

 **Internet**
www.professor-proto.de

Being a good neighbor

Maintaining a trustful relationship with local residents and communities is important to us. At many sites we have set up tools and mechanisms for dialog as a basis for regular interchange with local inhabitants. This helps us minimize risks and respond quickly to issues and concerns affecting our neighbors. We also have environmental and neighborhood hotlines at many sites. In Marl (Germany), for example, Site Security registered 13 calls in 2012. During the fire at the CDT plant in Marl in March 2012, about 2,000 residents called our neighborhood hotline.

 See also page 98 f.
Occupational safety

Executives at many of our major sites such as Hanau (Germany) and Antwerp (Belgium), and at smaller facilities like Lauterbourg (France), engage in an institutionalized dialog with the local community.

In Antwerp, we established a Neighborhood Council more than 20 years ago. Representatives of local communities—members of local councils, community associations, environmental associations and journalists—meet up with the management three times a year. Thanks to this long-standing dialog, we have a very good relationship and an open two-way communication process has evolved. In this way, local residents' concerns and requests become transparent.

Transparency is also fostered by regular Open Days and site tours at many of our locations, which give local residents an insight into our work. Our Open Day in Xin Zhuang (China) attracted about 450 visitors. Some Evonik sites in the Rhine-Main and Rhine-Ruhr areas also take part in the "Industry Evening" which gives visitors a behind-the-scenes look at a chemical company.

Regular contact and discussions with local residents at many sites result in activities to address issues that affect people in the area and improve local infrastructure. Many Evonik sites support local schools and other educational organizations. Since 2003 Evonik has offered a special educational training program for children and adults at its site in Barro do Riacho (Brazil). Since 2012, this has been run in cooperation with the charity Aces. Evonik has set up a cultural center under pedagogical management in the direct vicinity of its site, with a library, classrooms, computer rooms and a sports ground. This gives around 250 children an opportunity to attend computer courses or learn craft skills.

Encouraging our apprentices to accept social responsibility is an important element of our activities. Apprentices in Marl (Germany) do a good deed every month: repairing soccer goals in sports grounds or assembling playground equipment.

 See also page 75 f.
Vocational training

A good relationship between Evonik and companies in the neighborhood is also important to us. In Darmstadt (Germany), for instance, cooperation with a local utility has enabled us to reduce carbon dioxide emissions by around 12,000 metric tons a year.

In Bekasi Timur (Indonesia) we regularly help to clean a river near our facility by removing refuse and sediment. The aim is to improve the quality of the water and maintain the depth of the river.

We are convinced that the regions where we have a presence benefit from our commitment. Our fair remuneration strengthens purchasing power in the region, while good social benefits give our employees additional security. In addition, the neighboring area benefits from our collaboration with local suppliers.

Representation of our interests

Evonik regards itself as a corporate citizen. We therefore participate in many ways in public life and actively take part in the public and political debate. For example, the Hertie School of Governance's Governance Report 2013, which was sponsored by Evonik, investigates ways of driving forward the development of political systems. We also play a role in shaping opinions through publications like our regular policy newsletter "Evonik News."

Our representative offices in Berlin and Brussels are important interfaces with politicians. Our staff at these offices act as advocates representing the interests of our company. They maintain a dialog with politicians, decision-makers and other public figures. Evonik lobbies for political conditions that will enable the continuation or sustained growth of the industrial heart of Germany and Europe because industrial strength also means secure vocational training and employment.

For this reason, our representative offices focus on fundamental policy issues such as energy and resource policy, including renewable resources, chemicals and raw materials policy, and support for research and innovation.

Central aspects for our Berlin office in 2012 were Germany's new energy policy, trading in European emissions allowances, electromobility and stationary battery storage. Resource efficiency, biofuel strategies, foreign trade issues and work on the European Commission's project on sustainable consumption, sustainable production were key issues at European level. In addition, Evonik renewed its entry in the European Commission's and European Parliament's list of lobbyists.

Evonik contributes to various industry associations and organizations. Until September 2012 the Chairman of Evonik's Executive Board, Dr. Klaus Engel, was President of the German Chemical Industry Association (VCI).

The Evonik Group is a member of econsense, an association of leading German companies and organizations that promotes corporate social responsibility (CSR) and sustainable development. We are also a member of the World Business Council for Sustainable Development (WBCSD) and we are committed to the global Responsible Care Initiative and have signed the Responsible Care Global Charter.

In China, we regularly support the annual conference of the Boao Forum for Asia (BFA). We regard participating in this forum as an important opportunity to share knowledge and experience in one of the world's most dynamic regions.



Internet

www.econsense.de/en
www.wbcSD.org
<http://english.boaoforum.org>

Annex

Annex

Major sites	109
Market positions	110
Major shareholdings	112
Awards and accolades 2012	113
Membership of networks and initiatives	114
About this report	115
GRI statement	117
GRI index, UN Global Compact and the German Sustainability Code (GSC).....	118
Independent Assurance Report	120
Credits	122

Major sites

Employees	2010	2011	2012 ¹⁾
Germany			
Marl	6,567	6,618	6,737
Hanau	3,127	3,119	3,210
Essen	3,342	2,397	2,313
Darmstadt	1,511	1,538	1,585
Wesseling	1,236	1,288	1,282
Other European countries			
Antwerp (Belgium)	1,001	1,019	1,025
Zurich (Switzerland)	274	276	281
Slovenská L'upča (Slovakia)	173	188	219
Ham (France)	229	227	217
Gramatneusiedl (Austria)	168	167	171
North America			
Mobile (Alabama, USA)	680	712	758
Lafayette (Indiana, USA)	650	642	601
Parsippany (New Jersey, USA)	404	402	407
Greensboro (North Carolina, USA)	272	277	274
Hopewell (Virginia, USA)	234	254	265
Central and South America			
São Paulo (Brazil)	178	159	176
Mexico City (Mexico)	78	80	80
Barra do Riacho (Brazil)	55	54	49
Buenos Aires (Argentina)	30	34	38
Americana (Brazil)	39	33	32
Asia-Pacific			
Shanghai (China)	877	1,021	1,298
Nanning (China)	349	402	408
Nanping (China)	326	333	369
Singapore (Singapore)	137	174	259
Taipei (Taiwan)	156	200	213
Middle East, Africa			
Umbogintwini (South Africa)	26	28	31
Midrand (South Africa)	24	22	29
Dubai (United Arab Emirates)	11	12	15
Teheran (Iran)	12	12	13

¹⁾ The list covers about 67 percent of Evonik employees. As of December 31.

Market positions

Product	Application	Global ranking ¹⁾	Capacity in metric tons p. a.
Consumer Specialties			
Fat chemistry, quaternary derivatives	Fabric softeners	1	⁵⁾
Amphoteric surfactants	Shampoos, shower gels	1	⁵⁾
Ceramides, phytosphingosines	Cosmetics	1	⁵⁾
Skin cremes	Professional skin protection	2–3	⁵⁾
Organically modified silicones	Additives for polyurethane foams, cosmetics, radiation-cured separation coatings	1–2	80,000
Superabsorbents	Diapers, feminine hygiene products, incontinence products, technical applications	1–2	470,000
Health & Nutrition			
Exclusive synthesis	Intermediates and active substances for pharmaceuticals and specialty applications	2	⁵⁾
Pharmaceutical polymers	Drug-delivery systems, e.g. tablet coatings	2	⁵⁾
Amino acids and amino acid derivatives	Pharmaceutical intermediates and infusion solutions	3	⁵⁾
DL-methionine	Animal nutrition	1	430,000
Threonine	Animal nutrition	3	35,000
Tryptophan	Animal nutrition	3	⁵⁾
Inorganic Materials			
Organosilanes, chlorosilanes	Rubber, silicone rubber, paints and coatings, adhesives and sealants, building protection materials, pharmaceuticals, cosmetics, optical fibers	1 ²⁾	270,000
Fumed silicas, fumed metal oxides	Silicone rubber, paints and coatings, adhesives, sealants and plastics, pharmaceuticals, cosmetics, high-temperature insulation, electronics	1	500,000
Precipitated silicas	Reinforcement of rubber, consumer products	1	
Matting agents	Additives for the paints and coatings industry	2 ³⁾	
Precious metal powder catalysts	Life sciences and fine chemicals, industrial chemicals	1	⁵⁾
Activated nickel catalysts	Life sciences and fine chemicals, industrial chemicals	2	⁵⁾
Coatings & Additives			
Organically modified silicones	Additives for paints and printing inks	2	⁵⁾
Polyester resins	Can- and coil coating, reactive hot melt adhesives	1	⁵⁾
Amorphous polyolefins	Thermoplastic hot melt adhesives	1	⁵⁾
Isophorone chemistry	Environment-friendly coating systems, high-performance composites (crosslinkers)	1	⁵⁾
Oil additives	Viscosity index improvers	1	⁵⁾
Thermoplastic and reactive methacrylate resins	Binders for paints and coatings	1–2	⁵⁾

Product	Application	Global ranking ¹⁾	Capacity in metric tons p. a.
Performance Polymers			
Polyamide 12	High-performance specialty polymer applications (e.g. automotive, medical, sport, gas and offshore pipelines)	1	⁵⁾
Methacrylate monomers	Dispersions, coatings, plastics, additives, adhesives, optical lenses	1–2	⁵⁾
Methacrylate polymers (PMMA molding compounds and PMMA semi-finished products)	Construction materials for the automotive and electrical/electronics industries, specialty medical technology, architecture, design and communications applications	1–2	400,000
PEEK	Special applications in the oil and gas, automotive and aviation industries, electronics/semiconductors, specialty medical technology (e.g. implants)	2	500
Advanced Intermediates			
Alcoholates	Catalysts for biodiesel, pharmaceuticals, agrochemicals and other applications	1	>200,000
Cyanuric chloride	Industrial applications and specialties (e.g. crosslinkers and optical brighteners), crop protection (especially in China)	1	90,000
Hydrogen peroxide	Bleaching of pulp and textiles, oxidation agent for the chemical industry, starting product for polyurethane	2	>600,000
Butene-1	Co-monomer for polyolefins	1 ⁴⁾	235,000
Isononanol	Starting product for high-molecular plasticizers	2	340,000
DINP	High-molecular plasticizers for use in flexible PVC	2	220,000

¹⁾ Evonik's assessment based on various individual market reports/information and in-house market research.

²⁾ Chlorosilanes: freely traded volumes. Overall assessment—market position differs depending on application.

³⁾ Ranked second by volume and first by sales.

⁴⁾ Freely traded volumes.

⁵⁾ No data available.

Major shareholdings¹⁾

Name of company	Registered office	Shareholding in %
Consolidated subsidiaries		
Germany		
CyPlus GmbH	Hanau	100
Evonik Degussa GmbH	Essen	100
Evonik Goldschmidt GmbH	Essen	100
Evonik Hanse GmbH	Geesthacht	²⁾ 100
Evonik Litarion GmbH	Kamenz	²⁾ 100
Evonik Oil Additives GmbH	Darmstadt	100
Evonik Oxeno GmbH	Marl	100
Evonik Röhm GmbH	Darmstadt	100
Evonik Services GmbH	Essen	²⁾ 100
Evonik Tego Chemie GmbH	Essen	²⁾ 100
Infracor GmbH	Marl	100
Li-Tec Battery GmbH	Kamenz	50.10
Vivawest GmbH	Essen	100
Other countries		
Evonik Cyro LLC	Wilmington (Delaware, USA)	100
Evonik Degussa Antwerpen N.V.	Antwerp (Belgium)	100
Evonik Degussa Brasil Ltda.	São Paulo (Brazil)	100
Evonik Degussa Canada ULC	Calgary (Canada)	100
Evonik Degussa (China) Co., Ltd.	Beijing (China)	100
Evonik Degussa Corporation	Parsippany (New Jersey, USA)	100
Evonik Degussa Japan Co., Ltd.	Tokyo (Japan)	100
Evonik Degussa Specialty Chemicals Co., Ltd.	Shanghai (China)	100
Evonik Oil Additives USA, Inc.	Horsham (Pennsylvania, USA)	100
Evonik Oxeno Antwerpen N.V.	Antwerp (Belgium)	100
Evonik Stockhausen LLC	Wilmington (Delaware, USA)	100
Nippon Aerosil Co., Ltd.	Tokyo (Japan)	80
OOO Evonik Chimia	Moscow (Russian Federation)	100
Joint ventures (recognized at equity)		
Germany		
StoHaas Monomer GmbH & Co. KG	Marl	50
THS GmbH	Essen	50
Vivawest Wohnen GmbH	Essen	50
Associated companies (recognized at equity)		
Germany		
STEAG GmbH	Essen	49

¹⁾ A list of companies included in the consolidated financial statements can be found in the Annual Report for 2012 on page 155 ff.

²⁾ Utilizes the exemptions permitted under Sections 264 Paragraph 3 and 264 b of the German Commercial Code (HGB).

Awards and accolades 2012

Category	Awards and accolades	Presented by
Products and projects		
Evonik Industries AG	SEPURAN® gained second place in the Altran Sustainovation Award	Altran Foundation
Performance Polymers (Acrylic Polymers)	PLEXIGLAS® Wood was singled out as the most innovative wood-plastic composite (WPC)	WPC sector nova institute, Germany
Evonik Industries AG	First prize in the Technology/Innovation category for the Wind Explorer project (ecological concept car)	Federal State of North Rhine-Westphalia
Evonik Industries AG (Creavis)	Third place in the Responsible Care competition for the EffiCO ₂ project	Chemical Industry Association (VCI), Federal State of North Rhine-Westphalia
Employees		
Evonik Industries AG Evonik Degussa (China) Co., Ltd.	Top Employers China	Corporate Research Foundation (CRF) Institute
Evonik Industries AG	Occupational Safety Prize	BG RCI (Raw materials and chemical industry employers' liability association)
Evonik Industries AG	German Award for Occupational Safety for Young People	FASI e.V. (occupational safety organization)
Awards from customers		
Inorganic Materials (Advanced Silanes)	Director's Spirit of Partnership Award	Sterlite
Consumer Specialties (Baby Care und Household Care)	Excellence Award	Procter & Gamble
Coating & Additives und Inorganic Materials	Paint & Pintura Award: First place in the categories "Silica" and "Tintometric systems/colors"	Agnelo Editora
Advanced Intermediates (Performance Intermediates)	Supplier of the Year	Tarkett
Evonik Industries AG	Best Supply Performance Award	Henkel
Other		
Evonik Industries AG	Transparent climate reporting	Carbon Disclosure Project (CDP)
Evonik Thai Aerosil Co., Ltd. und Evonik United Silica (Siam) Ltd. (Inorganic Materials)	Green Star Award for continuous environmental endeavor	Industrial Estate Authority of Thailand (IEAT)
Evonik Degussa Specialty Chemicals (Shanghai) Co., Ltd.	First prize for the most successful energy-saving project	Chemical Energy Management China

Membership of networks and initiatives



Responsible Care Evonik is a signatory to the Responsible Care Global Charter of the International Council of Chemical Associations (ICCA). Evonik is committed to this initiative.



World Business Council for Sustainable Development Evonik is a member of the World Business Council for Sustainable Development (WBCSD), and supports its objectives. This international business leadership forum has around 200 member companies that are committed to sustainable development.



Forum Nachhaltige Entwicklung
der Deutschen Wirtschaft

econsense Evonik is a founder member of econsense, an association of leading German companies and organizations that promotes corporate social responsibility (CSR) and sustainable development.



Global Reporting Initiative Evonik supports the Global Reporting Initiative (GRI) as an organizational stakeholder. GRI is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework. Evonik has used it as a guideline since 2009.



UN Global Compact Evonik joined the UN Global Compact in 2010. Evonik supports the principles of the Global Compact, which are geared to sustainable and ethical business management.

About this report

Evonik's Corporate Responsibility Report 2012

This is Evonik's fifth full Corporate Responsibility (CR) report and continues the tradition of reporting introduced by the companies from which Evonik was formed. The report covers the 2012 fiscal year (January 1 to December 31, 2012). The report was written to give our customers, employees, owners and investors and the general public an insight into how we run our business and live our values. The CR Report focuses on ecological, and societal issues and thus supplements the annual report for 2012. The next report will be published in 2014.

Method

This report is based on the current G.3.1 guidelines of the Global Reporting Initiative (GRI) and focuses on reporting core indicators. It addresses all standard information and core indicators required by the GRI. We have provided background information and verifiable performance indicators where necessary.

The GRI has checked the report for adherence to its sustainability reporting guidelines and has confirmed successful application of Level A+ throughout. This report also represents Evonik's progress report for the UN Global Compact. In addition, we fully meet the provisions of the German Sustainability Code (GSC).

Scope of reporting and data capture

Evonik Industries AG prepares its consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS). Alongside Evonik Industries AG, the consolidated financial statements include all material German and foreign subsidiaries directly or indirectly controlled by Evonik Industries AG. Material associated companies and joint ventures are recognized at equity if Evonik is able to exert a significant influence. Initial consolidation or deconsolidation takes place as of the date on which the company gains or loses control. In fiscal 2012 the Evonik Group comprised 78 German and 115 foreign companies. The reporting concentrates on the continuing operations.

In 2012 we compiled relevant data on working hours, employee rights, social benefits, diversity, equal opportunities, and work-life balance for the Group's continuing operations using the HR Information Collector software of Cundus AG.

The ecological data for the core specialty chemicals business in 2012 comprise emissions and consumption at 86 production sites in 23 countries and thus cover 95 percent of total output.

Occupational safety data include other small production and non-production sites, so the data here cover 131 locations in 36 countries.

All data for our core specialty chemicals business are compiled with sustainability reporting software designed for this purpose (SuRe). The reporting segments reflect Group and business unit interests in order to provide a detailed reflection of production activities. In some cases, data are reported at plant level to ensure this. All reporting segments are clearly coded to allocate them to organizational and business units and geographical region. This allows consolidation at management and legal entity level as well as a detailed geographical analysis of the data.

Major acquisitions/divestments of relevance for ESH in 2012

No major acquisitions were made in the reporting period. The divestment of the global Colorants business to a subsidiary of Arsenal Capital Management LP., New York (New York, USA) was closed on April 30, 2012. This transaction comprised the assets and liabilities of companies located in the USA, Canada, Brazil, Australia, China, Malaysia and the Netherlands. Three subsidiaries were deconsolidated as a result of this divestment. Until then, the Colorants business was part of the Resource Efficiency segment. Evonik's stake in the subsidiary Evonik Sanzheng (Yingkou) Fine Chemicals Co., Ltd. was divested to its Chinese partner as of December 25, 2012. This company's agrochemicals business was assigned to the Specialty Materials segment.

The other changes in the scope of reporting and the remaining portfolio adjustments undertaken in 2012 did not have a significant impact on emissions and consumption data in the ESH report for 2012.

The ecological data are updated annually without taking changes in the Group into account. The prior-year figures are not adjusted for changes in the portfolio of companies consolidated. The figures for each company are included in full, without adjustment to reflect Evonik's stake in them.

Influence of acquisitions/divestments on the development of the ESH indicators for 2012

The environmental impact of the carbon black activities was consolidated in Evonik's ESH report in 2011 up to the date of divestment, in other words, from January to July. As a result of this divestment, Evonik's environmental impact in 2012 was reduced proportionately by the impact of the carbon black business in these months. This impacted the data for 2012 in many ways. For example, emissions into the air were considerably lower than in the previous year.

The emissions and consumption data for the hanse-chemie Group, which was acquired in May 2011, and for SurModics Pharmaceuticals Inc., Birmingham (Alabama, USA) and the hydrogen peroxide business of Kemira Chemicals Canada Inc., Maitland (Ontario, Canada), which were acquired in November 2011, were consolidated for the first time in 2012. Including these investments had a negligible impact on the Group's environmental profile.

hanse chemie supplies products for specialty silicone applications. SurModics Pharmaceuticals Inc. specializes in developing controlled release pharmaceuticals for parental delivery (injections). The majority of these two businesses has been integrated into the Consumer, Health & Nutrition segment. The hydrogen peroxides business has been assigned to the Specialty Materials segment.

Some occupational safety data for these investments was consolidated in 2011.

Updated data

Our ESH data are constantly checked by a large number of internal and external audits. In addition, large amounts of data have to be reported to authorities. In many cases, their submission and approval dates are far later than the internal deadline for Evonik's ESH report. To enhance efficiency, we endeavor to use a single set of data for both internal and external reporting. Since internal and external audit findings are examined for any possible change in ESH indicators, our databases are naturally subject to 'dynamic' change. If such adjustments reveal discrepancies of more than three percent compared with published data for prior periods, this is explained in the CR report (principle of materiality).

If the English version of this report differs from the German version, the statements and phrasing of the original German shall prevail.

External review

The "Employees" and "Environment" sections and the texts on pages 5 to 25 (apart from the text boxes), together with selected parts or statements in "Sustainability in business," "The business," "Safety and occupational protection" and "Society" were subject to a limited assurance engagement by PricewaterhouseCoopers AG (PwC) (labeled with ). The corresponding independent assurance report is printed on pages 120 and 121.

GRI statement



Statement

GRI Application Level Check

GRI hereby states that **Evonik Industries AG** has presented its report "Seeing. Linking. Creating" (2012) to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3.1 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3.1 Guidelines. For methodology, see www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 2 May 2013

A handwritten signature in blue ink, appearing to read "Nelmara Arbex", is written over a faint circular watermark of the GRI logo.

Nelmara Arbex
Deputy Chief Executive
Global Reporting Initiative



The "+" has been added to this Application Level because Evonik Industries AG has submitted (part of) this report for external assurance. GRI accepts the reporter's own criteria for choosing the relevant assurance provider.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 26 April 2013. GRI explicitly excludes the statement being applied to any later changes to such material.

GRI index, UN Global Compact and the German Sustainability Code (GSC)

More information about GRI, the UN Global Compact and the German Sustainability Code can be found online at www.globalreporting.org, www.globalcompact.org and www.nachhaltigkeitsrat.de/en/.

Global Compact Principle	GRI Indicator	GSC	Topic	Page	Reporting status
Strategy and Analysis					
	1.1	1	Foreword by the Chairman of the Executive Board	3–4	
	1.2	1, 2, 3, 4	Description of key impacts, risks and opportunities	18–21, 29–34	
	2.1-2.10		Organizational profile, markets, structures, data and facts	Inside front cover, 40–42, 109–116, 122	
	3.1-3.4		Report parameters	115, 122	
	3.5-3.13		Report content, limitations, verification	29–33, 115–116, 118–121	
	4.1-4.7	8	Corporate governance	29–30, 36, Annual Report 2012: 227–243	
	4.8-4.13	3, 5, 6, 7, 8	Obligations and commitment	34–39, 60–65, 101–105, 114, Annual Report 2012: 227–243	
	4.14-4.17	9	Stakeholders	30–33, 43, 80, 101–105	
Economic Performance Indicators					
			Management Approach	3–4, 40–58, 101–105, 110–111	
	EC1	18	Economic value generated/distributed	41	
7	EC2		Implications of climate change	30–32	
	EC3		Pension plans (defined benefit plans)	77	
	EC4		Government assistance	69	
	EC6		Business policy/practices	104	
6	EC7		Hiring procedure	75, 82	
	EC8		Investment for public benefit	101–103	
Environmental Performance Indicators					
			Management Approach	36–39, 60–65, 83–85, 89–97	
8	EN1	11	Materials by weight/volume	84	
8, 9	EN2	12	Recycled inputs		Not reported ¹⁾
8	EN3–EN4	12	Energy consumption: direct and indirect	84–85	
8, 9	EN6	10	Energy-efficient products and services	6–11, 85, 91, 96	
8	EN8	12	Water withdrawal	84	
8, 9	EN10	12	Water recycled and re-used	89	
8	EN11–EN12		Biodiversity	93–94	
7, 8, 9	EN16–EN20	13	Emissions	83–89	
8	EN21		Wastewater	90	
8	EN22	12	Waste	91–92	
8	EN23		Substance releases	95	
7, 8, 9	EN26	10	Reducing environmental impact	18–21, 60–65, 83	
8, 9	EN27		Reclaimed packaging	92	
8	EN28		Non-compliance with environmental regulations		Not reported ²⁾
7, 8, 9	EN30	13	Environmental protection expenditures and investments	83	

Global Compact Principle	GRI Indicator	GSC	Topic	Page	Reporting status
Social Performance Indicators					
Labor Practices and Decent Work					
			Management Approach	14–17, 22–25, 71–82, 98–100	
6	LA1–LA2		Workforce	72–75	
6	LA15		Return to work and retention rate after parental leave, by gender	81	
1, 3	LA4–LA5		Employee representatives/collective bargaining agreements	79–80	
1	LA6	14	Percentage of workforce represented on occupational safety committees	99	Partially reported ³⁾
1	LA7–LA8	15, 16	Occupational safety	98–99	
	LA10	16	Training and education	76	Partially reported ⁴⁾
1, 6	LA13	16	Employee structure	72, 77–78, http://corporate.evonik.com/en/company/management/pages/default.aspx	
1, 6	LA14		Ratio of basic salary men/women	79	
Human rights					
			Management Approach	35–36, 43, 58–59, 79–80, 95–100	
1, 2, 3, 4, 5, 6	HR1	17	Key investment agreements		Not reported ⁵⁾
1, 2, 3, 4, 5, 6	HR2	17	Screening of suppliers/contractors	35, 58–59	
1, 2, 3, 4, 5, 6	HR3		Training in human rights issues	38, 58–59	
1, 2, 6	HR4	15, 16, 17	Discrimination	79	
1, 2, 3	HR5		Risk to freedom of association	80	
1, 2, 5	HR6	17	Child labor	58–59, 74	
1, 2, 4	HR7	17	Forced and compulsory labor	58–59	
1, 2	HR10		Assessment	35, 58–59	
1, 2	HR11		Remediation	58–59, 79	
Society					
			Management Approach	35–39, 79, 101–105	
	SO1	18	Impact on communities	101	
1–10	SO9		Local community: Operations with significant potential or actual negative impacts on local communities	94, 95–97	
1–10	SO10		Local community: Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities	95–97, Annual Report 2012: 113–119	
10	SO2	20	Corruption: business units analyzed	38–39	
10	SO3		Corruption: employees trained	39	
10	SO4	20	Corruption: action taken	38–39	
1–10	SO5		Public policy positions	105	
10	SO6	19	Contributions to political parties and politicians	101	
	SO7	20	Anti-competitive behavior, anti-trust, and monopoly practices		Not reported ²⁾
	SO8	20	Legal compliance: fines/sanctions		Not reported ²⁾
Product stewardship					
			Management Approach	35–39, 59, 60–65, 76	
1, 7	PR1		Life cycle stages in which products have a health and safety impact	18–21, 61–62, 69–70	
8	PR3		Product labeling	60–65	
	PR6		Programs for adherence to laws in advertising	33, 35	
1	PR9		Fines for non-compliance with laws and regulations		Not reported ²⁾

¹⁾ Our intelligent linking of production plants along value-enhancing chains often makes it possible to use by-products from one plant as starting products for another plant. Moreover, many of the raw materials we use are not available as recycled input materials.

²⁾ Any risks arising from litigation and other claims are disclosed in the consolidated financial statements in our Annual Report.

³⁾ No worldwide data are available at present.

⁴⁾ At the moment, our data only covers Germany and in some cases China.

⁵⁾ As a member of the Global Compact, we strive to contribute to the protection and promotion of human rights within our sphere of influence. The exact number of investment agreements is confidential business-relevant information and is therefore not reported.

Independent Assurance Report

To Evonik Industries AG, Essen

We have performed a limited assurance engagement on selected data in the German version of the Corporate Responsibility Report 2012 of Evonik Industries AG, Essen (subsequently referred to as "the Company"), entitled "Seeing. Linking. Creating." The sustainability data selected by the company and reviewed by us is indicated in the CR report by a symbol .

Management's responsibility

The Executive Board of Evonik Industries AG is responsible for preparing the CR report using the criteria set forth in the Sustainability Reporting Guidelines Vol. 3.1 (pages 7–17) issued by the Global Reporting Initiative (GRI):

- materiality
- stakeholder inclusiveness
- sustainability context
- completeness
- balance
- clarity
- accuracy
- topicality
- comparability and
- reliability.

This responsibility includes the selection and application of appropriate methods to prepare the CR report and the use of assumptions and estimates for individual CR disclosures that are plausible in the circumstances. It also includes responsibility for designing, implementing and maintaining systems and processes relevant for the preparation of the CR report.

Practitioner's responsibility

Our responsibility is to express a conclusion based on our work as to whether any matters have come to our attention that cause us to believe that the data in the CR report indicated with the symbol  have not been prepared in accordance with the criteria set out in the Sustainability Reporting Guidelines Vol 3.1 (pages 7–17) issued by the GRI. Our engagement did not include an examination of the data referred in the CR report or to which the report contains links, or the text boxes on pages 5–25. We were also engaged to provide recommendations for the further development of CR management and CR reporting on the basis of the results of our limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000. This standards requires that we comply with ethical standards and plan and perform the assurance engagement such that we can express our conclusion with limited assurance. In a limited assurance engagement, the evidence-gathering procedures are more limited than in a reasonable assurance engagement, (for example, an audit of financial statements in accordance with article 317 of German Commercial Code/HGB). Consequently, less assurance is obtained than in a reasonable assurance engagement.

The procedures selected depend on the practitioner's judgment. Within the scope of our engagement, we performed, amongst others, the following procedures:

- Questioning of the management and the employees responsible for reporting CR information and preparing the CR report as well as employees from individual fields of specialization;
- Examination of the processes used for CR management, selecting topics and reporting;
- Examination of the structuring and effectiveness of the systems and processes used to compile and analyze the data for 2012 indicated by the symbol ;
- Site visits to the corporate headquarters in Essen (Germany) and to Evonik Degussa Peroxid GmbH, Weißenstein (Austria), Evonik Industries AG, Wesseling (Germany), and Hanse GmbH, Geesthacht (Germany), as well as location-specific interviews and data collection;
- Collection of random samples as selected evidence for the accuracy of the data for 2012 indicated by the symbol ;
- Evaluating the consistency of the statements made in the CR report with the findings of our work with respect to the areas covered by our limited assurance engagement.

Conclusion

Based on our limited assurance review, nothing has come to our attention that causes us to believe that the disclosures in the CR report indicated by the symbol  have, in any material respect, not been prepared in accordance with the criteria set out in the Sustainability Reporting Guidelines Vol 3.1 (pages 7–17) issued by the GRI.

Additional remarks and recommendations

Without qualifying the conclusion reached in our limited assurance engagement, we make the following recommendations for the ongoing development of CR management and CR reporting:

- With regard to the ongoing development and implementation of the CR strategy, where possible quantitative targets should be set and communicated for the main dimensions. Further, the projects to integrate sustainability indicators and sustainability management metrics into the present operational management systems should be continued.
- The compilation of data for some indicators throughout the year, which was introduced for 2012, should become the norm and be extended to further relevant data.
- We also recommend that the processes and systems used to compile the key information for CR reporting should be further optimized, especially by integrating data capture into existing automated processes and by further formalization of the process requirements.

Düsseldorf, May 16, 2013

PricewaterhouseCoopers
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

Lutz Granderath
 German Public Auditor

ppa. Nicole Kummer

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This report contains forward-looking statements based on the present expectations, assumptions and forecasts made by the Executive Board and the information available to it. These forward-looking statements do not constitute a guarantee of future developments and earnings expectations. Future performance and developments depend on a wide variety of factors which contain a number of risks and unforeseeable factors and are based on assumptions that may prove incorrect.

Production of Evonik's CR report 2012

This report is printed on environment-friendly FSC® paper. The Forest Stewardship Council® seal is an assurance that the timber used to produce the paper comes from sustainable forestry.

The printing company used by us has its own environmental management system and uses state-of-the-art technology. Printing inks containing heavy metals are not used. To minimize emissions resulting from distribution of this report we utilize efficient transportation logistics.

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