

Our polyurethane raw materials, such as diphenylmethane diisocyanate (MDI), toluene diisocyanate (TDI) and polyether (PET), and the polyurethane systems based on them that are offered in the market are used, for example, in the production of mattresses, refrigerator insulations, automotive bumpers and shoe soles. The Coatings, Adhesives, Specialties business unit manufactures raw materials for coatings used in the automobile and commercial vehicle industries, and for adhesives used in footwear. Examples of applications for our polycarbonates, which we market under the Makrolon®, Bayblend®, Makroblend® and other trademarks, include car headlamps, stadium roofs, housings for electrical appliances, and water bottles for water dispensers.

Depending on their fields of application, these products are used mainly in the automotive, construction, electronics, information technology, furniture, timber, chemical, sports equipment, leisure goods, textile, medical technology and manufacturing industries.

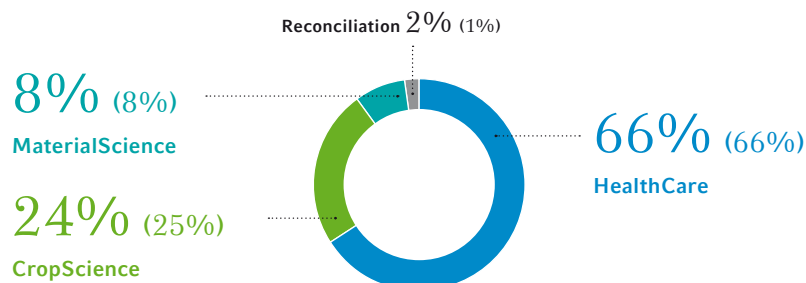
Our plastics materials are marketed primarily through regional distribution channels or directly to customers. We also work together with trading houses and local distributors who are responsible for business with small customers. Major customers with global operations are serviced directly by our key account managers.

€2.7 billion
for research
and development

Research and Development

Our mission statement “Science For A Better Life” underscores Bayer’s belief that innovation will play a major part in resolving the challenges facing society and will therefore remain a key growth driver for our research-based enterprise. Bayer has the necessary resources in place to realize further growth opportunities for the future through research and development activities. In 2008 a total of €2,653 million was invested in research and development, compared with €2,578 million in the previous year. It is particularly important for us to develop new products that strengthen our core businesses. To enable us to meet our growth targets, we strive to continuously expand our product portfolio and optimize our production processes. Our research activities are closely aligned to the requirements of our markets. Our own research and development activities are supplemented by an international network of collaborations with leading universities, public-sector research institutes and partner companies. Through this pooling of expertise, we aim to rapidly translate new ideas into successful products. Our activities are also supported by the systematic advancement of talented scientists and experts in our research and development units.

Research and Development Expenses by Subgroup (2007 in parentheses)



Bayer HealthCare

In 2008 we invested €1,742 million (2007: €1,700 million) in research and development in the Pharmaceuticals and Consumer Health segments to lay the foundations for the introduction of further innovative products in the subgroup's expanding markets. This represented about 66% of the Bayer Group's entire research and development expenditures and was equivalent to 11.3% of sales.

€1,742 million
for research
and development
at HealthCare

Research and development in the Pharmaceuticals segment is strategically aligned to the conditions in its markets. In drug discovery we focus on four growth areas: diagnostic imaging, cardiology, oncology, and women's healthcare. The respective research activities and capacities are concentrated at three sites in Berlin and Wuppertal, Germany, and Berkeley, California. Work at the Berlin and Wuppertal sites focuses on identifying molecular targets in order to develop and optimize lead substances. Research is also carried out at these sites in the fields of drug metabolism, pharmacokinetics, toxicology and clinical pharmacology. Berkeley is an important global research and development center for protein-based active ingredients and is home to the biotechnological production facility for Kogenate®. To drive the development of new substances to treat diseases with a high unmet medical need, we conducted clinical studies with several drug candidates from our research and development pipeline during 2008. Following the completion of all necessary studies, we submitted applications to one or more regulatory authorities for registration or extension of the existing registration for some of these drug candidates. The most important drug candidates currently in registration are:

| | |
|------------|---------------------------------------------------------------------------------|
| Xarelto® | U.S.A., prevention of venous thromboembolism following major orthopedic surgery |
| Recothrom® | E.U., hemostatic agent in surgery |
| Visanne® | E.U., for the treatment of endometriosis |

The following table shows our most important drug candidates currently in Phase III or II of clinical testing:

Research and Development Projects (Phases III and II)

| | Indication | Status |
|-------------------------------------------|--------------------------------------------------------------------------------|-----------|
| Alemtuzumab | Multiple sclerosis | Phase III |
| Angeliq® low-low | Menopause management | Phase III |
| Aspirin® i.v. | Acute coronary syndrome | Phase III |
| Bonefos® | Prevention of bone metastasis in breast cancer | Phase III |
| Gadovist® | Magnetic resonance imaging | Phase III |
| LCS (Levonorgestrel Contraceptive System) | Intrauterine fertility control | Phase III |
| Levitra® | New galenic formulation | Phase III |
| Mirena® | Menorrhagia (U.S.A.) | Phase III |
| Nexavar® | Melanoma | Phase III |
| Nexavar® | Non-small-cell lung cancer | Phase III |
| Qlaira® (E2/DNG) | Supplementary indication: dysfunctional uterine bleeding | Phase III |
| Riociguat (sGC stimulator) | Pulmonary hypertension (PAH, CTEPH) | Phase III |
| Rivaroxaban/Xarelto® | Prevention of venous thromboembolism in medically ill, immobilized patients | Phase III |
| Rivaroxaban/Xarelto® | Treatment of venous thromboembolism | Phase III |
| Rivaroxaban/Xarelto® | Stroke prevention in atrial fibrillation | Phase III |
| Rivaroxaban/Xarelto® | Secondary prevention of acute coronary syndrome/myocardial infarction | Phase III |

Research and Development Projects (Phases III and II)

| | Indication | Status |
|-----------------------------------|----------------------------------------------------------|-----------|
| VEGF Trap-Eye | Wet age-related macular degeneration | Phase III |
| YAZ® plus, Yasmin® Plus | Oral contraception; combined product containing folate | Phase III |
| YAZ® | Dysmenorrhea (Japan) | Phase III |
| YAZ® Flex | Oral contraception | Phase III |
| Adenosine A1 agonist | Atrial fibrillation | Phase II |
| Amikacin Inhale | Pneumonia | Phase II |
| BAY 60-4552 (sGC stimulator) | Heart failure | Phase II |
| BAY 94-9172 (AV1/ZK) | PET diagnosis of Alzheimer's disease | Phase II |
| Cinaciguat (sGC activator) | Acute heart failure | Phase II |
| Ciprofloxacin Inhale | Lung infection | Phase II |
| DAST Inhibitor | Cancer | Phase II |
| E2/DRSP | Fertility control (oral) | Phase II |
| ERβ Agonist | Menopause management | Phase II |
| FC Patch low | Fertility control | Phase II |
| Kogenate® | Hemophilia (formulation based on liposome technology) | Phase II |
| Combined oral contraceptives/DHEA | Fertility control (oral) | Phase II |
| Lonaprisan (ZK-PRA) | Breast cancer | Phase II |
| Nexavar® | Breast cancer | Phase II |
| Nexavar® | Colon cancer | Phase II |
| Nexavar® | Ovarian cancer | Phase II |
| Nexavar® | Additional indications | Phase II |
| Riociguat (sGC stimulator) | Pulmonary hypertension (COPD/ILD) | Phase II |
| Sagopilone (ZK-EPO) | Lung/ovarian/prostate cancer | Phase II |
| Valette® plus | Oral contraception; combined product containing folate | Phase II |
| Vardenafil | New indications | Phase II |
| VEGF Trap-Eye | Diabetic macular edema | Phase II |

PAH = pulmonary arterial hypertension; CTEPH = chronic thromboembolic pulmonary hypertension

COPD = chronic obstructive pulmonary disease; ILD = interstitial lung disease

The nature of drug discovery and development is such that not all compounds can be expected to meet the pre-defined project goals. It is possible that any or all of the projects listed above may have to be discontinued due to scientific and/or commercial reasons and will not result in marketed products. It is also possible that the requisite FDA, European Medicines Agency (EMA) or other regulatory approval will not be granted for these compounds.

We regularly evaluate our research and development pipeline in order to prioritize the most promising pharmaceutical projects. Our most important development candidates include, for example, the innovative cancer drug Nexavar®, which has been developed jointly with Onyx Pharmaceuticals, Inc., United States. Nexavar® targets both the tumor cells and the vascular supply to the tumor. Preclinical trials have shown that the action of Nexavar® intervenes in two classes of kinase which are known to be involved both in cell proliferation (growth) and angiogenesis (blood supply) – two important processes that enable tumor growth. We continue to conduct research with this promising active substance, which is currently being marketed for the treatment of advanced renal cell carcinoma and hepatocellular carcinoma. The product was approved in January 2008 in Japan for the treatment of renal cell carcinoma, and in July 2008 in China for the treatment of hepatocellular carcinoma. Nexavar® is currently in various stages of clinical testing for the treatment of other tumor types.

Our novel anticoagulant Xarelto®, a direct Factor Xa inhibitor in tablet form, has received approval since September 2008 in Canada, Europe and several other countries for the prevention of venous thromboembolism (VTE) following elective hip or knee-joint replacement surgery. The extensive clinical trial program supporting Xarelto® makes it the most studied oral, direct Factor Xa inhibitor in the world today. More than 60,000 patients are expected to be enrolled into the Xarelto® clinical development program, which will evaluate the product in the prevention and treatment of a broad range of acute and chronic blood-clotting disorders including VTE treatment, stroke prevention in patients with atrial fibrillation, VTE prevention in hospitalized medi-

cally ill patients, and secondary prevention of acute coronary syndrome (heart attack). The Phase III study on secondary prevention of acute coronary syndrome was initiated in December 2008.

Featuring an innovative, patent-protected 24/4 day dosage regimen, our low-dose oral contraceptive YAZ® from the drospirenone product family can be used in three distinct indications: contraception, treatment of moderate acne, and treatment of the emotional and physical symptoms associated with PMDD (premenstrual dysphoric disorder). The product is already registered in all three indications in the United States, important markets of the Asia/Pacific region and in Latin America. In September 2008, YAZ® was launched for the oral contraception indication in Europe.

Our activities in the field of biological products are focused on strengthening and expanding our recombinant Factor VIII product Kogenate®. A key project here is the development of a new presentation of Kogenate® based on a patent-pending pegylated liposome technology.

Based on positive Phase II trial outcomes with riociguat, the first member of a new class of vasodilating agents known as soluble guanylate cyclase (sGC) stimulators, we moved into Phase III trials with this substance in December 2008. Administered in tablet form, riociguat is currently being investigated as a new approach for the treatment of various forms of pulmonary hypertension.

The portfolio of products emerging from our own research and development is supplemented by products licensed on a national, regional or global level. The humanized monoclonal antibody alemtuzumab successfully completed Phase II clinical trials and is now being tested in two global Phase III studies for the treatment of multiple sclerosis (MS). This novel approach to the treatment of the autoimmune disease MS is being developed in collaboration with Genzyme Corporation.

The Phase III study in age-related macular degeneration (wet AMD) for our VEGF Trap-Eye project that we are pursuing in collaboration with Regeneron Pharmaceuticals Inc. has started. Our development partner additionally initiated a Phase II study in patients with diabetic macular edema in December 2008. VEGF (vascular endothelial growth factor) is a natural growth factor that stimulates the formation of new blood vessels (angiogenesis) and is formed naturally during the growth of tissues and organs. VEGF Trap-Eye blocks this growth factor specifically and very effectively. Inhibition of VEGF prevents the abnormal formation of new blood vessels and the leakage of fluid, which is very important in treating patients with wet AMD. The medication is administered topically into the eye. Once the product has been granted regulatory approval, Bayer will market it outside the United States. Regeneron maintains exclusive commercialization rights to VEGF Trap-Eye in the U.S.

We have also acquired the commercialization rights for recombinant human thrombin (rhThrombin) outside the United States from U.S.-based ZymoGenetics, Inc. This product received FDA approval for the U.S. market in January 2008. The two companies will co-promote the product in the United States for an initial period of three years under the name Recothrom® for the control of bleeding during surgery. In August 2008 Bayer submitted a marketing authorization application for rhThrombin in Europe.

In 2007 we entered into a partnership with U.S.-based Nektar Therapeutics, Inc. to develop and commercialize an inhaled formulation of the antibiotic amikacin. This innovative treatment for pneumonia in intubated and mechanically ventilated patients is based on a novel inhalation technology. This project is currently in Phase II clinical testing and shows promising results.

To further strengthen our activities in the area of biopharmaceutical active ingredients, we acquired the protein engineering specialist Direvo Biotech AG, Germany. In addition, July 2008 saw the acquisition of the hemophilia portfolio of Maxygen, Inc., United States, along with a license to use that company's novel biotechnology research platform known as Molecular Breeding. With this acquisition we are seeking to build on our strong market position in hemophilia care.

We also invest in continuous life-cycle management to identify possible additional indications and improved delivery forms for products already on the market.

In our Consumer Health segment, research and development activities of the Consumer Care Division at our product development centers in Morristown, New Jersey, United States, and Gaillard, France, focus on identifying, developing and commercializing non-prescription (over-the-counter = OTC) products. These efforts are centered on support for both existing and new brands through the implementation of product-specific, clinical and regulatory development strategies that enable the successful exploitation of new technologies, the expansion of indications for existing products or the reclassification of current prescription medicines as OTC products. We introduced a variety of new product line extensions to several markets in 2008.

In the Diabetes Care Division, headquartered in Tarrytown, New York, we focus our research and development activities on strengthening core product lines and continuing our expansion into attractive segments of the diabetes market. The results of our internal development work and our collaborations enable us to offer user-friendly monitoring systems to meet the individual needs of people with diabetes, as demonstrated for example by the wireless combination of our new Contour® Link system and the Medtronic® insulin pump.

The Animal Health Division focuses its research and development activities in Monheim, Germany, on anti-infectives and parasiticides as well as active ingredients for the treatment of non-infectious disorders such as chronic kidney and cardiovascular diseases and cancer, particularly in companion animals. With the launch of Renalzin®, an innovative dietary supplement for cats suffering from chronic renal failure, we laid the foundation for expanding our portfolio of kidney disease treatments.

Bayer CropScience

€649 million
for research
and development
at CropScience

In 2008, €649 million (2007: €637 million) in research and development expenditures, or about 24% of the Bayer Group total, were made in the CropScience subgroup. This is equivalent to 10.2% of sales. CropScience maintains a global network of research and development facilities. Our biggest R&D sites for crop protection products are located in Monheim and Frankfurt am Main, Germany, and Lyon, France. The major research centers of the BioScience unit are located in Ghent, Belgium, and Haelen, Netherlands.

While research is concentrated at a small number of sites, our development activities take place both there and at field testing stations across the globe to enable future products to be tested under the relevant regional climatic conditions. Breeding activities for our seed business are also carried out at various decentralized locations to take account of specific local requirements.

In the Crop Protection unit we identify and develop innovative, safe and sustainable insecticide, fungicide and herbicide products for farmers and carry out research projects across all indications in new areas of future importance, such as plant health or stress tolerance. In addition to conventional chemistry, biology and biochemistry, modern technologies such as genomics, high-throughput screening, bioinformatics and combinatorial chemistry play an important role in the identification of new lead structures. Collaborations with external parties supplement our own activities.

We actively seek to extend the spectrum of use for our substances by developing seed treatment solutions, new mixtures or innovative formulations of products that are already on the market so that they can be applied in additional crops or are easier to use.

In 2008 we introduced two new active ingredients to the market: Spirotetramat (major brand: Movento®), Bayer CropScience's third ketoenol compound, is a highly effective systemic insecticide that offers protection against a broad spectrum of sucking insects. Spirotetramat protects pome and stone fruit, citrus fruit, grapes, nuts, vegetables and potatoes against pests such as aphids, cicadas, grape lice, mealybugs, whiteflies and cottony-cushion scales.

Pyrasulfotole (major brand: Huskie®), a member of the benzoylpyrazoles class, is a new cereal herbicide offering farmers reliable control of a large number of broadleaved weeds. Thanks to its novel mechanism of action in cereal crops, this product can play an effective part in resistance management programs.

The active ingredient pipeline in Crop Protection currently contains 18 developmental projects that the company hopes to bring to market maturity between 2009 and 2017, along with a further 50 projects in early-stage research.

In 2008 we already received the first marketing approvals for a new herbicide and an innovative safener substance that we plan to commercialize as of 2009. Safeners are special substances added to herbicides to protect crops from potentially damaging effects of the active ingredient. We aim to introduce three promising new fungicides to the market in 2010 subject to their successful registration:

| New active ingredient | Indication | Planned launch |
|-----------------------|-------------------|----------------|
| Thiencarbazone-methyl | Herbicide | 2009 |
| Cyprosulfamide | Herbicide/safener | 2009 |
| Fluopyram | Fungicide | 2010 |
| Bixafen | Fungicide | 2010 |
| Isotianil | Fungicide | 2010 |

Thiencarbazone-methyl (major brands: Adengo®, Corvus®) is a new sulfonyl amino carbonyl triazolinone (SACT) compound to control weeds in corn and cereal crops. This substance ideally complements our active ingredient isoxaflutole, which is already on the market. The combined modes of action of these two ingredients, in conjunction with our new safener cyprosulfamide, ensure particularly good plant tolerance.

CropScience anticipates a total peak sales potential in excess of €1 billion for the nine new active ingredients it plans to introduce to the market between 2008 and 2012.

The compounds developed by Crop Protection are also tested and evaluated by our Environmental Science unit for possible non-agricultural uses. In addition, we carry out tests with active ingredients from other companies and may purchase such ingredients if results are positive. Current development projects include passive treatments such as gels and baits to combat insect pests, biological solutions for pest control and insecticides for material treatment in a vector-control context. Also at the focus of our development activities are new products for weed control and active ingredient mixtures to control fungal diseases on turf and ornamental plants.

Well-stocked
research pipeline

In 2008, Environmental Science introduced numerous new products featuring simple, user-friendly handling for professional users and consumers. In Europe, for example, we launched Kid Way® and Pistol®, two new herbicides for professional users that are intended to replace older products in our portfolio. In the United States we launched Temprid®, a new product for professional users featuring an active-ingredient combination to control ants and other pests, particularly outdoors.

We strengthened our Bayer Advanced portfolio for U.S. consumers with new products, including an insecticide that also acts as a disinfectant. In Europe we launched a number of additions to the Bayer Garden range for consumers, including several new products based on the young active ingredient thiacloprid.

Several product introductions are planned for 2009. They include the U.S. launch of Kontos®, a new pest control product for the greenhouse and nursery markets, based on the active ingredient spirotetramat, to protect ornamental plants.

Research in our BioScience unit is concerned with optimizing the properties of plants. We are developing new varieties of our core crops – cotton, canola and rice – and new vegetable seeds.

Our research and development activities are focused on the agronomic properties of these core crops. For example, our scientists are working to develop crop plants that are more resistant to stress factors such as extreme temperatures and drought conditions. We also aim to increase the plants' yield potential and quality, as by improving the profile of canola oil or enhancing the properties of cotton fibers. Other projects are directed toward broadening the spectrum of herbicide tolerance through additional mechanisms of action and improving plants' resistance to insect attack and diseases.

The technologies we use comprise both modern breeding methods and processes based on plant biotechnology. Our research and development pipeline currently contains more than 40 promising lead projects and is supplemented by research and license agreements.

The growth in BioScience sales in 2008 was supported by new product introductions. We launched several new canola varieties – including InVigor® Health, a canola line developed for the specialty canola oil market in North America. The year also saw the market introduction of Arize® Dhani rice seed. This high-yield variety is resistant to bacterial leaf blight, a disease much feared by rice growers. We also successfully introduced numerous new vegetable varieties and several new cotton lines.

In 2009 we plan to launch several innovative seed varieties, including cotton featuring our own glyphosate herbicide-tolerance trait. In conjunction with leading seed producers, we also intend to introduce our LibertyLink® herbicide tolerance technology in soybean seeds for the U.S. market.

To further strengthen the innovative capability of CropScience, we plan to gradually increase research and development spending to reach some €750 million annually by 2015. We intend to step up our research effort, particularly in the seed and plant biotechnology areas, where expenditures are planned to increase to more than €200 million over the same period.

Bayer MaterialScience

In 2008, MaterialScience spent €221 million (2007: €209 million) on research and development (not including joint development activities with customers) to further expand its leading position in the market and in process technology as a global supplier of high-quality customized materials and system solutions. MaterialScience thus accounted for 8% of the Bayer Group's total research and development expenses. The subgroup's expenses in this field amounted to 2.3% of sales. In the MaterialScience business units – Polyurethanes; Polycarbonates; Thermoplastic Polyurethanes; and Coatings, Adhesives, Specialties – the latest technologies and production processes are used to develop new products and applications in close cooperation with our customers and other external partners.

€221 million
for research
and development
at MaterialScience

Product development work in the Polyurethanes business unit is focused on expanding applications for materials and optimizing the properties of our polyurethane systems. In the construction industry, for example, our polyurethanes serve as the basis for highly efficient insulating materials and thus make an active contribution to climate protection. Roughly 70 times as much energy can be saved during the product life cycle of rigid polyurethane foam as is required for its manufacture. The use of renewable raw materials also plays an important part in our research and development activities. For example, we have developed polyols containing up to 70% by weight of renewable raw materials for use in mattresses, car seats and refrigerator insulation. One new application is a polyurethane foam system used to lay railroad ballast beds. The use of this innovative technology, which is currently being tested under regular rail traffic conditions, can result in a lower maintenance requirement for the railroad bed and also considerably reduce train noise levels.

Investment in process development is currently focused on new and improved raw materials and the optimization of manufacturing processes for polyether polyols and aromatic isocyanates. Our 250,000 tons-per-year TDI facility in Shanghai, China, due on stream in 2010, will employ the gas-phase phosgenation process, which uses up to 60% less energy than would a conventional world-scale facility of the same size. This innovative process also reduces carbon dioxide emissions by 60,000 tons per year. We have also developed highly efficient processes for MDI that are already being used at our 350,000 tons-per-year plant at Shanghai. This is the world's largest single-line MDI facility.

The Coatings, Adhesives, Specialties business unit focuses its research and development activities on developing polyurethane raw materials for the formulation of high performance coatings, adhesives and sealants, such as aliphatic and aromatic polyisocyanates and resin components. Important areas of research are raw materials for waterborne and UV-curing systems that help to conserve resources by obviating the need for organic solvents and reducing drying times for coatings. We are also working to open up more new applications in the areas of cosmetics and medical technology. The new strategic business unit Functional Films was created based on the high level of expertise harbored by the Coatings, Adhesives, Specialties business unit in the field of innovative surfaces. This unit's activities include three-dimensionally formable electroluminescent films (Lyttron®), LCD diffuser films for flat screens, formable coated films for electronic and automotive applications and soft-touch Makrofol® films used in automotive interior components and cellphone housings. We are also collaborating with U.S.-based InPhase Technologies to develop holographic data-storage media with a capacity of 300 gigabytes per first-generation disc. And with an annual capacity of 60 tons, we have quickly established ourselves as one of the world's leading industrial-scale suppliers of carbon nanotubes (Baytubes®).

Our aim in the Polycarbonates business unit is to develop new applications for our products and steadily improve manufacturing processes. We direct our efforts toward finding innovative solutions that align with global societal trends in areas such as climate protection, mobility and living standards against a background of steady population growth. Examples include lightweight plastics components for automotive construction, novel approaches in the field of LED light management technologies and stronger yet lighter materials for the passenger transportation and other sectors. Product development focuses on new polymer alloys (PC blends and compounds), modified base materials for polycarbonate sheets and various coating technologies for modifying polycarbonate surfaces. An example is the polycarbonate-based glazing and roof panels introduced globally in collaboration with leading automakers in the first quarter of 2008 under the "BayVision" competence brand. This pooling of material, application, processing and service expertise is central to integrating development activities in areas that are important for growing the business.

Research and development work in the Thermoplastic Polyurethanes business unit is concerned mainly with high-performance thermoplastic polyurethane resin granules and film products, such as solar-module films with very high transparency and UV stability.

The New Business section of MaterialScience constantly tracks and evaluates new technological and market trends, channeling the most promising ideas into research and development projects in order to create profitable business opportunities for the future or expand existing technology platforms. Early 2008 saw the inauguration of the Center for Catalysis Research (CAT) at RWTH Aachen University, Aachen, Germany, as part of a new technology initiative. The center will develop novel catalytic processes for MaterialScience.

Bayer Technology Services

All Bayer subgroups work closely with Bayer Technology Services worldwide on technology solutions, particularly in the fields of process technology, plant engineering, automation and product development. For example, this service company cooperates with MaterialScience in the development of new production processes that make efficient use of energy and raw materials, thereby helping the subgroup to maintain and expand its technological and cost leadership. Centralized development work on technologies relevant to more than one subgroup, such as nanotechnology and biotechnology, along with mathematical simulation and data mining expertise, helps HealthCare and CropScience to shorten development times for new products. International sourcing of know-how plays a key strategic role in this respect. It involves country-specific expertise in the implementation of capital expenditure projects, global access to innovations and public funding, and the recruiting of top international personnel.

Bayer Innovation

Bayer Innovation investigates and evaluates innovative areas related to the subgroups' current core activities and develops them into viable new businesses for the Bayer Group.

An example is the manufacture of plant-made pharmaceuticals (PMP). In 2008 a pilot facility was inaugurated to produce clinical trial samples of a vaccine for the therapy of non-Hodgkin's lymphoma. Bayer Innovation also has activities in the field of medical technology, with novel concepts under development including dressings made from biodegradable silica gel fibers for the treatment of chronic wounds. The full potential of these technologies is being evaluated in close cooperation with the Bayer subgroups and external partners.

Triple-i: Inspiration, Ideas, Innovation

The innovation campaign entitled “Triple-i: Inspiration, Ideas, Innovation” is motivating Bayer employees worldwide to submit ideas for possible new products and thereby help to strengthen the company’s innovative capability. More than 7,000 suggestions were submitted by February 2009, and many of them have been or continue to be evaluated by our subgroups. Some ideas have already been successfully commercialized, such as the use of polycarbonate in special boatbuilding applications.

Employees

On December 31, 2008, the Bayer Group had 108,600 employees worldwide, compared with 106,200 at the end of 2007. The net increase of 2,400 was mainly the result of our acquisitions and the expansion of our organization in the BRIC countries (Brazil, Russia, India and China) and other growth markets. These factors were partly offset by decreases in headcount such as that resulting from the integration of Schering, Berlin, Germany. In Germany we had 37,400 employees, who made up 34.4% of the Group workforce.

On the reporting date we employed 53,100 people at HealthCare (2007: 51,500). Included here for the first time are 300 employees who joined the subgroup following the acquisition of Possis Medical, Inc. in the United States, 600 employees of the acquired company Topsun in the Asia/Pacific region, and the 600 employees of Sagmel in Europe. CropScience had 18,300 employees as of December 31, 2008 (2007: 17,800) and MaterialScience 15,100 (2007: 15,400). In addition, 22,100 (2007: 21,500) Bayer Group employees work for the service companies or the holding company. Personnel expenses declined in 2008 by 1.1% to €7,491 million (2007: €7,571 million).

| Employee Data | Dec. 31, 2007 | Dec. 31, 2008 |
|----------------------------------------------------------|------------------|------------------|
| | FTE | FTE |
| Employees by region | | |
| Europe | 56,200 | 55,500 |
| North America | 16,800 | 17,000 |
| Asia/Pacific | 18,900 | 20,800 |
| Latin America/Africa/Middle East | 14,300 | 15,300 |
| Employees by corporate function | | |
| Production | 48,800 | 49,100 |
| Marketing | 36,900 | 38,000 |
| Research and development | 11,600 | 12,300 |
| General administration | 8,900 | 9,200 |
| Total | 106,200 | 108,600 |
| of which trainees | 2,700 | 2,900 |
| Training costs in percent of personnel expenses | 2.0 | 2.7 |
| Percentage of women in Bayer Group senior management | 4.3 | 4.7 |
| Number of nationalities in Bayer Group senior management | 16 | 23 |

The total number of employees with permanent or temporary contracts is reported in full-time equivalents, with part-time employees included in proportion to their contractual working hours. We believe this presentation improves the comparability of personnel expenses and employee numbers.