

# Health – Made in Germany

The market for healthcare is gaining steadily in global importance and offers great promise for innovation, growth and employment. Demographic developments, increasing health awareness and even new products and technologies themselves, are driving the dynamics of further growth. The worldwide market for healthcare holds great potential for further international co-operation, including with Germany's healthcare industry – a top international player. Through the initiative "Health – Made in Germany", the Federal Ministry of Economics and Technology (BMWi) is supporting German healthcare companies and their global partners as they exploit opportunities to co-operate and do business.

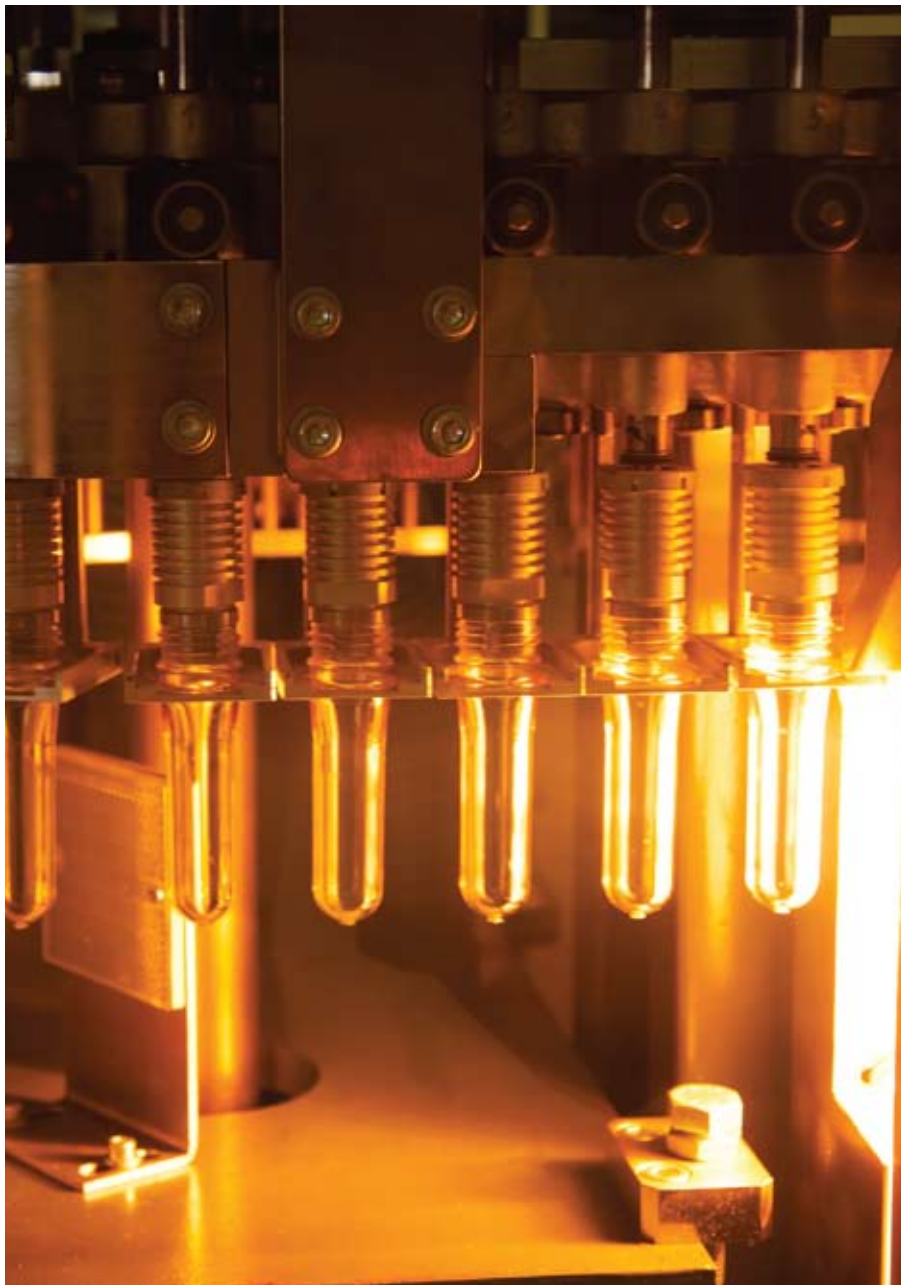
## Why Germany?

Germany was among the top five countries in the world in terms of market size in 2010, with a generated turnover of USD 35 billion<sup>1</sup>. Meanwhile, government statistics indicate that around 900 companies – most of them small or medium-sized firms or SMEs – are active in pharmaceuticals-related fields<sup>2</sup>. While most of them are trading on foreign markets, they also strengthen the country's domestic economy. Germany's fermentation capacity is second only to the United States. That has made the country Europe's biggest producer of biopharmaceuticals, with sales of EUR 5,2 billion in 2010<sup>3</sup>.

Germany's current status at the top of the ranks in the pharmaceuticals and biotechnology sectors of healthcare is no coincidence. A long tradition in producing drugs, of academic excellence, an innovative business climate, public support for research and development and geographic advantages have helped secure its leading position.

## Striving for Innovation

Germany's industrial and institutional



innovative drive is reflected in an impressive array of registered patents. In 2010, Germany led Europe with close to 12,000 patents granted in the field of pharmaceuticals and medical biotechnology (10,384 pharmaceutical, 1228 biotechnological)<sup>4</sup>. Bearing in mind the fact that the German pharmaceutical industry spent in 2009 about 13.7% percent of their sales on

research and development, the high number of patents does not come as a surprise<sup>5</sup>.

What is more, the German government has identified life sciences as a decisive factor in economies of the 21<sup>st</sup> century, and has made available a variety of public subsidies for R&D in this field. Between 2012 and 2015 the German government will

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invest EUR 8.3 billion in what is known as the “High-Tech Strategy”<sup>6</sup>.

Another part of the “High-Tech Strategy” is a competition aimed at identifying “leading-edge clusters”. The 15 winners of the three-round competition are each provided with EUR 40 million in funding by Germany’s Federal Ministry of Education and Research (BMBF) for a period of five years to implement their strategies. In addition to R&D grants, the clusters will also be eligible for reduced-interest loans and special partnership programmes<sup>7</sup>. Beyond that, the federal states have their own R&D grant programmes. Most are designed for SMEs and focus on specific industry clusters.

In line with improving R&D infrastructure, the government is promoting clinical trials because these are seen as drivers of innovation and a major part of quality assurance in medicine. The government is also trying to improve conditions for clinical trials in Germany through funding and by setting up various interdisciplinary centres for clinical research. The aim is to speed the transfer of research findings into practice.

The strategy has proven successful, with Germany recently leading Europe in the number of sites in clinical trials in Europe<sup>8</sup>. One key to Germany’s success in this area is cost. While data quality is on a par with the US, costs are up to 50 per cent lower in Germany<sup>9</sup>. That gives Germany a competitive advantage in terms of lower costs and enhanced levels of expertise and quality. The recently published “Guide to Contract Research in Germany” can assist you in locating the right partners conducting clinical trials in Germany ([www.health-made-in-germany.com](http://www.health-made-in-germany.com)).

### Institutional and Academic Research Thriving

Germany has held a leading position in drug development for more than a century. Some of the world’s most sought-after medications were invented in the country. Also home to some of the most successful traditional pharmaceuticals companies, universities and research organisations, Germany’s outstanding success in the field of



healthcare can in part be attributed to well-established and traditional co-operative ties between companies, research organisations and the academic community.

The pharmaceuticals industry in Germany also benefits from internationally renowned scientists who come to the country to carry out world-class research at institutes and universities or the companies themselves. The number of people employed in decided biotechnology research companies is a lot higher than in any other industry – with around 45 per cent of the German workforce holding a university degree<sup>10</sup>.

The University of Freiburg and the University of Frankfurt-am-Main are globally known for the work they do in the pharmaceuticals field. Like their other German counterparts, they cooperate closely with a variety of

research institutes in order to advance basic and applied research as well as get new products onto the market.

Germany’s biggest research organisation, the Helmholtz Association, has an annual research budget of EUR 2.7 billion, and employs 26,500 staff. Another important organisation is the Max Planck Society, which has more than 80 institutes dedicated to the full range of basic research in, among other subjects, biology, technology and medicine. The Leibnitz Association is an inter-disciplinary scientific community, which has 86 research institutes across the country, of which 25 specialise in life sciences. Last but not least, Germany’s Fraunhofer Gesellschaft is Europe’s largest applied research institution. It employs a staff of 18,000 in 80 research facilities<sup>11</sup>.

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### Europe's Fermentation Centre

Germany became involved in biotechnology early on and has evolved into one of the world's leading biotech hubs. With a fermentation capacity of 675,000 litres, Germany is Europe's largest producer of biopharmaceuticals, and second only to the US in the world<sup>12</sup>. A number of clusters relevant to the biotechnology industry have fuelled this development. Among the largest are located near Munich, Berlin and in the Rhine-Neckar triangle and the Ruhr area. A major biotechnological hotspot is the BioRegion Ulm, which is home to one of Europe's largest mammalian cell culture facilities in Europe<sup>13</sup>. Most genetically manufactured drugs are produced here. This cluster is made up of 60 pharmaceutical, biotechnological and medical technology companies. In addition to the healthcare industry's quantitative strengths, high standards for quality and reliability set German pharmaceutical and biotechnological products apart from their competitors. Maintenance of the highest technical standards as well as the corresponding regulatory requirements in production and quality control are a matter of course. Optimal product quality is additionally guaranteed by the know-how and skill of a highly-qualified labour force.

### Dynamic Growth on a Global Scale

Demographic developments, increased health awareness and fast-paced growth in countries like China, Brazil, Russia and India is spurring the call for products and services. What is more, an increasing population of elderly people with chronic problems such as diabetes or cardiovascular disease is driving the call for healthcare goods and services in the industrialised world in particular. Given those factors, demand is diversified as well, leaving consumers searching for providers who can deliver the latest technologies and products to meet a wide range of healthcare needs<sup>14</sup>.

Whether it is pharmaceuticals, medical technology, medical biotechnology or health-related services, German industry responds to this challenge with innovation

and product development. New methods for diagnosis and treatment are facilitating the therapy of as yet incurable diseases, which in turn enhances the life expectancy, and thus extends the utilisation of the healthcare system<sup>15</sup>.

As a global export leader, Germany's pharmaceutical sector has already reaped advantages from these market developments. A study by a major international consulting firm Prognos AG indicates the sector's export volume quadrupled between the years 2000 and 2008 to EUR 45.2 billion. The consultants say that they expect the pharmaceuticals market's exports to grow further at an above-average rate of 6.3 per cent until 2015<sup>16</sup>.

Currently, the European market is still the main destination for German exports, followed by the US, which accounts for more than half of the exports going to destinations outside the EU<sup>17</sup>. Analysts who are experts in innovation say that densely populated countries like India, China and Russia, as well as those in Latin America, such as Brazil and Argentina, will have greater influence on Germany's exports in future.

### Fostering Global Cooperation

BMWi has established the initiative "Health – Made in Germany" in order to support the healthcare industry in its efforts to expand activity in markets around the globe. The main aim of the programme is to foster bilateral trade in the healthcare market and support German industry in entering emerging markets. Strong partners like federal ministries, professional associations and Germany's federal states co-operate through it to achieve a common goal. Health – Made in Germany is implemented by Germany Trade & Invest, the German government agency for foreign trade and inward investment.

The initiative has been organised into four main healthcare industry sector working groups: pharmaceuticals, biomedical, medical technology and telemedicine and health-related services. Among the members of the different groups are 14 different branch associations. This structure has been chosen to establish

a channel of direct communication with partners within each sector in order to allow industry a constant dialogue to co-ordinate and direct the goals and activities of the initiative.

The inception of Health – Made in Germany centrally bundled all activities related to foreign trade in the healthcare industry. Its internet portal [www.health-made-in-germany.com](http://www.health-made-in-germany.com) is the first point of contact for foreign partners and German companies who are interested in international business. The site offers information on current initiative activities including projects, tenders, grants and market data. Furthermore, the strengths of the German healthcare economy are presented in a way that makes it easy for foreign partners and decision-makers to access and enjoy the advantages of cooperating with German companies.

The initiative has already drawn global attention. Until now, it has been active on four continents and in more than 16 countries around the globe. At the same time, the pharmaceuticals and biotechnology working groups have started focus projects in Russian and India respectively. For the pharmaceuticals and biotechnology market, the respective working groups have started two focus projects in Russia and India. At the moment, these countries are currently engaging in political efforts to create a more suitable business climate for German companies.

The Russian pharmaceuticals market holds vast potential and enormous opportunity for German drug-makers. In the past years though, they have surprised the Russian administration with mostly short-term regulatory acts, which could not be met by the German companies in the given time-frame. Health – Made in Germany has attempted to resolve this problem by setting up what is known as a pharmaceuticals "early-warning system" in co-operation with a Russian market research company. It includes a regularly published newsletter in Russian and German which details new regulations on the Russian pharmaceuticals' retail market, including items on licensing and reimbursement that are of interest to German firms doing business with

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Russia. The publication also clarifies other implications Russian regulatory decisions could have for foreign drug firms interested in commerce there.

Another major issue is the strengthening of cooperation between India and Germany in the field of life sciences. In particular, the pharmaceutical and the biotechnology sector are in the focus of attention. The “Indo-German Healthcare Dialogue”; a platform that was initiated last year by the initiative Health – Made in Germany will help to achieve this target. With the aid of the platform and in cooperation with the diplomatic mission, Indian and German entrepreneurs get the opportunity to gather on a regular basis.

During their meeting, questions of research cooperation and innovation represent key issues for companies joining the Indo-German Healthcare Dialogue. Together they try to lobby for an adjuvant, supporting environment which is indispensable to foster partnerships and bilateral collaboration in this sector.

### Locating Partners

Health – Made in Germany has, in addition to its website, published a series of directories that give an overview of part of Germany's pharmaceutical and biotechnology sectors and their capacities. Created to simplify partner access to the wealth of expertise and experience Germany has to offer, the *Guide to Contract Research in Germany*, and the *German Biomanufacturing Guide* can be retrieved, like many other reports and documents, free-of-charge from the initiative's website. The *Guide to Contract Research* includes a listing of more than 120 companies, mainly SMEs. It also provides company profiles and graphic tables that describe the types of research done by each company.

The *German Biomanufacturing Guide* serves as an orientation aid for the complex, rich and very diverse German biomanufacturing sector. Nearly half of all German biomanufacturing activities are currently orientated towards medicine and healthcare. Most medical biotech companies employ less

than 50 people, yet frequently cooperate and interact with much larger stakeholders in industry, academia and with researchers at globally-known private and public institutes and organisations. Compiled in early 2011 from a survey of the country's biomanufacturing companies, the guide contains profiles of more than 30 firms that vary in terms of their focus, staff size and fermentation capacity.

While the German pharmaceuticals and biotechnology sectors have already realised a considerable amount of their potential in the domestic and foreign markets, there is still plenty of room for new growth. If you are interested in further information on the German healthcare market, ongoing projects, or current healthcare news, a visit to [www.health-made-in-germany.com](http://www.health-made-in-germany.com) is highly recommended.

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Marion Luekemann



is working as a Senior Manager for the initiative “Health - Made in Germany”. She supports foreign enterprises seeking partnerships with German healthcare institutions and companies as well as German healthcare firms that are looking for international expansion. Prior to joining Germany Trade & Invest, Marion worked in the pharmaceutical industry for six years. She holds a degree in international cultural and business studies as well as an MBA in international management. Marion gathered several years of work experience in Russia and Poland.  
Email: [marion.luekemann@gtai.com](mailto:marion.luekemann@gtai.com)