# The Machinery & Equipment Industry in Germany

Issue 2011/2012



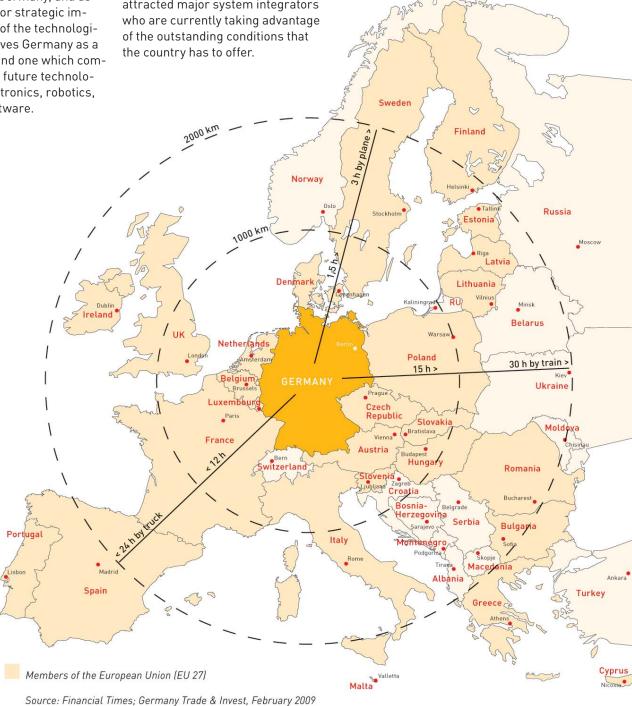


## Germany is the Geographic and Economic Center of Europe

Machinery & Equipment (M&E) is the second largest and most innovative industry sector in Germany, and as such, is one of major strategic importance. It is one of the technological motors that drives Germany as a high-tech nation, and one which combines all of the key future technologies including electronics, robotics, materials, and software.

The M&E sector is the birthplace of many innovations which later make their way into the other parts of the economy – and Germany is the right place to realize them. Lying at the heart of Europe at the crossroads between the highly developed west and the booming east, Germany has attracted major system integrators who are currently taking advantage of the outstanding conditions that the country has to offer.

German M&E industry strength is driven by a combination of Germany's proven engineering tradition, its position as a leader in technological development, and its highly diversified industrial base.



## The Industry in Numbers

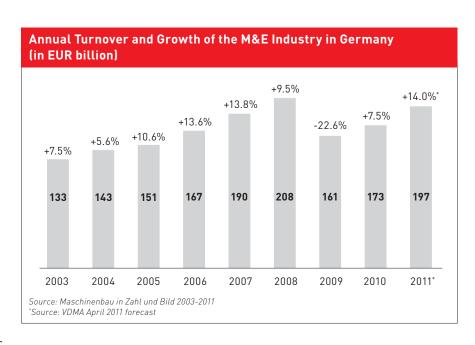
With an overall turnover of EUR 173 billion in 2010, Germany's M&E industry remains the strongest in Europe. The industry has experienced strong growth in recent years, with a total increase of 56 percent for the period 2003-2008. Due to the financial crisis and worldwide economic downturn of 2009, annual turnover in this export-oriented industry dropped by 20 percent. However, an actual 2010 increase of 7.5 percent was more than double the three percent growth forecast. Growth of 14 percent is forecast for 2011.

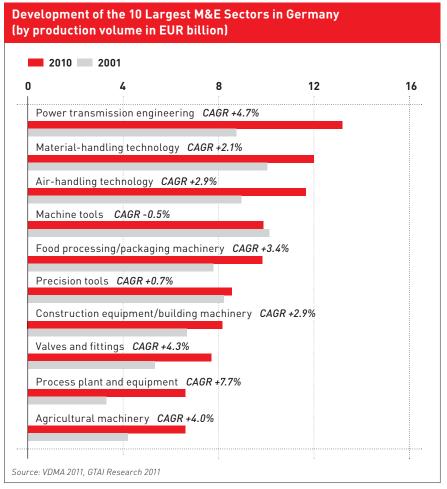
Germany is the world's export leader with 19.1 percent share of global M&E trade - putting it ahead of Japan and the USA. Domestic demand is also substantial, with the home market generating around EUR 87 billion in revenue for M&E manufacturers in 2010.

M&E is Germany's largest sector by level of activity; with almost 6,300 companies along the value chain and a highly trained workforce of more than 908,000 people. Eighty-seven percent of these companies are active in the SME sector.

With annual R&D expenditures topping out at over EUR 11.4 billion, the M&E industry is one of the most innovative industries in Germany. Around 25 percent of European patents issued in 2009 were made in the handling & processing and vehicles & general technology sectors – of which one third were issued in Germany alone.

The number for M&E FDI projects in Europe for the period 2003-2010 was 1,848 projects in total. Germany is the top location with 169 projects in the last three years – ahead of the UK and France.





## **Application Industries**

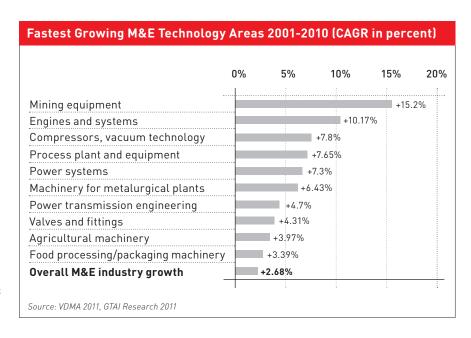
Germany's highly industrialized environment is just one of the reasons for the continued success of the M&E industry. As Germany's largest industries, the electronics, automotive, chemicals, and food sectors are the four largest clients driving market growth. More than 11,400 companies, employing a combined workforce of around 2.2 million, are active in these four sectors, generating combined turnover of EUR 630 billion. New market opportunities are also opening up in the thriving renewable energies & resources sector.

The need for high-tech machinery and equipment in these industries is key to survival in a global context. Demand will continue to grow in the future as current market developments demonstrate a significant increase in demand for increased energy and production efficiencies. These growth technologies will continue to be the predominant force underpinning the ongoing upswing in the M&E industry.

#### Chemicals & Plastics

The chemical industry is one of the most important M&E application industries. Germany is the European chemicals market leader with total market revenue of more than EUR 100 billion. Sixty highly developed chemical parks with excellent infrastructure represent an optimal base for chemical processors, refiners, and end-product producers. One third of European chemical industry investment is made in Germany.

Germany is also home to Europe's leading plastics industry. The country's plastics industry includes polymer producers and manufacturers,



converters and machine manufacturers alike. And with industry turnover of over EUR 34 billion, the domestic plastics industry counts as one of Germany's most significant industry sectors.

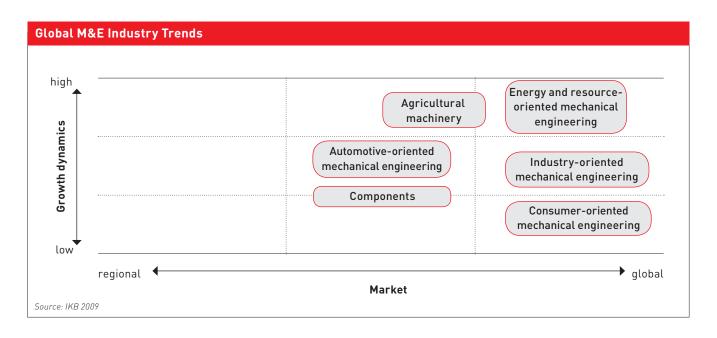
#### **Electronics**

Electronics is the world's fastest growing industry with an average growth level of seven percent over the past decade. Germany is and will continue to be the number one location for high-end production of complex components. Almost 800,000 highly-skilled employees helped generate total revenue of EUR 159 billion in 2010. New technologies such as flat panel displays, flexible displays and printed electronics will fuel the growing demand for machinery and automation systems in the near future.

#### **Automotive**

The automotive industry's manufacturers, suppliers, and service providers represent Germany's largest industry in revenue terms - EUR 317 billion in 2010. The large-scale

production of ever more complex products in a competitive market-place accounts for the high level of automation and production efficiency in the thousand plus companies (employing more than 700,000 staff) in Germany. A number of new vehicle programs were initiated by German OEMs in 2010 – production for 14 new models with electrified power trains will be ramped up in the next three years alone, placing Germany at the European center of this fundamental shift within the auto industry.



#### Food & Beverages

The food and beverages sector provides further profitable market opportunities for M&E companies in Germany. The industry accounts for revenues of over EUR 150 billion and has seen annual investments of more than EUR 4 billion in 2009. Robust competition within the food retail market has led to high automation standards in production standards which can be found only in Germany. The most important subsegments - bakery products, beverages, dairy, confectionary food, and meat – will see even more production line investments in the near future.

## Renewable Energies & Resources Sector

Germany is the world leader in the sustainable industry revolution – a fact which both benefits companies engaged in the industry while positively influencing global environmental policy. The German government has ambitious goals: it hopes to cut 270 million metric tons of  ${\rm CO_2}$  emissions by 2020 and promote the consumption of energy

## European 20/20/20 Goals

The European Commission has set a number of ambitious climate and energy targets, better known as the "20/20/20" goals. EU greenhouse gas emissions are to be reduced by at least 20 percent below 1990 levels; 20 percent of EU energy consumption to be generated from renewable resources; and an energy increase of 20 percent all by 2020.

These objectives will influence the way business is done and simultaneously drive innovation. Extensive investments in all number of technologies and processes are necessary to meet the challenges of the future. Germany, as the world leader in "green technologies" with global market share of 20 percent, offers multiple investment opportunities.

produced from renewable sources. Estimates put domestic investment levels at EUR 200 billion and exports at over EUR 80 billion. The overall goal is to ensure that, by 2050, half of Germany's primary energy consumption is derived from renewable resources. Both "green production technology solutions" for the component manufacture of the next generation of renewable energy equipment and technologies to achieve sustainable resource efficiency will remain in demand in Germany for decades to come.

The German Federal Government's "Energy Concept for an Environmentally Sound, Reliable and Affordable Energy Supply" promises to transform energy supply - and provides a road map to a truly genuine "renewable age." In doing so, it will further consolidate Germany's role as a major energy exchange partner in Europe.

### Future Key Markets: Renewable Energies

#### 1 Wind Energy

Germany is home to the world's largest wind industry, with over 14 percent of globally installed capacity. The thriving sector recorded an annual market growth rate of 5.6 percent in 2010.

In 2010, new capacity of 1,551MW (equivalent to 754 wind turbines) was installed, taking cumulated 2010 capacity to 27,215 MW (equivalent to 21,607 wind turbines). Members of the world's strongest wind energy industry profit from the immediate proximity to leading wind energy companies along the whole value chain.

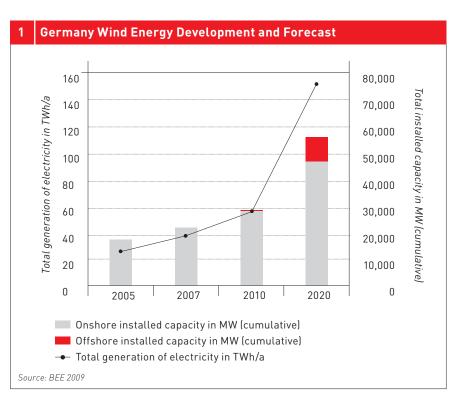
#### 2 Photovoltaic Industry

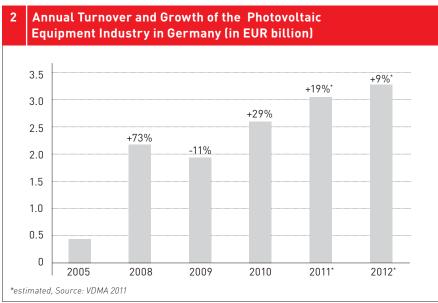
Germany boasts the world's strongest PV market, with 7.4 GWp of newly installed PV power in 2010. The sector recorded 45 percent share of newly installed global capacity in the same year.

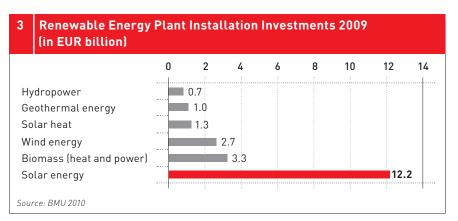
The compound annual growth rate (CAGR) for the period 2008-2015 is forecast at between 15 and 20 percent. Germany offers the world's strongest PV cluster with over 60 silicon/wafer/cell/module manufacturers, more than 100 PV equipment manufacturers, and 60 PV R&D institutes as well as hundreds of material/component producers. PV manufacturers located in Germany generated turnover of EUR 12.2 billion including exports in 2010.

#### 3 Bioenergy Industry

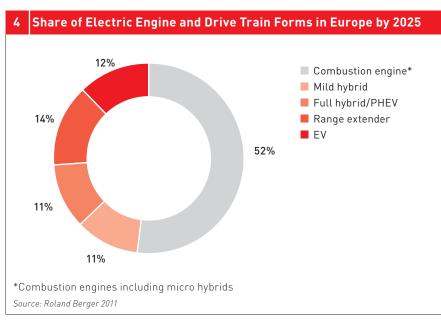
Germany is Europe's largest consumer of bioenergy, with a 2008 share of more than 19 percent of EU-27 bioenergy consumption. In 2009, bioenergy contributed 5.5 percent to fuel consumption, almost 8 percent to heat, and 5 percent to power consumption levels. The industry has set itself bold goals for the future: 18 percent of power and 15 percent of heat consumption should be bioenergy-generated by 2030.

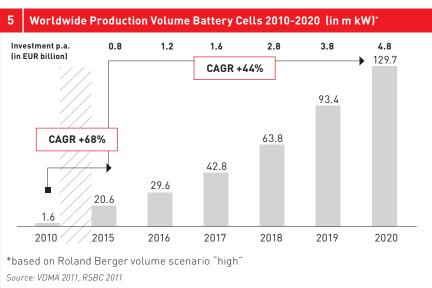


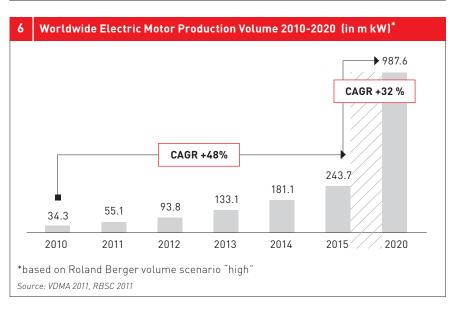




## Future Key Markets: Electromobility







#### 4 Alternative Drive Technologies

The future shortage of fossil fuels is widely recognized by German end users with the need to turn to alternative drive technologies enjoying widespread acceptance. According to a study conducted by Roland Berger, electric vehicles and drive train forms, e.g. battery electric vehicles (BEVs) and hybrids will capture European market share of almost 50 percent by 2025.

#### 5 Battery Production

With the increasing use of electronic power trains, new technologies and production capacities will be developed. The boundaries between automobile producers and suppliers will dissolve, and a shift in the value chain will occur (e.g. in-house production). Production sites and plants for battery production will be situated close to OEM production plants. Today, 30 final assembly plants - with a production capacity of over one third of total automobile production in Europe - are located in Germany. Germany is excellently positioned to increase its share of the developing battery production market by using its proven know-how, outstanding R&D landscape and competence clusters.

#### 6 Electric Motor Production

It is not foreseen that the combustion engine will be completely replaced by alternative drive technologies in the medium term. Conventional combustion engine technology continues to have a major role to play, with hybrid concepts expected to dominate the market for some time. In fact, additional business opportunities in the classical M&E sector will present themselves as electromobility becomes more widespread. As a highly industrialized production location with excellent cross-sector process capacities, Germany is ideally positioned to capitalize on the synergies being created in traditional and new production processes.

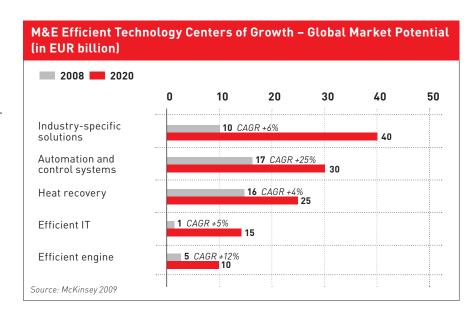
## Driving M&E Market Growth: Energyefficient Technologies

German companies active in energyintensive industry sectors have been working steadily for decades to optimize production process energy-efficiency levels. Prohibitive greenhouse gas emission regulations and rising raw material prices provide further incentive for the production sector to dramatically reduce energy use and emission levels.

Fundamental production process changes, which would represent additional energy savings beyond those changes made to date, are therefore being considered in a number of energy-intensive sectors.

In total, the worldwide market potential for efficient M&E industry technologies is expected to grow from a 2008 figure of EUR 49 billion at a pace of eight percent annually representing around EUR 120 billion in 2020. The German Engineering Federation (VDMA) has carried out a 2010-2020 market forecast of possible barriers to market entry, life cycle costing effect on new investments, and energy efficiency as a differentiation factor. Findings show that energy efficiency will have a significant impact on all three factors measured.

The M&E sector, with expertise running the gamut from energy conversion to energy-efficient components and production, plays a central role in the future prospects of the environmental technology sector. Three submarkets in particular are of major significance, joining together with industry-specific solutions to form the core growth areas in the years ahead.



#### **Automation and Process Control**

The consistent alignment of automation and control technology for energy management purposes can contribute significantly to higher energy efficiency levels within the different manufacturing industry sectors. An average annual growth rate of five percent is expected, with worldwide market volume forecast to reach the EUR 30 billion level by 2020. Automation and control technology will also play an increasingly large role based on two specific developments: faster and more precise control (supporting increased device energy efficiency) and the change in customer preferences to specifically tailored products.

#### **Industrial Drives**

Around one quarter of total energy consumption and two thirds of power consumption in industrial production are generated by drives and drive systems. For that reason, low consumption in this sector is an important lever for optimized energy use – particularly in non-energy intensive sectors. The global market for energy-efficient drives currently stands at around EUR 5 billion

(equivalent to around 85 percent of total turnover from new drives sold). With annual growth of around six percent and an energy-efficient model market penetration increase of almost 100 percent, the market potential by 2020 will stand at around EUR 10 billion.

#### **Heat Recovery**

Although heat recovery at large temperature differences is already being successfully implemented in many energy-intensive industry sectors, the corresponding technology for low temperatures is still in the development stage. This involves both solutions for the reuse of steam in upstream process steps as well as the use of waste heat for power generation. By 2020, the global market potential for energy recovery systems will be approximately EUR 25 billion (equivalent to four percent growth per annum).

## Market Leadership Powered by German Engineering Excellence

## World Market Share – German Machine Trade by Subsector

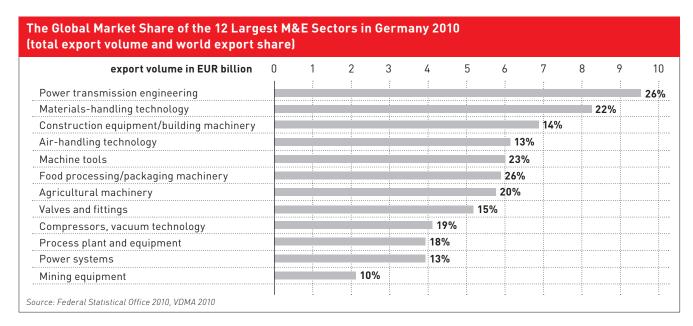
German manufacturers are the world leaders in 17 out of 32 M&E sectors in international comparison. In a further 11 categories, German companies occupy second or third spots compared to their international rivals. Germany secures first place in seven of the 12 largest industry sectors in terms of revenue. It also ranks in second and third places four and one time respectively. These numbers show very clear, that developing and manufacturing machinery in Germany is highly competitive.

#### Value Chain Opportunities

It's not just machinery and equipment production which is attractive to foreign investors; other parts of the value chain demonstrate rich opportunity for profitable future investment. R&D centers, for example, are just one area where extra government support is attracting new investment (see "Financing & Incentives" section). Service and maintenance, repair & overhaul are other value chain areas proving popular due to their market size and healthy growth prospects. Mechanical engineering is also an integral part of the electromobility value chain. Some electric vehicles no longer require "traditional" parts, with new components needing to be integrated instead.

Technological advances are also making a difference to the perceived value percentage in vehicle pricing. Germany's auto track record and technology leadership will ensure that electric vehicles are competitive on all fronts.





## International R&D Leadership

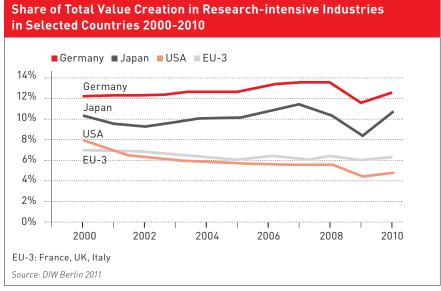
Germany is Europe's leading R&D investment nation. In international comparison, only the US, Japan and China have higher domestic R&D budgets. Germany is also a world leader in terms of R&D investment as share of GDP, with a figure of 2.8 percent outperforming the EU-27 2009 average of 2.1 percent.

#### World Innovation Leader

According to the European Innovation Scoreboard 2009, Germany is the fastest growing of Europe's leading innovation nations. It also belongs to the small group of European countries with innovation performance levels above those of fellow EU-27 member states and other countries. The report also singled out Germany as being particularly strong in terms of the economic effects of innovation.

German patent figures pay testimony to the innovation work done in German companies: with over 12,500 patents granted at the European Patent Office in 2010, Germany's share is almost twice as large as that of France and the UK combined. Germany is also the leading European nation in triadic patents (patents registered at the three major global patent offices: the European Patent Office, the United States Patent and Trademark Office, and the Japan Patent Office). With 73 triadic patents per million inhabitants in 2008, Germany ranks third only after Switzerland and Japan. German advanced and high technologies have driven overall economic development within Germany for a number of years, with above average growth until 2008. Since 2007, Germany has been the largest gross and net exporter of research-intensive goods in the world.





#### **High Innovation Rate**

Over 27 percent of German manufacturing company turnover is generated from innovative products. These are products which are new to the enterprise and to the market. This ratio is comparatively low in France and the UK at around 16 percent for both countries, while Finland can point to an above average 21 percent rate (the European average lies at 19 percent). A 2011 study carried out by the German Institute of Economic Research

(DIW) found that no other industrialized country produces a larger share of gross value added in researchintensive manufacturing industries than Germany. The share of total value creation in research-intensive industries in Germany is above Japan and US levels and more than double the share of France, UK, and Italy combined. By swiftly implementing the latest innovations, companies are able to secure their leading roles in their respective fields.

#### **New Technology Investment**

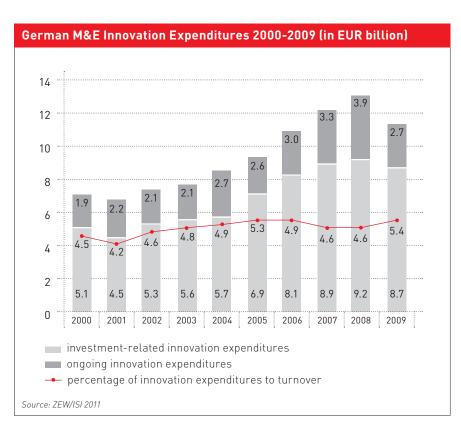
The M&E industry counts as one of the most innovative sectors in the economy. Seventy percent of M&E companies were active as innovators in the period 2007-2009. Of these, 55 percent brought new or significantly improved products to market, while 42 percent introduced new or noticeably improved production and process technologies. M&E innovation outlay reached a new high of EUR 13 billion in 2008, with forecasts expecting 2011 investment expenditure to return to pre-crisis levels.

With total aggregate R&D expenditure of EUR 11.4 billion in 2009, the M&E industry accounted for more than 10 percent of the national economy's total planned R&D budget. For the period 2010-2011, companies and joint-research institutes conceive a budget plan in similar or slightly higher measure. The German economy retains its role as a globally competitive and flexible R&D test bed.

#### Technological Academic Excellence

A world-renowned location for high quality mechanical engineering, Germany provides access to an advanced network of universities active in the field of M&E. With strong connections to the industry, 99 higher education institutions are home to mechanical engineering study programs. As the most widespread study program, mechatronics represents the interdisciplinary study program of the three major industries in Germany: automotive, mechanical engineering, and electrical and electronic.

Germany's M&E workforce enjoys international recognition. Over 30 percent of German university graduates have an applied sciences or engineering degree background.



With more than 50,000 students starting mechanical engineering studies in winter 2010, technical courses of study remain very much in demand. Mechanical engineering, with more than 400,000 matriculated students, ranks second in the top 20 of the most in-demand study programs.

In 2009, M&E companies and joint-research institutes could point to an R&D workforce of around 40,000. The share of R&D employees employed in the industry has grown constantly over the last 10 years.

#### Public R&D Support: Germany's High-Tech Strategy

As R&D is considered to be among the most important areas for the development of the German economy, both industry and the public sector have made a commitment to spend around three percent of national GDP per year on R&D activities. This amounts to approximately EUR 70 billion R&D spending each year. In addition, an unprecedented campaign to foster the advancement of new technologies has been launched by the German government. This campaign - known as the "High-Tech Strategy" - is combining the resources of all government ministries, committing several billion euros annually to the development of cutting-edge technologies. R&D projects can accordingly count on numerous forms of financial support. There are many programs allocating support in the form of R&D grants, interest-reduced loans, and special partnership programs.

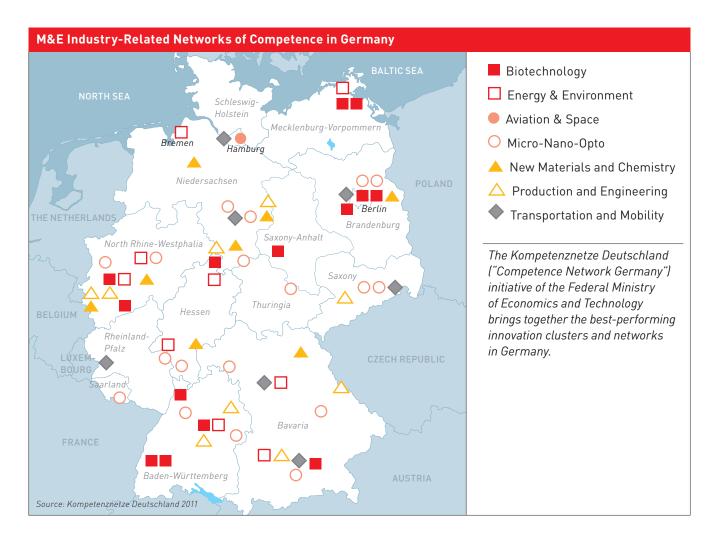
## M&E Industry Cluster

Thanks to the decentralized nature of the M&E industry, a number of clusters have been able to develop strong academic and business networks. This has helped them secure an internationally leading position in various technology fields and consolidated their international benchmark status. As an industry dependent on different technological areas, the M&E segment benefits from the shared flow of knowledge in Germany's broad competence cluster networks. By connecting the knowledge of local research institutions and companies, numerous clusters active in different M&E

related topics can be found across Germany. Germany's unique "industry cluster" concept has created an environment in which actors in all industry sectors are able to flourish in close proximity with other industry actors and investors, academic institutions, and research centers. The German Federal Government's cluster strategy encompasses a competition to promote exchange processes between universities and companies; measures to foster nontechnology-specific collaboration; region-specific measures to foster the development of clusters in individual fields of technology; crossindustry competence creation; and a cutting-edge cluster competition.

#### Fertile R&D Landscape

As the largest organization for applied sciences in Europe, the Fraunhofer institutes are active in developing new technologies for industry and the public sector. Seventeen thousand Fraunhofer employees develop cutting-edge technologies in 80 research institutions spread across Germany. Of these, 17 Fraunhofer research institutes specialize in matters purely M&E related. International subsidiaries and research networks ensure that Fraunhofer institute competences enjoy global reach.



## **Dynamic Labor Market**

#### Outstanding Quality through Longstanding Experience

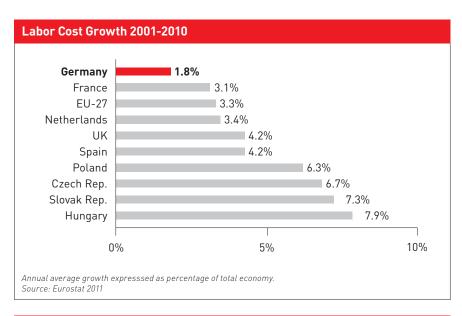
Germany enjoys a long and successful tradition in mechanical engineering and manufacturing. Researchers and companies as well as employees continue to profit from this global know-how. The "Made in Germany" quality seal has long been recognized as a sign of engineering excellence and precision across the globe. The M&E industry in Germany is ideally placed to further profit from German engineering know-how and experience.

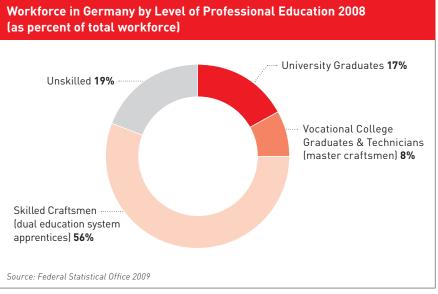
#### **World Class Education Standards**

Germany's world-class education system ensures that the highest standards are always met. More than 80 percent of the German workforce has received formal vocational training or is in possession of an academic degree. Germany provides direct access to a highly qualified and flexible labor pool ensuring that skilled workers are well prepared for the workplace.

#### **Dual Education System**

The country's dual education system – unique in combining the benefits of classroom-based and on-the-job training over a period of two to three years – is specifically geared to meet industry needs. The German Chambers of Industry and Commerce (IHKs) ensure that exacting standards are adhered to, guaranteeing the quality of training provided across Germany.





#### **Competitive Labor Costs**

High productivity rates and steady wage levels make Germany an extremely attractive investment location. Labor cost increases have been the lowest in Europe in recent years, with a modest annual increase rate of less than two percent. The M&E sector has recorded an even more modest annual average wage growth rate of just 0.77 percent over the last five years. German productivity rates are almost ten percent greater than

the EU-15 member state average, and almost one quarter higher than the OECD average. Highly flexible working practices such as fixed-term contracts, shift systems, and 24/7 operating permits contribute to enhance Germany's international competitiveness as a suitable investment location for internationally active businesses.

## Creating Investment Stability

## Sound and Secure Legal Framework

According to the World Economic Forum (WEF), Germany is one of the world's best locations in terms of planning and operating security. Germany is also one of the world's leading nations in terms of intellectual property protection and protection from organized crime. German regulatory authorities are highly professional in their operations. The German legal system also counts as one of the world's most efficient and independent. Social, economic, and political stability provides a solid base for corporate investment projects. Contractual agreements are secure and intellectual property is strictly protected in Germany.

#### Open and Transparent Markets

The German market is open for investment in practically all industry sectors, and business activities are free from regulations restricting day-to-day business. German law makes no distinction between Germans and foreign nationals regarding investments, available incentives or the establishment of companies. The FDI legal framework in Germany favors the principle of freedom of foreign trade and payment. There are no restrictions or barriers to capital transactions or currency transfers, real estate purchases, repatriation of profits, or access to foreign exchanges.

#### Reliable Logistics Infrastructure

Germany's infrastructure excellence is confirmed by a number of recent studies including the Swiss IMD's World Competitiveness Yearbook and various UNCTAD investor surveys.

Most Attractive FDI Destinations in Europe According to Corporate Executives						
Country	European Rank	International Rank				
Germany	1	5				
Poland	2	6				
UK	3	10				
France	4	13				
Romania	5	16				
Czech Republic	6	17				
Source: A.T. Kearney 2010						

Number of FDI Projects in Europe in the M&E Industry by Destination Country							
Destination Country	2006	2007	2008	2009	2010	Total (2006-2010)	
Germany	21	23	72	65	32*	213	
UK	20	22	42	50	45	179	
France	41	34	35	23	16	149	
Russia	13	21	31	30	33	128	
Poland	21	24	14	8	11	78	
Other Countries**	125	142	149	93	111	620	
Overall Total	241	266	343	269	248	1,367	

<sup>\*</sup>preliminary 2010 data

Source: fDi Markets 2011

The 2009-2010 Global Competitiveness Report of the WEF ranked Germany first for infrastructure; singling out Germany's extensive and efficient infrastructure for highly efficient transportation of goods and passengers for special praise. Accumulated in this score for Germany are high marks for the quality of roads and air transport, excellent railroads and port infrastructure, as well as its communications and energy infrastructure.

## Internationally Competitive Tax Conditions

Germany has developed one of the most competitive tax systems in the world. Significant company taxation reforms made in 2008 have resulted in a decrease of the corporate tax burden by around 25 percent. The overall average corporate tax burden has sunk to just below 30 percent, with a number of federal states providing even more competitive tax rates. Standard corporate income tax has also been reduced by ten percent to just 15 percent on all corporate taxable earnings.

<sup>\*\*</sup>Other countries includes 33 remaining countries outside the top five countries listed and non-specified countries

### Financing & Incentives

In Germany, investment projects can receive financial assistance through a number of different instruments. These instruments may come from private sources or consist of public incentives programs available to all companies - regardless of country of provenance. They fit the needs of diverse economic activities at different stages of the investment process.

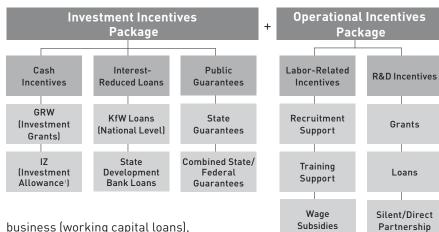
## Early Stage Investment **Project Financing**

Technologically innovative startups in particular have to rely solely on financing through equity such as venture capital (VC). In Germany, appropriate VC partners can be found through the Bundesverband Deutscher Kapitalbeteiligungsgesellschaften e.V (BVK – "German Private Equity and Venture Capital Association"). Special conferences and events like the Deutsches Eigenkapitalforum ("German Equity Forum") provide another opportunity for young enterprises to come into direct contact with potential VC partners. Public institutions such as development banks (publicly owned and organized banks which exist at the national and state level) and public VC companies may also offer partnership programs at this development stage.

## Later Stage Investment Project Financing

Debt financing is a central financing resource and the classic supplement to equity financing in Germany. It is available to established companies with a continuous cash flow. Loans can be borrowed for day-to-day

#### Types of Incentives in Germany



1) only in Eastern Germany

business (working capital loans), can help bridge temporary financial gaps (bridge loans) or finance long-term investments (investment loans). Besides offers from commercial banks, investors can access publicly subsidized loan programs in Germany. These programs usually offer loans at attractive interest rates in combination with repayment-free start-up years, in particular for small and medium-sized companies. These loans are provided by the stateowned KfW development bank and also by regional development banks.

#### Cash Incentives for **Investment Projects**

When it comes to setting up production or service facilities, investors can count on a number of different public funding programs. These programs complement the financing of an investment project. Most important are cash incentives provided in the form of non-repayable grants applicable to co-finance investmentrelated expenditures such as new buildings, equipment or machinery. In Eastern Germany, investment grants are complemented by an investment allowance (Investitionszulage IZ), which is usually allotted in the form of a tax credit but which can also be provided in the form of a taxfree cash payment.

#### Labor-related Incentives and **R&D Project Grants**

After the location-based investment has been initiated, companies can receive further subsidies for building up a workforce or the implementation of R&D projects. Labor-related incentives play a significant role in reducing the operational costs incurred by new businesses. The range of programs offered can be classified into three main groups: programs focusing on recruitment support, training support, and wage subsidies respectively. R&D project funding is made available through a number of different incentives programs targeted at reducing the operating costs of R&D projects. Programs operate at the regional, national, and European level and are wholly independent from investment incentives. At the national level, all R&D project funding has been concentrated in the so-called High-Tech-Strategy to push the development of cutting-edge technologies. Substantial annual funding budgets are available for diverse R&D projects.

Germany Trade & Invest provides a plethora of inward investment-related services to international investors. After careful consultation with the individual investor, a support program of consultancy and information services is drawn up to help set the stage for investment success. Here we provide a typical example of the types of services recent investment projects have benefited from.

## Best Practice I: MetoKote

#### **Company Information**

MetoKote Corporation, headquartered in Lima, Ohio, is the industry leader in protective coating applications, serving over 900 customers throughout the United States and the world.

#### **Product Information**

MetoKote supplies coating applications - such as electrocoating (e-coat), powder coating, and liquid paint - for a variety of industries. MetoKote's applications are utilized in agriculture, appliances, the automotive industry, construction equipment, industrial equipment, recreation, and the truck and bus segment.

#### **Project Information**

The new manufacturing plant was required to serve new customers in the Rhein-Neckar region and to function as a pilot project focused on reaching further customers in continental Europe.

#### **MetoKote Investment Project Time Line**

#### April 2007

Initial contact with Germany Trade & Invest

#### May 2007 - September 2007

Meeting with local business development agencies, site visits, and incentive application support

#### October 2007 - July 2009

Meetings with potential customers, business plan revision, location short list and further site evaluation

#### September 2009

Closing contract with key customer

#### October 2009

Final site selection

#### November 2009

Start of construction work

#### March 2010

Equipment installation

#### June 2010

Production ramp-up

#### **Investment Volume**

- EUR 6.5 million
- Jobs created: 50+
- Location: Mannheim, Baden-Württemberg

#### **Support Required**

- Site selection support
- Business development services
- Tax & legal information
- Financing & incentives consulting

## Creating New Business in Record Time

Germany Trade & Invest helped provide a market overview and set out possible market-entry strategy options. Contact with potential partners and multipliers was initialized, with all necessary legal and financial information made available in customized form.

In just a few months, *Germany Trade & Invest's* industry experts identified, analyzed and set up visits to potential production sites on behalf of the investor. Supplementary support services specific to company formation, personnel recruitment, incentives application processes, and company expansion procedures were also provided.

After a comprehensive selection process designed to refine and meet the exact needs and requirements of MetoKote, the city of Mannheim in the state of Baden-Württemberg was selected as the preferred location.

# hoto: © GA Pack 201;

## Best Practice II: Greatview Aseptic Packaging (GA Pack)

#### **Company Information**

GA Pack is one of a select few integrated providers of aseptic packaging material and related services globally. The company describes itself as the second largest supplier of roll-fed aseptic packaging material in the world.

#### **Product Information**

The company is committed to providing leading dairy and non-carbonated soft drink producers with customized, high quality and competitively priced aseptic packaging that are fully compatible with standard roll-fed filling machines. GA Pack also provides filling equipment for installation at the customer's production sites to process the beverages into the respective packaging materials.

#### **Project Information**

GA invests EUR 50 million to build a European production facility in Germany. The new production site marks an important milestone in the company's international growth strategy. The production of aseptic packaging material in Germany is scheduled to start in 2012. The factory in Halle/Saxony-Anhalt is expected to have an annual production capacity of approximately 4 billion packs by the end of 2013, and create jobs for at least 110 skilled employees.



#### Investment Volume

- EUR 50+ million
- Jobs created: 110
- Location: Halle, Saxony-Anhalt

#### **Support Required**

- Site selection support & cost factor analysis
- Tax & legal information
- Financing & incentives consulting

According to Peder Berggren, director international business, GA Pack, the company sees the potential and the customer demand to grow the facilities over time: "This is a long-term commitment to the dairy and beverage industry, the region and to Europe in general. We are here to stay, and to offer the liquid food industry a choice that creates real value."

Halle was chosen for its optimal mix of competitive location factors, as Peder Berggren explains: "The production site offers excellent railroad connections and motorway access, and is located conveniently close to Leipzig airport. Also, a great number of professionals live in the area. What won us over though, were the authorities of Saxony-Anhalt and Halle, who have shown great professionalism and eagerness to win this project. They have made it very clear from the start that, together, we can create a winwin-situation."

## **Germany Trade & Invest Helps You**

Germany Trade & Invest's teams of industry experts will assist you in setting up your operations in Germany. We support your project management activities from the earliest stages of your expansion strategy.

We provide you with all of the industry information you need - covering everything from key markets and related supply and application sectors to the R&D landscape. Foreign companies profit from our rich ex-

perience in identifying the business locations which best meet their specific investment criteria. We help turn your requirements into concrete investment site proposals; providing consulting services to ensure you make the right location decision. We coordinate site visits, meetings with potential partners, universities, and other institutes active in the industry.

Our team of consultants is at hand to provide you with the relevant background information on Germany's tax and legal system, industry regulations, and the domestic labor market. Germany Trade & Invest's experts help you create the appropriate financial package for your investment and put you in contact with suitable financial partners. Incentives specialists provide you with detailed information about available incentives, support you with the application process, and arrange contacts with local economic development corporations.

All of our investor-related services are treated with the utmost confidentiality and provided free of charge.

Strategy	Evaluation	Decision & Investment		
Project Management Assistance				
Business oppor- tunity analysis and market research	Project partner identification and contact	Joint project management with regional develop- ment agency	Coordination and support of negotiations with local authorities	
Location Consulting/Site Evaluation				
Identification of project-specific location factors	Site preselection	Site visit organization	Final site decision support	
Support Services				
Identification of re- levant tax and legal issues  Project-related financing and inc	\	Administrative affairs support	Accompanying incentives application and establishment formalities	

## **Imprint**

#### **Publisher**

Germany Trade and Invest Gesellschaft für Außenwirtschaft und Standortmarketing mbH

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#### Layout

Germany Trade & Invest

#### Print

CDS Chudeck-Druck-Service, Bornheim-Sechtem

#### Support

Promoted by the Federal Ministry of Economics and Technology and the Federal Government Commissioner for the New Federal States in accordance with a German Parliament resolution.

#### Notes

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All market data provided is based on the most current market information available at the time of publication. *Germany Trade & Invest* accepts no liability for the actuality, accuracy, or completeness of the information provided.

#### **Order Number**

13692

#### The information contained in this brochure has been compiled from the following sources:

BMU (Federal Ministry for the Environment, Nature Conservation and Nuclear Safety), ErneuerbareEnergien.de (website), Berlin, 2011.

BMWi (Federal Ministry of Economics and Technology), *Erneuerbare Energie in Zahlen – nationale und internationale Entwicklung*, Berlin, 2010.

BMWi (Federal Ministry of Economics and Technology), *Initiative Kompetenznetze Deutschland* (www.kompetenznetze.de), Berlin, 2011.

DIW (German Institute for Economic Research), Forschungsintensive Industrie gut aufgestellt, Berlin. 2011.

EPIA (European Photovoltaic Industry Association), *Global market outlook for photovoltaics until 2015*, Brussels, 2011.

EPO (European Patent Organisation), Statistics (website), Munich, 2011.

European Commission, Eurostat (website), 2011.

fDi Markets, fDi markets.com (website), 2011.

Federal Statistical Office, Beschäftigte und Umsatz der Betriebe im Verarbeitenden Gewerbe, Wiesbaden, 2010.

Federal Statistical Office, *Durchschnittliche Bruttomonatsverdienste der vollzeitbeschäftigten Arbeitnehmer nach Wirtschaftszweigen und Jahren*, Wiesbaden, 2010.

Federal Statistical Office, Hochschulstatistik 1980-2009, Wiesbaden, 2011.

Federal Statistical Office, Umsatz im Verarbeitenden Gewerbe (Wertindex) 1999-2009, Wiesbaden, 2009.

Fraunhofer-Gesellschaft, Institute und Einrichtungen, Munich, 2011.

Hochschulkompass, Hochschulrektorenkonferenz 2010 (website), 2011.

IKB (IKB Deutsche Industriebank AG), Maschinenbau 2020 – Globaler Markt – Mittelständische Strukturen, Düsseldorf, 2009.

IPC (International Patent Classification), PCT Quarterly Report, Geneva, 2011.

McKinsey Deutschland, Wettbewerbsfaktor Energie – Neue Chancen für die deutsche Wirtschaft, Frankfurt am Main, 2009.

Plastics Europe, The Compelling Facts about Plastics 2010, Brussels, 2011.

Roland Berger Strategy Consultants & VDMA (German Engineering Association), Zukunftsfeld Elektro-mobilität – Chancen und Herausforderungen für den deutschen Maschinen- und Anlagenbau, Munich, 2011.

VDA (German Association of the Automotive Industry), Jahresbericht 2011, Berlin, 2011.

VDMA (German Engineering Association), FuE Personal im Maschinenbau: Entwicklung seit 1998, Frankfurt am Main, 2010.

VDMA (German Engineering Association), *Innovationsaufwendungen im Maschinen- und Anlagenbau*, Frankfurt am Main, 2011.

VDMA (German Engineering Association), *Kennzahlen zu Forschung und Innovation im Maschinenbau*, Frankfurt am Main, 2010.

VDMA (German Engineering Association), Maschinenbau in Zahl und Bild 2011, Frankfurt am Main, 2011.

VDMA (German Engineering Association), *Produktion nach Fachzweigen des Maschinenbaus in Deutschland*, Frankfurt am Main, 2011.

World Economic Forum, Global Competitiveness Report 2010-2011, Geneva, 2011.

World Economic Forum, International Legal System Efficiency Assessment 2008, Geneva, 2009.

WWEA World Wind Energy Association, www.wwindea.org, 2011.

ZVEI (Central Association of the German Electrical and Electronics Industry), *Marktzahlen nach Segmenten*, Frankfurt am Main, 2010.



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Promoted by the Federal Ministry of Economics and Technology and the Federal Government Commissioner for the New Federal States in accordance with a German Parliament resolution.

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