Chemie
Baden-Württemberg

2016/17

Diversity
Progress
Future

Profile of an industry

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Diversity · Progress · Fu

The chemical industry in Baden-W

Baden-Wuerttemberg: a chemistry-friendly state

This booklet gives you the details. The chemical industry here produces a range of pharmaceuticals, cosmetics, plastics, paints and coatings that is as diverse as the state itself and the people living in it.

Diversity

A mix of well-established small and medium-sized companies, subsidiaries of large corporations and start-up ventures nurtures a spirit of innovation. Managers, researchers, developers, engineers, technicians, production workers and office staff work in their factories, laboratories and offices with one and the same aim in mind – to become steadily more productive, more customer-oriented – in a word, better.

Progress

The chemical industry is essential for the future of Baden-Württemberg. It is one of the state's most productive sources of innovation for other industries. Many innovative product developments originate in chemical laboratories.

The chemical-pharmaceutical industry invests more than five per cent of its turnover in research and development.

ture
ürttemberg

Future

Baden-Württemberg's excellent traffic infrastructure and research-oriented environment make it an ideal location for the chemical industry, in fact the fourth largest in Germany. Baden-Württemberg's chemical industry thinks globally, too. More than half its sales are made in export markets.

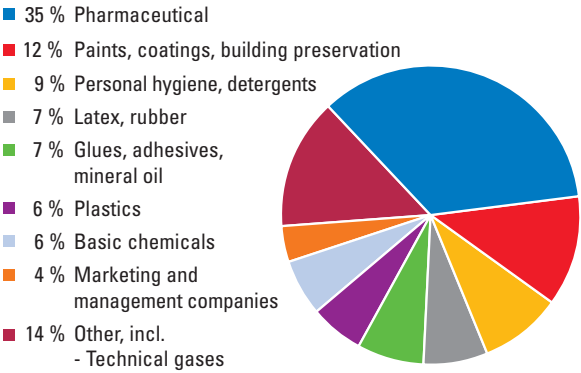
Without the chemical industry it would be impossible to cope successfully with some of the key challenges of our time, like husbanding of natural resources and climate protection. More than one hundred thousand people are working in Baden-Württemberg's chemical industry to ensure that the future will be worth living.

Structures and Figures

Diversity is our strength

Diversity

Percentage employed by sub-sectors



Sales and numbers employed

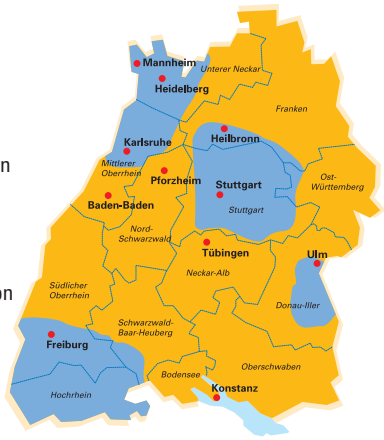
442 companies

107,000 employees

Annual sales approx. 37.3 billion euro

Source: Data supplied by member companies of chemical industry associations in Baden-Württemberg (Status: March 2016)

Principal locations of chemical industry



Mannheim/Karlsruhe region
131 companies
34,504 employees

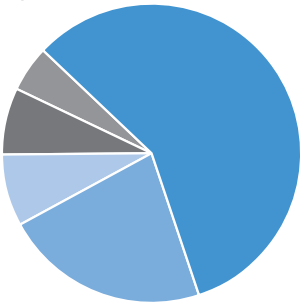
Freiburg/Upper Rhine region
66 companies
15,460 employees

Greater Stuttgart area
109 companies · 23,075 employees

Ulm region
29 companies · 14,150 employees

Typical medium-sized structures

Almost 90 per cent of companies have fewer than 500 employees.



- 58 % up to 100 employees
- 22 % 101 - 300 employees
- 8 % 301 - 500 employees
- 7 % 501 - 1,000 employees
- 5 % over 1,000 employees

Products Made in Baden

A world of chemistry

Baden-Württemberg's chemical industry is traditionally a supplier of precursor products and components. These include, for example, basic essentials for the web: innovative products for electronic chip manufacture, plastic casings for computers, mobile telephones and for the infrastructure are developed and produced here.

Chemistry has an ubiquitous presence in our everyday lives:

Chemistry makes us mobile

Scratch-resistant paints, fuel-saving tyres, ultra-robust, light structural materials, high-performance engine oils, flexible and durable adhesives, new fuel additives and improved insulating materials – Baden-Württemberg's chemical industry makes an important contribution to the car of the future.

Chemistry preserves

Environment-friendly detergents producing better washing results with smaller quantities – this is made possible by special chemical additives produced by Baden-Württemberg companies. Chemical treatments make clothing waterproof, dirt-resistant and easier to iron. Colours are more attractive, too.

-Württemberg

Chemistry helpst

Cosmetics, products for care of skin and hair are present in the homes of just about every consumer. Baden-Württemberg's chemical industry helps enhance your quality of life by developing improved sun screens, medicines with less side-effects and new, alternative therapeutic agents.

Chemistry protects ...

the climate. By improving its production processes, the chemical industry has almost halved its greenhouse gas emissions since 1990. Production in the same period rose by 62 per cent – but absolute energy consumption went down by over 19 per cent. The industry and its products are also indispensable for saving energy.

Innovative backbone of t

The strong “Mittelstand”

Nine out of ten companies in the chemical, pharmaceutical and paint industries in Baden-Württemberg have less than 500 employees. They form the “Mittelstand” – Germany’s small and medium-sized companies that play a vital role in our state and its economy.

Flexible and efficient

Baden-Württemberg’s small and medium-sized businesses employ around 40 per cent of all employees in this sector. They research, develop, produce and sell products that are often at the cutting edge of their particular niche segment. Because small and medium-sized businesses have advantages in terms of their structure: with their flat hierarchies they can react flexibly to changing circumstances.

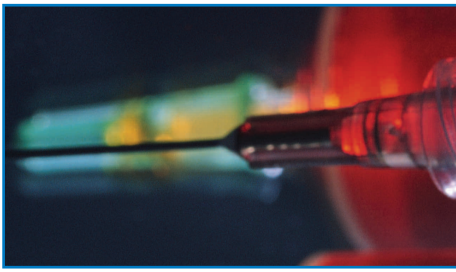
he industry

Location factor

Many of the small and medium-sized businesses have a long tradition. They have firm roots in their region and long-standing employees. It is not unusual for employees to have worked for the same company for many years, and in many cases the companies have an above-average number of trainees. These factors contribute to securing jobs in Germany. To enable these small and medium-sized enterprises to continue being the innovative backbone of Baden-Württemberg's economy, they require support and reliable framework conditions, which means flexible solutions are needed. In particular this includes internationally competitive energy costs and security of supply.

Germany's Pharmacy

The pharmaceutical industry in B



Baden-Württemberg's manufacturers of pharmaceuticals and diagnostic agents are a powerful stimulus for innovation. Baden-Württemberg has one of the highest concentrations of pharmaceutical manufacturers in Germany. With a 35-per-cent share, the pharmaceutical industry is the largest sub-sector in the state.

Diversity and specialisation

Baden-Württemberg is the chosen location of several global players and also a large number of smaller, privately-owned companies. Research, development and manufacture of health care products can be found at many different locations. This naturally includes companies using bio- and gene technology.

Leading global position

The leading European manufacturers of homoeopathic, phytotherapeutic and anthroposophic preparations are located in Baden-Württemberg, as also are companies supplying products for regenerative medicine like skin grafts. The state is also the home of one of Europe's largest biotechnological production plants. And not to forget: important manufacturers in the area of self-medication produce here too.

aden-Württemberg

Research defends strong position

Baden-Württemberg's pharmaceutical manufacturers conduct research in all fields, especially for products to combat major scourges like cardiovascular disease, cancer, Alzheimer's and central nervous system disorders. They are also strong in the new area of personalised medicine. To achieve success, they need an environment that is open to competition. Their development work should not be hampered by blanket cost-cutting policies in the health care sector. The sole valid objectives of research are patient benefit and health care quality.

Decoration, Protection a

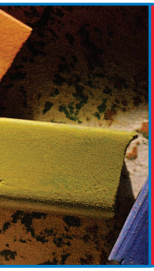
The paints and coatings industry

Paints and coatings manufacture accounts for a 12 per cent share of Baden-Württemberg's chemical industry and gives the state a leading position in this sector at national level. One of the reasons for this is the proximity of the automobile industry, but products for building protection and printing inks also make a significant contribution.

Protection and maintenance

The importance of paints and coatings for a country's economy extends far beyond the mere material value of these products. Surface protection of building and manufacturing materials ensures maintenance of assets valued at many billions of euros, which would otherwise succumb to corrosion and rot and need replacing much more frequently. The paint industry's contribution to alleviation of the world's climate problems with its products for protection of buildings is so large that it is impossible to express it in figures.

nd Maintenance



Constant progress

One notable development in recent years is the steadily increasing market share of water-based and powder coatings and coatings with a very high solids content. This is clear proof that technological progress – for example, development of products containing nanoparticles – also yields benefits in the field of environmental protection.

Strong position of family-owned companies

The paints and coatings industry in Baden-Württemberg has a structure in which small and medium-sized companies predominate. Many of these have been family-owned for generations. Exporting their innovations to all parts of the globe, they help to enhance Baden-Württemberg's image as a location that is open to the world.

Focused on the Future

Bio- and gene technology

Baden-Württemberg is one of the most preferred locations in Germany for companies specialising in bio- and gene technology. They cover a broad bandwidth ranging from start-up ventures to internationally active pharmaceutical companies. A large number of biotech companies have been founded here.

The state's five bio-regions are in the greater Stuttgart region, the Rhine-Neckar Triangle, in Ulm and Freiburg, and on Lake Constance. They have created an innovative environment for the industrial use of biotechnological processes.

Wide range of applications

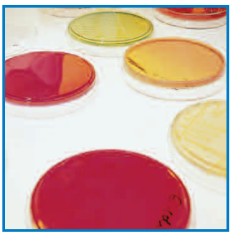
Bio- and gene engineering enables breakthroughs in the field of medicines, innovative and safe diagnostic agents, hardier and higher-yielding varieties of plants and environmentally compatible processes and products. Modern drug development and manufacture, especially in the fight against cancer, is heavily reliant on these new sciences

Biotechnology and environmental protection

Biotechnological manufacturing processes have a large number of advantages. They require fewer raw materials, less energy, less water, and generate less waste. Any residues are largely reused in new processes, effectively closing the manufacturing cycle.

Public debate on biotechnology

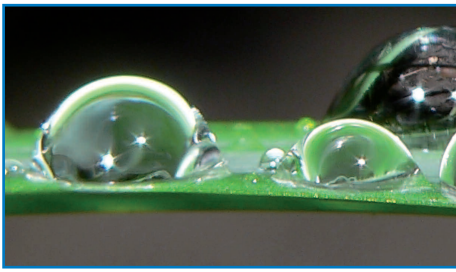
The bioengineering industry wants to encourage open debate on the responsible use of its technologies. Because this is the only way to create the sort of social and political climate in which their safe and beneficial use can be guaranteed.



The prime criteria for the use of bio- and gene engineering – as with anything else in the field of chemistry – are safety and protection of the environment in general and mankind in particular. The companies involved are constantly seeking to improve the safety and environmental compatibility of their processes, independently of any officially imposed legal standards. The chemical industry takes its environmental obligations seriously under the umbrella of the Chemie[3] initiative

Small but very important

Nanotechnology



Nanotechnology is a pioneering, modern science influencing a broad cross-section of industries. It has made great strides forward in recent years.

Small and new

The chemical industry is already using nanoparticles in the manufacture of a wide range of products. Their optical, electrical and magnetic properties, plus their hardness, viscosity and melting properties give nanoparticles a number of advantages over conventional materials. They can, for example, make surfaces scratch-resistant, non-reflecting, waterproof and grease- and dust-resistant.

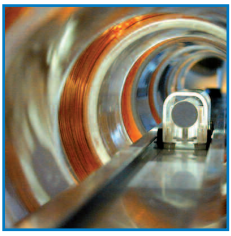
Small and direct

Nanoparticles are also valuable in medical research. Charged with clinically active substances, they can be transported exactly to the parts of the body where they are needed.

Big in Baden-Württemberg

Baden-Württemberg is one of the leading German states in the field of nanotechnology. Of the more than 280 nanotechnology locations in Baden-Württemberg, considerably more than half work in the field of industry, and of these, more than two-thirds are medium-sized enterprises.

Further-more, Baden-Württemberg has numerous scientific institutions conducting research on nanomaterials, mostly in close collaboration with the chemical industry.



Reliable, affordable, effi

Energy – what the chemical indu

As a core industry in Germany and Baden-Württemberg, the chemical industry uses energy and resources efficiently. To achieve this, new technologies are used – and products are manufactured that are indispensable for saving energy.

Climate protection through products and processes

Many products of the chemical industry protect the climate and save more energy than is needed for their production. Practical examples include building insulation, new innovative sources of light and sustainable mobility. With the likes of lightweight construction materials and fuel-efficient tyres, safe alternatives are coming into use, step by step. Moreover, renewable sources of energy – from solar to wind power – cannot be reasonably used without chemicals either.

Raw materials

It goes without saying that the chemical industry uses raw materials efficiently. For us, efficiency means testing renewable raw materials for their usability and integrating them into the industry's processes. But this has to be technically possible, economically and environmentally viable, and be carried out in a socially responsible manner. Our researchers and developers are working to achieve this.

cient
stry needs

Energy policy

The chemical industry is fully behind the energy revolution. But we need to structure it properly, and for this reason we have clear policy demands: the process needs to be safe, affordable and environmentally friendly. Currently there is a clear imbalance. Renewable energies are expanding substantially – which is good for the climate. Bad for the chemical industry, on the other hand, is that energy supplies look set to be less reliable in the medium term, while at the same time energy costs are continuing to rise in comparison to other parts of the world.

Sustainability: We stand

Acting responsibly for the future

Under the Chemie³ (Chemistry³) umbrella, the VCI (German chemical industry association), the BAVC (German chemical industry employers' association) and the IG BCE (German trade union for the mining, chemical and energy industries) advocate sustainable development. In dialogue with stakeholders, the alliance partners are promoting sustainability within their industry.

The Chemie³ initiative

These three partners have made it their goal to strengthen sustainability as a mission statement within the industry. The fundamental principles of our actions are to protect mankind and the environment as well as promote good, fair working conditions and economic efficiency. Examples are the Responsible Care Programme, the Wittenberg Process and the Chemistry Social Partnership.

Three dimensions

Innovations in the chemical industry are making an important contribution towards meeting global challenges. At the same time, we are well aware of the numerous tasks that still lie ahead of us. Our industry not only sees sustainable development as an obligation towards future generations, but also as an opportunity to develop a strategy that will secure the future of the chemical industry. It can combine economic success with social justice and ecological compatibility.

for Chemie³

Joint efforts

By joining forces, the partners are working to achieve our aims. To date, the Chemie³ sustainability initiative is unique. All three partners have a common commitment to success – and are well aware of their responsibility, both for the chemical industry and for society.

CHEMIE³
THE SUSTAINABILITY INITIATIVE OF THE GERMAN CHEMICAL INDUSTRY

Competition

At state level, the companies regularly take part in a competition to win the Responsible Care Award. The competition focuses on issues such as resource efficiency, occupational, plant and transport safety, as well as environmental protection. In 2012 and 2013, the national winners were companies from Baden-Württemberg.

Job Protection

Well-balanced wage and social p

Ever since the 1980s the employers and the trade union in the chemical industry have been following agreed policies aimed at perpetuating the industry's presence and safeguarding employment opportunities for future generations. This has been made possible by a pragmatic attitude to social partnership which has become a hallmark of the chemical industry. It finds its expression in wide-ranging collective agreements, supplementary agreements on social benefits and the foundation of institutions jointly administered by the employers and the union.

Flexible labour agreements

- Corridor for working hours
- Options for long-term accounts and qualification
- Remuneration corridor – demographic corridor
- Reduced rates for job starters
- Performance-related annual bonus

Pioneering agreements

- Collective agreement on life work and demographic issues
- Collective agreement on training and entry-level jobs for the future
- Collective agreement on one-off payments and pension schemes
- Principles "For a family-conscious personnel policy offering equal opportunities"

olicies

- A responsible approach to the social market economy (the Wittenberg case)

Joint institutions

- Chemie-Stiftung Sozialpartner-Akademie (CSSA) – a joint employer-union foundation
- So.Win – the Social Partner Lab for Innovation and Sustainability (formerly GIBUCI)
- Unterstützungsverein der Chemischen Industrie (UCI) – a fund offering assistance to young people starting careers in the industry

Safeguarding jobs

The objective of any policy agreed between employers and unions must be achievement of a fair balance between employer and employee interests. It must not adversely affect the companies' financial performance. It is the joint responsibility of both sides to safeguard jobs and job location.

Careers with a Future

Training facilities in the chemical

Attractive, interesting careers, modern, safe workplaces – that is what training in the Baden-Württemberg chemical industry can offer. Around 1,000 young people opt in favour of a career in our industry every year. They are interested in modern science and technology. They are happy to contribute their dedication and a strong team spirit. The industry stands behind the dual vocational training system on all levels. Currently the companies in Baden-Württemberg are training around 3,000 trainees. The chemical industry is thereby fulfilling its social responsibility.

Modern-day careers

The qualifications for careers in the chemical industry are regularly reviewed to make allowance for developments in industrial practices. Dual (theoretical/practical) training courses are available for some fifty different scientific, technical and commercial qualifications that give trainees and apprentices excellent preparation for their future careers.

Study plus practice

The training courses prepare the applicants for a career in the chemical industry with a combination of theoretical study at the Baden-Württemberg Duale Hochschule and practical, on-the-job training in a chemical company.

industry

Career start for academics

With the platform "Your Chemistry Career", the Chemical Associations (Chemie-Verbände Baden-Württemberg) offer information for job-seeking graduates: what companies are looking for and what jobs and career opportunities they are offering. (www.yourchemistrycareer.com).

Ongoing training

The training facilities in the chemical industry offer much more than just basic training courses. Ongoing specialist training and courses aimed at developing personal skills are part of the standard range available from the training establishments. Further training courses for qualification as engineer, technician or master craftsman offer candidates additional opportunities for career advancement.

Additional information about careers in the chemical industry can be found at "www.elementare-vielfalt.de".

Working for the future

The need for stable background c

Stable, industry-friendly political conditions are essential for the future development of the chemical industry in Baden-Württemberg.

Increasing foreign competition

Companies located in Baden-Württemberg are finding themselves exposed to increasingly keen competition at global level. Roughly two thirds of the workforce in the Baden-Württemberg chemical industry are employed in companies belonging to foreign corporations which make benchmark and cost comparisons of their international locations.

EU influences

The EU is nowadays playing a leading role in shaping the legal background for industrial activities. The decisions taken by the responsible EU committees should make due allowance for the interests of the industrial countries and regions making significant contributions to Europe's prosperity. There is a need for more practically oriented regulations and less bureaucracy.

Responsibility in Baden-Württemberg

Political and fiscal decisions taken in Baden-Württemberg should reflect an understanding of the needs of local industry and a friendly disposition towards small and medium-sized companies. Extra charges due to Baden-Württemberg's special levies, for example resulting from the regional

onditions

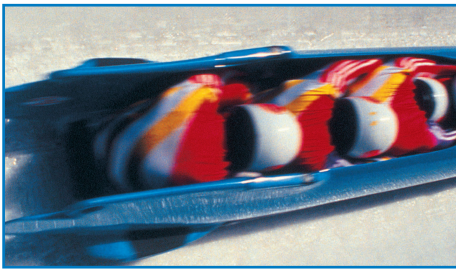
Renewable Energies Act or the so-called "Water Penny" tax, should be avoided. The chemical industry needs qualified young people and this can only be achieved by placing more emphasis on natural sciences in teaching programmes at school level. Education is a staple food for Baden-Württemberg. It must be cultivated.

Competitive health care sector

The German health care market is highly regulated. But what it really needs is more competition. The pharmaceutical industry, which is so important for Baden-Württemberg, will only be able to offer high-grade, well-paid jobs, conduct research that will benefit the sick and continue costly development of innovative products, if it has a properly functioning, competitive environment in which to operate.

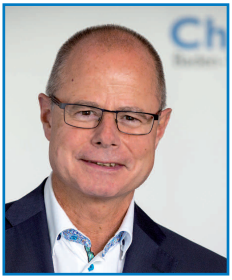
Services and Representa

Portrait of Baden-Württemberg's



Chemie
Baden-Württemberg

Baden-Württemberg's chemical industry associations represent the chemical companies doing business there. They publicise their positions on financial, environmental, health care and social matters to the politicians, the media and the general public. They are the Baden-Württemberg branch of the Association of the Chemical Industry (VCI) and the Baden-Württemberg Chemical Employers' Association (agvChemie).



Thomas Mayer
Principal General Manager

Specialised sub-groups belonging to the foregoing associations include the regional branches of the Association of the German Pharmaceutical Industry and the Association of the German Coatings and Printing Inks Industry.

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tion
chemical industry associations

Core responsibilities

- We offer advice and constructive criticism on the drafting of legislation relating to our members' business activities.
- We explain the political expectations of our member companies to politicians, bureaucrats and the media.
- We give our member companies advice on questions relating to economic policies and the environment.

VCI Baden-Württemberg

Peter Dettelmann
Chairman of VCI Regional Management Board

- We negotiate collective agreements with the trade union.
- We give our member companies advice on questions relating to worker participation in management, the Works Council Constitution Act and labour law in general.
- We keep politicians, the media and the business world informed on matters of special concern to our member companies.
- We cultivate a dialogue between the chemical industry and the schools.

agvChemie Baden-Württemberg

Markus Scheib
Chairman of Management Board, agvChemie

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