



# Courage for freedom – tackle reforms!

Joint economic policy positions  
of the mechanical and plant engineering  
industry 2025



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## Profile of the VDMA

### A strong representation of interests for a strong industry

The mechanical and plant engineering sector stands for innovation, export-orientation and SMEs. It employs around three million people in the EU, more than 1.2 million of them in Germany alone. With a value added of around 280 billion euros (2023), mechanical and plant engineering contributes the highest share of the manufacturing industry to the European gross domestic product of the EU-27. With technology for people, we provide solutions for the many challenges we face.

The VDMA represents around 3,600 German and European mechanical and plant engineering companies, making it the most important industrial association in Europe. As a platform of 35 mechanical engineering associations, it covers the entire value chain of the capital goods industry – from components to complete systems, from system suppliers to service providers, from machines to self-organizing logistics.

As an industry association, the VDMA works on behalf of its members at national and international level. It constructively represents the interests of the mechanical engineering industry and is committed to overall economic progress and the common good in Europe. Its economic policy positions are derived from the conviction that competition, individual responsibility, and open markets are the basis for microeconomic and macroeconomic success driven by innovation and investment. Being an entrepreneur in Germany and Europe should remain attractive in the future.



[www.vdma.org](http://www.vdma.org)

## Courage for freedom – tackle reforms!



2025 is the year in which we need to set the course for growth and competitiveness of our industry. We must be globally competitive. Only an economically strong Federal Republic in a strong Europe will allow us to survive in the current and future geopolitical situation. This is the only way we can master challenges such as climate change, the restructuring of the energy supply, demographics and digitization. This is the only way we can assert ourselves between the competing blocs of the USA and China.

Germany has become a brake pad in Europe. We need to change that. We need a federal government that is capable of taking action and that sets the course for an economic upturn. The mechanical and plant engineering industry can clearly state what companies need now. Industrial companies plan and invest for the long term. Accordingly, first and foremost those factors that have a long-term effect must be changed, instead of getting lost in regulatory details and subsidies for supposed lighthouse projects.

We demand reliable and good framework conditions for all companies, technological neutrality, and more trust in market forces and entrepreneurship in general. What we specifically offer and demand is outlined on the following pages. We view this as an invitation to engage in a constructive dialog with politicians and society. Only together can we safeguard our freedom, our openness to the world, our social market economy, our prosperity, and our democratic system.

Bertram Kawlath  
VDMA President

# Economic policy reforms

## Facts and figures

- Deterioration of Germany's competitiveness<sup>1</sup>
  - Germany ranked 24th out of 67 countries surveyed in the IMD World Competitiveness Ranking in 2024<sup>1</sup>; downward trend since 2014 (6<sup>th</sup> place); 9 places worse in 2024 than in 2022; tax policy particularly poor (62<sup>nd</sup> place)
  - Negative development of the competitive position of the manufacturing sector (mfg.) since 2017, below average in an EU comparison<sup>2</sup>
- Conference Board Measure of CEO Confidence™ for Europe 2024
  - Business prospects within Europe significantly worse than outside
  - Simpler and more innovation-friendly regulation as the most important lever for competitiveness
- Need for action from a business perspective (Top 5)<sup>3</sup>: Reduce bureaucracy, speed up approval procedures, modernize infrastructure, increase investment in education, reduce tax and duty burden
- Little evidence of deindustrialization in Germany so far
  - Mfg. share of value added in GDP has remained constant at around 20 % for 30 years<sup>4</sup>
  - Sustained positive trend in the share of medium and high-tech in the value added of mfg.<sup>4</sup>
  - Rising labor productivity (euros per hour) in mfg. since 1991<sup>5</sup>
  - Decline in industrial production, but noticeable increase in gross value added<sup>2</sup>
- Weak development of the production potential<sup>6</sup>
  - Decline in real potential growth from around 2 - 3 % annually from 1970 to the early 1990s to 1.4 % between 1995 and 2018 and an average of around 0.6 % since 2019
  - Dampening effects due to a shortage of labor, an aging capital stock, and weaker productivity growth

<sup>1</sup> Source: International Institute for Management Development (IMD)

<sup>2</sup> Source: ifo Institute 2024

<sup>3</sup> Source: VDMA economic survey, Q3/2024

<sup>4</sup> Source: OECD

<sup>5</sup> Source: Federal Statistical Office

<sup>6</sup> Source: SVR, annual report 2023/24

## VDMA position: tackle structural reforms

**Europe as a business location is facing enormous, simultaneous challenges: climate-neutral and digital transformation, demographics, and geopolitical conflicts. Instead of short-sighted crisis management, long-term international competitiveness must be ensured through structural, broad-based reforms. Political commitment is needed to tackle these reforms swiftly.**

- Reducing bureaucracy
  - Acceleration of planning and approval procedures
  - Reduced reporting obligations, especially for SMEs
  - Check regulations for practicability and consistency
- Reform the tax and social system
  - Lower corporate taxes and improved depreciation conditions
  - Relief of the factor labor
- Securing skilled workers
  - Full utilization of the domestic labor force through education, training, childcare, extended weekly and lifetime working hours, and incentive compatibility of social security
  - Using automation to relieve the workload of skilled workers
  - Targeted, qualification-oriented immigration of skilled workers
- Expand infrastructure
  - Accelerate the expansion of digital infrastructure
  - Expansion of renewable energies and energy infrastructure
  - Modernization of transport infrastructure
- Enable free trade
  - Use free trade agreements and international partnerships to diversify supply chains
  - Technology sovereignty through mutual dependencies
- Strengthen market-based competition
  - Do not block structural change; enable market entries and exits as well as job changes
  - Using swarm intelligence through entrepreneurial freedom
  - Do not relieve private individuals of liability and responsibility
  - No permanent subsidization far from the market

# Labor market and wage policy

## Facts and figures

- Germany is one of the most expensive EU mechanical engineering locations
  - Labor costs per hour (2023)<sup>1</sup> 51.40 €
- Personnel costs as % of gross production value (2021)<sup>2</sup>
  - Mechanical engineering on average 26.6 %
  - Mechanical engineering branches from 18.0 % to 33.8 %
- Social security contribution rate (2024)<sup>3</sup> 40.9 %
- Average gross annual earnings of full-time employees in mechanical engineering (2023)<sup>2</sup> € 68.360
- Long-term unemployed (%) of the labor force<sup>4</sup>

	2023	2010
– Germany	1.0 %	3.2 %
– EU (27)	2.1 %	3.9 %
- High importance of permanent staff in mechanical engineering (2023)<sup>2</sup>
  - Proportion of standard employees 90.2 %
  - Proportion of marginally employed persons 1.3 %
- Temporary work
  - Ca. 90 % of mechanical engineering firms use temporary work<sup>5</sup>
  - Temporary employment rate (2023)<sup>2</sup> 3.2 %
  - Industry surcharges for the M+E industry, staggered by operating time 15 to 65 %
- Demographic change<sup>6</sup>

	2023	2005
– Share of employed persons aged 55 or older	25.8 %	14.3 %
- Short-time workers in mechanical engineering (2023)<sup>7</sup> 14.000
- Collective bargaining coverage of VDMA member companies (2024)<sup>5</sup>
  - With tariff commitment 30 %
    - Thereof collective agreement 82 %
    - Thereof company collective agreement 18 %
  - Without collective bargaining 70 %
    - Orientation towards or reference to collective agreement(s) 66 %
  - Proportion of companies with a works council 59 %

<sup>1</sup>Source: Eurostat; only DK (€ 53.80) and NL (€ 52.40) are more expensive.

<sup>2</sup>Source: Federal Statistical Office

<sup>3</sup>Source: Federal Ministry of Labor and Social Affairs

<sup>4</sup>Source: Eurostat

<sup>5</sup>Source: VDMA

<sup>6</sup>Source: Federal Statistical Office, Microcensus

<sup>7</sup>Source: Federal Employment Agency

## VDMA position: modernize labor markets

**Competitiveness, growth, and a long-term supply of labor and skilled workers require adaptability, specialization, a flexible labor market, and a future-proof social security system. Due to demographic trends, the volume of work needs to be stabilized. The use of AI and other digital technologies require modern and unbureaucratic framework conditions. More operational and individual leeway is needed.**

- Adapt the Working Hours Act – make rest periods more flexible, weekly instead of daily maximum working hours, maintain trust-based working hours
- Remove barriers and facilitate employment
  - Relaxation of fixed-term employment contracts, abolish the ban on pre-employment
  - Extension of the maximum duration of temporary employment
  - Create incentives for employment at retirement age and make it legally secure; revise Section 41 SGB VI
- Mobile working, flexitime, trust-based working hours, working time accounts, job sharing, or further training – the starting point must always be individual solutions
- Preserve freedom of association – no (in)direct obligation to be bound by collective agreements
- Promote contracts for work and services as the basis for innovation networks based on the division of labor
- No extension of corporate co-determination
- Legalization of company alliances for work
- Limitation of social security contributions to 40 percent
- Pension insurance reform
  - Raise retirement age, strengthening subsidiarity
  - Increase the attractiveness of personal pension provision and company pension schemes
  - Early retirement max. 3 years before the standard retirement age and only with incentive-neutral deductions
- Align social benefits with the requirements of the low-wage sector; observe the wage gap principle

# Foreign trade and free trade

free trade

## Facts and figures

- Strong international integration of the German economy
 

	2023	2005
– Export share of GDP <sup>1</sup>	38.0 %	37.3 %
– Import share of GDP <sup>1</sup>	32.6 %	30.7 %
– German direct investment portfolio abroad (2022)	ca. € 1,546 bn	
- Total German export volume (2023) € 1,590 bn
- Mechanical engineering (2023)<sup>2</sup>:
 

– Export volume	€ 208 bn
– Export ratio <sup>3</sup>	81.7 %
– Machine trade surplus (exports minus imports)	€ 114.3 bn
– World trade shares (2023) <sup>4</sup>	
China	18 %
Germany	14 %
USA	9 %
- Germany is world market leader in 9 of 31 specialised sectors of mechanical and plant engineering, including drive technology, agricultural engineering, machine tools, and process engineering machinery and equipment
- German direct investment portfolio in foreign mechanical engineering (2022) € 56.4 bn
- De-globalization harms everyone<sup>5</sup>

– GDP decline in GER (6.9 %), EU without GER (4.9 %), RoW (1.5 %)	
– Decline in mechanical engineering production in Germany	19.5 %
- Federal export credit guarantees (2023)<sup>6</sup>

– Total (exports to 145 countries)	€ 18.4 bn
– Newly covered export transactions with credit periods from 1 – 5 years (esp. small tickets)	€ 900 mil
– Annual result Euler Hermes	€ 740 mil

<sup>1</sup>Source: Federal Statistical Office, provisional figures

<sup>2</sup>Source: Federal Statistical Office, VDMA

<sup>3</sup>Exports as a percentage of production

<sup>4</sup>Source: National statistical offices, VDMA; share of mechanical engineering in machinery exports of the most important supplier countries

<sup>5</sup>Source: IfW, IMPULS study supply chains after Corona

<sup>6</sup>Source: Euler Hermes, BMWK

## VDMA position: bolster free trade and resilience

**Economic success in Europe is based on open markets. In Germany alone, almost one in four jobs depends on exports. Free trade agreements are essential to survive in international competition. They significantly contribute to securing prosperity, diversifying trade, and, thus, to Europe's economic resilience.**

- Strengthening free trade
  - Ratify free trade agreement with MERCOSUR, finalise negotiations with Indonesia, conclude free trade agreement with India based on the EFTA model
  - Do not overload free trade agreements with environmental and social policy requirements and objectives; dialog at eye level instead of sanctions
- De-risking China
  - Demand a level playing field
  - Use trade defence instruments such as anti-dumping and subsidy procedures
  - Reduce dependency through diversified trade
- Secure and expand the transatlantic partnership
  - Mutual recognition of conformity assessments
  - Coordinated approach to global trade issues
- Make export financing competitive
  - Bring financing and loan guarantees together
  - Make climate policy sector guidelines internationally competitive
  - Modernize and simplify eligibility criteria for Hermes cover
- Combat extraterritorial sanctions worldwide
  - Secure payment transactions despite sanctions
  - Protect EU companies from the effects in the best possible way
- Facilitate work assignments in the EU
  - Standardize reporting requirements in the EU member states, reduce bureaucracy
  - Implement a standardized digital registration procedure (eDeclaration) in EU member states

# Digitization

## Facts and figures

- Digitization Index (DESI)<sup>1</sup>
  - Finland (1<sup>st</sup> place) 85.6
  - Germany (9<sup>th</sup> place) 61.4
  - France (20<sup>th</sup> place) 52.0
  - EU average 57.7
- Proportion of machine manufacturers with a significant security incident<sup>2</sup>
  - up to 249 employees 3 %
  - 250 to 500 employees 41 %
  - 500 to 1,000 employees 38 %
  - more than 1,000 employees 28 %
- Share of fibre optic connections in total stationary broadband connections<sup>3</sup>
  - Korea 89.6 %
  - OECD average 42.5 %
  - USA 23.1 %
  - Germany 11.2 %
- Within the German economy, the mechanical engineering sector has an above-average level of digitization<sup>4</sup>
- Lack of IT specialists is seen as the biggest obstacle<sup>5</sup>
- 64 percent of all machine manufacturers surveyed (N = 110) see a medium to very strong impact on their own business model from AI-based products and services<sup>6</sup>
  - Across Europe, 47 % of the manufacturing industry uses at least one AI technology<sup>7</sup>
  - The availability of qualified personnel poses particular challenges for Germany (76 %) compared to the EU (57 %)<sup>7</sup>

<sup>1</sup>Source: EU Commission 2024, SMEs with at least a basic level of digital use, share of companies in %

<sup>2</sup>Source: VDMA study Industrial Security and Product Piracy 2024

<sup>3</sup>Source: OECD broadband statistics 2023

<sup>4</sup>Source: BMWK 2024; digitization of the economy in Germany; electrical engineering and mechanical and vehicle engineering with 154.8 (Ø 105.1)

<sup>5</sup>Source: VDMA study: Leadership and innovation in times of digitalization, 2018

<sup>6</sup>Source: VDMA report on artificial intelligence in mechanical engineering, 2020

<sup>7</sup>Source: European enterprise survey on the use of technologies based on artificial intelligence, 2020

## VDMA position: accelerate digitization, consolidate regulation

**Digitization creates potential for intelligent production and new business models. In close cooperation with society and politics, growing requirements for research, training and qualification, norms and standards, legal and data security can be realized, and digital sovereignty can be strengthened. The aim must be to position Europe as a leading market and provider.**

- Strengthening digital sovereignty through innovation incentives
- Improved coordination of initiatives – thinking digitization in a European, or even better, global way
- Uniform innovation and industry-friendly framework conditions in the EU internal market, including for data economy and AI; create secure and reliable European connectivity
- Development and establishment of a federative data ecosystem for the manufacturing industry ("Manufacturing-X")
- Securing the European supply of semiconductors for industry (in particular with structure sizes > 28 nm)
- Promote further training and new qualifications for digital skills
- Design a digital immune system with little bureaucracy and cut excessive reporting obligations for SMEs
- Actively promote and strengthen cyber resilience and cyber defence for NIS2 SMEs and provide the BSI with sufficient resources to support the economy affected by NIS2
- Secure the use of machine-related data; adapt the GDPR
- Strengthen research into the digitization of industry (e. g. through broad-based innovation platforms, cross-border test environments)
- Expand and secure digital infrastructure (e. g. 5G) nationwide and with high performance for industry
- Promote efficient data access and use of open and neutral standards (e. g. OPC UA CS) and strengthen them throughout Europe
- Norms and standards are the key to implementation: Strengthen the successful interplay between consensus-based standardization and consortial standardization; avoid excessive standardization; cross-industry harmonization of standards for interoperability, e. g. OPC UA for Machinery

## Facts and figures

- European mechanical engineering (EU 27) as a guarantor of prosperity<sup>1</sup>
  - Gross value added (2023) ca. € 280 bn
  - Employees 3 mil
  - Share of SMEs 98 %
  - Machinery sales in the domestic market (2023)<sup>2</sup> ca. € 740 bn
- German share of mechanical engineering sales in the EU 27<sup>2</sup> 42 %
- German mechanical engineering exports to the EU 27<sup>3</sup> € 92.3 bn
  - France € 14.5 bn
  - Italy € 10.3 bn
  - Poland € 9.4 bn
- German direct investment in mechanical engineering of the EU 27<sup>4</sup> € 15.6 bn
- EU reporting obligation on sustainability – SMEs hugely affected
  - European companies now affected by CSRD 5 times as often (instead of approx. 11,000 now 50,000)
  - In Germany, 30 times more companies affected by the CSRD compared to the NFRD (now 15,000 instead of approx. 550)
- Public debt of EU countries (2023/2024 estimate)<sup>5</sup>
  - European Union (27) 82.1 % / 82.4 %
  - Germany 62.9 % / 63.0 %
  - Italy 134.8 % / 136.6 %
- Regulatory initiatives of the EU Commission (2019 – 2024)<sup>6</sup>
  - Proposed regulations 416
  - Proposed guidelines 135
  - Delegated acts adopted 812
  - Adopted implementing acts 4943
- Bureaucracy costs for the German mechanical and plant engineering industry due to the EU Posting and Enforcement Directive (205,000 postings per year)<sup>7</sup> € 31 mil

<sup>1</sup> Source: Eurostat, estimates, gross value added at factor cost

<sup>2</sup> 2022; source: Eurostat, VDMA estimate

<sup>3</sup> 2023; source: Federal Statistical Office, VDMA

<sup>4</sup> 2022; source: Deutsche Bundesbank

<sup>5</sup> Share of GDP; source: Autumn forecast 2024 European Commission

<sup>6</sup> Source: Gesamtmetall

<sup>7</sup> Source: VDMA

## VDMA position: strengthening Europe's industrial base

**As a domestic market, a community of values, and a global player, the EU is of great importance to the mechanical engineering industry. Following the EU elections and the appointment of a new EU Commission, competitiveness is once again at the centre of EU policy. The EU must now turn words into action and take concrete measures to strengthen Europe's industrial base across the board.**

- Strengthening industrial competitiveness by creating innovation-friendly framework conditions for the entire industry
- Actively drive forward the simplification of the EU regulatory framework
  - Abolish contradictory and disproportionately burdensome regulations
  - New regulation only if need is proven by the EU Commission and impact analysis rules out disproportionate burdens
  - Avoid detailed regulation, leave room for innovation
- New political initiative to deepen the EU single market
  - Analyse and systematically remove obstacles in the internal market
  - Facilitate the posting of employees in Europe
  - No further erosion of state aid law; avoid intra-European subsidy races
  - Drive forward the Capital Markets Union
- Strengthening Europe's economic security
  - Use free trade as a resilience strategy
  - Allow promotion of "strategically relevant technologies" only in narrowly defined exceptional areas
- Making Europe crisis-proof and capable of action
  - Gradually abolish the unanimity requirement
  - Clearly define competencies and responsibilities, reorganise them according to the principle of subsidiarity and finance them adequately
  - Europeanise defence policy, internal security and refugee policy; regulate labor market/social policy nationally
- No communitization of liability risks without a political union with budget and control rights at European level

# Securing skilled labor and education

## Facts and figures

- Mechanical engineering is the most important employer for engineers
  - In total approx. 181,000, of which 11 % female<sup>1</sup>
  - Share of engineers in the total number of employees in mechanical engineering<sup>1</sup> 16 %
- High drop-out rates in engineering-oriented bachelor's degree programs at German universities (universities of applied sciences)<sup>2</sup>
  - Mechanical engineering/process engineering 33 % (32 %)
  - Electrical engineering/information technology 44 % (44 %)
  - Informatics 42 % (30 %)
- Above-average commitment of the mechanical engineering sector to dual training
  - Mechanical engineering training rate (2023)<sup>3</sup> 5.3 %
  - Share of mechanical engineering training companies (2023)<sup>3</sup> 37 %
  - Companies that want to offer more technical apprenticeships in the coming months<sup>4</sup> 36 %
  - Average share of trainees retained<sup>4</sup> 90 %
- Bottlenecks in the recruitment of skilled labor
  - Vacancy period (days)<sup>5</sup>: Mechanical and industrial engineering (195), STEM professions (196), IT (155)
- Unused skilled labor potential in Germany and abroad
  - School leavers without a qualification (2023)<sup>6</sup> 7 %
  - Around 250,000 young people in measures between school and vocational training<sup>6</sup>
  - 380,000 foreign students in Germany
  - Proportion of foreign students in engineering sciences in the winter semester 2023/2024<sup>6</sup> 25.6 %
  - Share of companies that were able to recruit new employees through the Skilled Immigration Act<sup>7</sup> 18 %

<sup>1</sup>Source: VDMA Engineering Survey 2022

<sup>2</sup>Source: German Centre for Higher Education Research and Science Studies 2020

<sup>3</sup>Source: Federal Employment; BIBB calculations, 31<sup>st</sup> December

<sup>4</sup>Source: VDMA Surveys 2023

<sup>5</sup>Source: Federal Employment Agency 2023

<sup>6</sup>Source: Federal Statistical Office

<sup>7</sup>Source: VDMA survey September 2023, a further 10 % stated "don't know"

## VDMA position: securing and qualifying skilled labor

**Qualified employees are a guarantee of success for companies. According to VDMA surveys, the shortage of labor and skilled workers – despite the recession – is one of the greatest risks to competitiveness. More people from Germany and abroad need to be attracted to technical professions, degree programmes, and further training. Automation does not make skilled workers redundant but makes an important contribution to alleviating the labor shortage.**

- General school education
  - Enhance cooperation between schools and companies
  - Introduce technology as a school subject, improve ICT skills and career guidance
- Vocational training
  - Strengthen dual training, value skilled labor
  - Reduce bureaucracy – give schools more freedom to make decisions
  - Better recognition of professionally acquired skills
- Study
  - Improve the quality of teaching, reduce dropout rates without compromising quality
  - Increase ICT skills (e. g. AI, Industry 4.0)
  - Strengthen practical relevance: promote dual study programmes
- Further training
  - Teach lifelong learning skills
  - Teach skills in ICT and new drive technologies
  - Further qualify vocational school teachers and trainers
- Domestic employment potential
  - Leading more young people to school-leaving qualifications
  - More all-day and childcare options
  - Employ qualified older employees for longer
- Foreign potential
  - Increase the attractiveness of Germany as an employment location for qualified immigrants
  - Reduce bureaucracy in the immigration of skilled labor; allow temporary work for placement

## Facts and figures

- Company share of total expenses for research and development (R&D) in Germany<sup>1</sup> 67.4 %
- Internal expenses of the German economy for R&D 2022<sup>1</sup> (share of mechanical engineering) € 82 bn (9.2 %)
- Increase in R&D personnel in mechanical engineering between 2012 und 2022<sup>1</sup> 29.6 %
- State share of R&D expenditure in mechanical engineering<sup>2</sup> 2.6 %
- High innovative strength of German mechanical engineering
  - Innovation expenditure<sup>3</sup> € 17 bn (5.7 % of turnover)
  - Share of companies with innovations<sup>3</sup> 72 %
  - Industry sales with new products<sup>3</sup> 15 %
- Germany is the most attractive R&D location for mechanical engineering; performance of engineering sciences is rated best<sup>4</sup>
- 46 % of VDMA members are affected by product or brand piracy; estimated annual damage<sup>5</sup>: € 4.1 bn
- Around 600 contractually bound research projects under the supervision of the VDMA research associations<sup>6</sup>
- Country shares in mechanical engineering patent applications at the European Patent Office<sup>7</sup>
  - Germany 20 %
  - USA 18 %
  - Japan 13 %
- Research allowance in mechanical engineering<sup>8</sup>
  - 17 % of all projects submitted come from the mechanical and plant engineering sector – number 1 in the economy<sup>8</sup>

<sup>1</sup> Source: Stifterverband Wissenschaftsstatistik

<sup>2</sup> Source: Stifterverband 2021

<sup>3</sup> Source: Centre for European Economic Research (ZEW) 2022

<sup>4</sup> Source: VDMA Survey 2024

<sup>5</sup> Source: VDMA Product Piracy Study 2024

<sup>6</sup> Source: VDMA estimate

<sup>7</sup> Source: European Patent Office 2023

<sup>8</sup> Source: ZEW, VDMA 2024

## VDMA position: producing the future

**Research and innovation are essential for the future of Europe as an industrial location. This is the only way to secure value creation and in the long term. Mechanical and plant engineering provides solutions for the global challenges of our time. For this, companies need innovation-friendly framework conditions. This includes open-topic and broad-based research funding, as well as securing the skilled labor base for research and innovation.**

- Promotion of research and innovation in Germany and modernizing Europe: facilitate access and engage the industry – from research needs to implementation
- Avoid overlaps and duplication in funding instruments
- Practical implementation, promotion and expansion of tax incentives for research
- Future-proof further development and sustainable financial expansion of the pre-competitive and broadly effective Industrial Collective Research (IGF) to 300 million euros
- Strengthening production research, which determines scaling, competitiveness, and technological sovereignty
- Adaptation of funding procedures to the current requirements of agile and shortened R&D processes through open-topic and accelerated tenders
- Efficient transfer of results that gives all companies access to new knowledge; as multipliers, associations guarantee success in this regard
- Boost German involvement in the development of the upcoming 10<sup>th</sup> EU Research Framework Program
- Targeted support, networking platforms, and unbureaucratic funding programs for start-ups that support knowledge transfer and joint innovation projects with industry
- Bolster industrial property rights through improved administrative and legal framework conditions, combat product piracy and industrial espionage

## Facts and figures

- Share of costs due to energy consumption of gross production value in Germany (2021)<sup>1</sup>
  - Mechanical engineering 0.9 %
  - Motor vehicles and motor vehicle parts 0.6 %
  - Manufacture of chemical products 4.8 %
- Market sizes of German machinery and plant engineering segments<sup>2</sup>
  - Off-highway (mobile) € 22 bn
  - Buildings € 60 bn
  - Automation € 75 bn
  - Greentech, drive, energy € 86 bn
  - Other mechanical and plant engineering € 123 bn
- Electricity prices/gas prices (kW/h) for industry, 1<sup>st</sup> half of 2024<sup>3</sup>

Finland	€ 0.12 / € 0.11
Germany	€ 0.28 / € 0.08
Italy	€ 0.24 / € 0.06
France	€ 0.2 / € 0.08
- Emission prices (tCO<sub>2</sub>e)<sup>4</sup>
  - Sweden (ETS + Carbon Tax) € 120
  - European Union € 67
  - Canada € 55
  - China € 14
  - Japan € 1.50
- Up to 86 % of emissions in the OECD and BRICS countries can be avoided with state-of-the-art climate protection technologies from the mechanical engineering sector<sup>5</sup>

<sup>1</sup> Source: Federal Statistical Office

<sup>2</sup> Source: BDI – Transformation Paths 2024

<sup>3</sup> Source: Eurostat, monthly gross electricity costs of industrial companies with an annual consumption of 500 – 2,000 MWh

<sup>4</sup> Source: World Bank & Federal Environment Agency

<sup>5</sup> BCG&VDMA 'For Machinery Makers, Green Tech Creates Green Business', 2020

## VDMA position: understand the transformation as an opportunity

**Sustainably changing cost structures are a clear signal to accelerate the transformation away from fossil fuels. The mechanical engineering industry is on an ambitious target path, both as a solution provider and as a consumer. The competition that has flared up on transformation markets must be conducted fairly. Global CO<sub>2</sub> pricing is and remains the most efficient instrument for achieving climate targets.**

- From electricity transition to energy transition – technology-neutral, energy-efficient, cross-sectoral, and digital
  - Advance the European internal energy market
  - Energy efficiency is a central component of the energy transition
  - Reform energy market design for transformation and security of supply
  - Internalize external costs according to the polluter-pays principle
  - More speed in planning and approval procedures
- Expand the competitiveness of the mechanical engineering industry through the EU's pioneering role in climate protection in the European domestic market; new solutions must nevertheless have a global market perspective
- EU must advocate a serious, effective trading mechanism for global emissions reductions in the UN climate protection negotiations
- Organize the transition from national fuel emissions trading to the EU ETSII for heat and transport in the short term
- Reduce energy costs through a permanent reduction of the energy tax and a reform of grid fees; no permanently subsidized industrial electricity prices
- Give equal weight to environmental compatibility, security of supply, and economic efficiency
- Classify energy transition technologies as strategically important; secure the supply of raw materials and stabilize value chains; counter unfair trade with suitable instruments (e. g. prequalification criteria for tenders)
- Role model function of the public sector for investments

## Facts and figures

	2024 <sup>1</sup>	2008	1998
• Government spending ratio <sup>2</sup>	48.7 %	43.7 %	48.3 %
• Tax and contribution ratio <sup>2</sup>	39.8 %	39.6 %	42.3 %
• Tax ratio <sup>2</sup>	23.4 %	24.3 %	23.1 %
• Debt ratio <sup>2</sup>	63.1 %	65.9 %	59.4 %
• Interest tax rate <sup>3</sup>	4.6 %	11.3 %	15.5 %
• Trade tax <sup>4</sup>			
– Anti-investment taxation of the corporate substance			
– Around 11 % of companies account for over 90 % of trade tax revenue			
• Income tax: the main burden falls on a few shoulders <sup>4</sup>			
For incomes from € 104,832, 10 % of taxpayers bear approx. 57 % of the income tax revenue			
• Income tax burden of a corporation in 2023 <sup>5</sup>			
– Germany			29.9 %
– OECD average			23.7 %
– Among industrialized countries, only Japan, with 30.42 %, has a higher nominal burden than German corporations <sup>6</sup>			
• Change in nominal tax rates from 2008 to 2022 (percentage points) <sup>7</sup>			
– Germany			0.4 %
– Italy			-3.6 %
– France			-8.6 %
– Japan			-9.8 %
– USA			-13.4 %
• Significant acceleration of depreciation has many advantages: <sup>8</sup>			
– Positive effects on investment, employment, wage bill, private household consumption, and GDP			
– Leads to greater tax revenue in the long term			

<sup>1</sup>Forecasts by the German Council of Economic Experts (GCEE) and financial planning (debt level)

<sup>2</sup>Source: GCEE; in relation to GDP at current prices

<sup>3</sup>Source: GCEE, interest in relation to tax revenue

<sup>4</sup>Source: Federal Statistical Office, Federal Ministry of Finance

<sup>5</sup>Source: OECD

<sup>6</sup>Source: BMF, The most important taxes in international comparison 2023

<sup>7</sup>Source: IW

<sup>8</sup>Source: ifo Institute 2021

## VDMA position: tax reform now

**The economy urgently needs a modern corporate tax law: what is needed is a comprehensive streamlining of obligations, a rapid digitization of tax proceedings, and a reduction of the corporate tax burden to an internationally competitive level. There must be no new substance taxes!**

- Boost growth through innovation and investment incentives
  - Depreciation rules that reflect the true decline in value of fixed assets without selective choice of certain investments; declining balance depreciation is the first choice
  - De-bureaucratization of tax benefits for research and expansion of eligible expenses
  - Generate additional tax revenue through growth
- Restore efficiency in a timely manner by significantly expanding tax loss offsetting (carryforward and carryback); permanently mitigate minimum taxation
- No substance taxation motivated by distribution policy (assets, inheritances)
- Reduction of the profit tax burden to an internationally competitive level of max. 25 % through, among other things
  - Complete abolition of the solidarity surcharge
  - Fundamental reform of trade tax; deduction of trade tax as a business expense/ crediting and reduction of bureaucracy in the assessment basis
  - Reduction of the retention rate of Section 34a EStG and a SME-friendly structure
- Modernization of corporate tax law
  - Reduce tax bureaucracy through more digitization and flat-rate taxation
  - Low-bureaucracy and practical implementation of global minimum taxation (Pillar II)
  - More transparency in the negotiation of double taxation agreements and alignment with the exemption method
  - Interest on pension provisions in line with the market

### Facts and figures

- Internal market
  - Over 30 regulations on CE marking are the basis for the success of the internal market through uniform requirements
  - The legal framework for the marketing of products (New Legislative Framework) has been applied since 2008 and its principles have proven in practice for over 30 years
  - 90 % of mechanical engineering companies view digital operating instructions as a good solution and are in favor of extending them to all CE marking regulations
  - Further strengthen market surveillance: in 2023, there were 3,412 warning messages in the Safety Gate network that triggered 4,287 follow-up actions<sup>1</sup>
  - In certain product areas, over 80 % of imports are carried out without designation of a European contact person for the market surveillance authority
  - 9 out of 10 companies view IT security as a top issue, as the level of concern is constantly increasing<sup>2</sup>
  - At least 90 % of mechanical engineering companies are affected by the Cyber Resilience Act, as machines and machine systems often communicate via the internet
  - Over 800 standards reflect the state of the art, so standards have an important function for legal compliance
- Removal of technical barriers to trade
  - Any delivery to countries outside the European Economic Area (EEA) is affected
  - Market volume of € 114 bn<sup>2,3</sup> in Germany alone
  - Around 87 % of mechanical engineering products are exported and are therefore in global competition
  - In some sectors, 80 % of standards are developed at international level, which is why international compatibility is of key importance for the mechanical engineering industry

<sup>1</sup> Source: EU Commission

<sup>2</sup> Source: VDMA

<sup>3</sup> Source: Federal Statistical Office

### VDMA position: suitable legal framework for future markets

**Mechanical engineering is an important partner in shaping the future. Digitization is a driving force in mechanical engineering and part of the industry's ability to innovate. Mechanical engineering companies must not be overburdened with bureaucracy, as to be feared with many current and planned legislative activities.**

- Involvement of the mechanical engineering industry in upcoming legislative initiatives to ensure that implementation aspects are adequately taken into account; promotion of the coherence of planned regulations
- Strengthen international competitiveness through European standards that enjoy international recognition; make targeted use of the revision of the EU Standardization Regulation for this purpose
- Further strengthen market surveillance: more enforcement for fair competition, improving the level playing field
  - Use of the digital product passport (DPP) to achieve greater clout in market surveillance
  - There is no substitute for market surveillance, as third-party certification cannot fill this gap
- European and international standards as the basis for global market access conditions
  - Maintain the international connectivity of European standards
  - Design DPP for specific products via harmonized standards
  - No certification for the DPP or the data for the DPP
  - Further develop the success story of the legal framework for marketing products (New Legislative Framework, NLF) and utilize the opportunities offered by the planned NLF revision
- Relief for SMEs to unleash more innovative strength; reduction of bureaucracy and no third-party certification

## Facts and figures

- Environmental technology<sup>1</sup>
  - Environmental protection-related sales in manufacturing (2022): € 81.3 bn, thereof mechanical engineering with € 23.9 bn; 6 % increase in units with environmental protection-related sales from 9,125 (2021) to 9,684 (2022)
  - 376,213 employees worked in environmental protection in 2022, thereof 22 % in mechanical engineering
- Rulemaking
  - Increase in European delegated and implementing acts in the last legislative period 2019 – 2024 to 5,755 (previous legislative period: 3,101), many of them in the area of the Green Deal<sup>2</sup>
  - The number and complexity of legal requirements for products, chemicals and waste (e. g. ecodesign, substance restrictions) in the EU and third countries is continuously increasing
  - The Ecodesign Regulation defines the term SOC (Substances of Concern) for the first time with an as yet unknown, open-ended number of substances, estimated at more than 12,000; currently 241 substances of very high concern on the SVHC candidate list, rising trend<sup>3</sup>
  - In 2021, the circular economy generated sales of around € 105 bn (up 47 % on 2010) and employed around 310,000 people in the same year (up 11 % on 2010)
  - Increase in non-financial reporting obligations from the Green Deal, including the EU Deforestation Regulation (EUDR), which stipulates that certain products and raw materials must be deforestation-free, the Carbon Border Adjustment Mechanism (CBAM), which requires CO<sub>2</sub> real data from the supply chain for affected products, and the Corporate Sustainability Reporting Directive (CSRD), which includes almost 1,200 possible reporting points

<sup>1</sup> Source: Federal Statistical Office

<sup>2</sup> Source: EU Commission

<sup>3</sup> Source: ECHA

## VDMA position: less bureaucracy, more individual responsibility

**Mechanical engineering is a key component in shaping a sustainable future. To remain internationally competitive, companies must not be overburdened with impracticable, bureaucratic obligations and procedures. Unavoidable regulations must be drawn up in a transparent, careful, differentiated, coordinated and consistent manner, while involving affected stakeholders.**

- Withdraw or at least fundamentally simplify existing EU regulations, including the CSRD, CBAM, EUDR, and the CS3D:
  - Postpone and revise the Deforestation Regulation (EUDR) or override them completely
  - Increase de minimis limits in CBAM and stop its expansion
  - No additional sector-specific reporting standards as part of sustainability reporting (CSRD)
  - Limit EU due diligence law (CS3D) to direct suppliers
  - Make the EU taxonomy practicable for mechanical and plant engineering
- No "gold plating": 1:1 transposition of EU requirements into national law and rapid reduction of overfulfilled EU requirements
- ESG regulations must also apply to public administration and should always be tested for practicability by the public procurement sector before coming into force; regular practical evaluation after coming into force
- Digital product passport should promote circular economy, but must protect know-how – "need-to-know" principle
- Relieve companies of bureaucracy
  - Maintain risk-based approach to substance regulation (e. g. REACH); no blanket ban on PFAS
  - Global standardization of material compliance; administratively practicable instruments for supply chain communication
  - Further accelerate and simplify environmental approval procedures
  - Immediate withdrawal of the national Supply Chain Due Diligence Act (LkSG) for companies not affected by CS3D

## Facts and figures

- Strong selectivity of federal financial aid<sup>1</sup>
  - Subsidy volume 2023 (estimated) € 362 bn
  - Federal financial aid volume in 2024 is approx. 50 % higher than in 2022
  - Over 39 % of all financial aid to the corporate sector favors certain sectors or industries
  - 79 % of these sector-specific subsidies are attributable to just three sectors 2,63 % to transport alone
  - 40 % of financial aid is cross-sectoral; recently sharp increase due to higher environmental subsidies as part of the German government's package for the future
  - Environmental financial aid of € 34.9 bn exceeds transport subsidies (€ 26.2 bn) for the first time
- Bureaucracy costs for the economy
  - Bureaucracy cost index (June 2024, base 2012 = 100)<sup>3</sup> 94.9
  - Stress barometer index (2024, base 2012 = 100)<sup>3</sup> 97.0
  - Increase in ongoing compliance costs 2023/24<sup>4</sup> € 400 mil
- Government spending ratio (2024)<sup>5</sup> 48.7 %
- Redistributive state<sup>6</sup>
  - Social benefits per capita (2023) ca. € 15,000
  - Social benefit ratio of GDP (2023) 30.3 %
- Public debt (2023)<sup>7</sup> around € 2.45 tn (66 % GDP)
  - Federal Government around € 1.70 tn (+4.7 %)
  - Federal states around € 594 bn (-2.1 %)
  - Municipalities/municipal associations around € 155 bn (+9.8 %)
  - Interest expenditure in relation to taxes (2024)<sup>7</sup> 4.6 %
  - Share of public gross fixed capital formation in GDP (2023)<sup>8</sup> 2.8 % (€ 118.5 bn)

<sup>1</sup> Source: Kiel Institute for the World Economy, subsidies as defined by the Institute

<sup>2</sup> Agriculture and forestry/fishing, transportation, residential rentals

<sup>3</sup> Source: Federal Government, Federal Statistical Office

<sup>4</sup> Source: Standards Control Council

<sup>5</sup> Source: GCEE, expenditure as a percentage of gross domestic product

<sup>6</sup> Source: BMAS, Federal Statistical Office, estimated values

<sup>7</sup> Source: GCEE, Federal Statistical Office, as at 30<sup>th</sup> June 2024, changes as at 31<sup>st</sup> December 2023

<sup>8</sup> Source: Federal Statistical Office, provisional figures, at current prices

## VDMA position: trust market forces

**The state must know its competencies, but also their limits. Good economic policy relies on the creation of favorable general conditions and a growth-friendly environment in which companies compete for the best solutions on their own responsibility. The EU, federal government, federal states, and local authorities must operate efficiently, prioritize expenditures, and consider opportunity costs.**

- Setting a regulatory framework instead of vertical industrial policy
  - State should set rules and be the arbitrator
  - Technology-neutral competition for innovations
  - Strengthening SMEs as the backbone of industry
  - Exit strategies for state investments from the outset
- Germany needs a master plan for subsidy reduction; sustainable reduction of subsidies that cannot be justified from a regulatory perspective, particularly those that are harmful to the climate
- Subsidies (CAPEX and OPEX) only in justified exceptional cases, limited in time, degressive, transparent, with competitive awarding, ongoing performance monitoring, and appropriate co-payment
- Removing the brakes on growth by a moratorium on burdens, cutting red tape, e-government, and improved access to venture capital
- Ambitious reduction in planning and approval times
- Putting public finances on a sustainable footing
  - Comply with the debt brake in line with the constitution
  - Cap the government share to a maximum of 40 % of GDP in the future
  - Do not overstretch the KfW mandate
  - Social spending as a proportion of GDP must not increase any further
- Forward-looking reorganization of government spending
  - Less consumption spending, more investment spending
  - Maintain and expand public infrastructure (energy, transport routes, digitization, education)
- Strict adherence to the principle of subsidiarity – limit state-imposed social security to covering the basic risks of poverty in old age, illness, long-term care, and unemployment
- Scientific evaluation of the success of policy measures

## Further information

# Information

The joint economic policy positions of the German mechanical and plant engineering industry and other detailed position papers can be **downloaded from** the Internet at

<https://vdma.org/wirtschaftspolitik-gesellschaftspolitik>

The VDMA has a broad network of representative offices in Germany and abroad. The VDMA capital city office represents **political interests** vis-à-vis federal politicians in Berlin, while the VDMA European office in Brussels represents political interests vis-à-vis EU politicians.

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