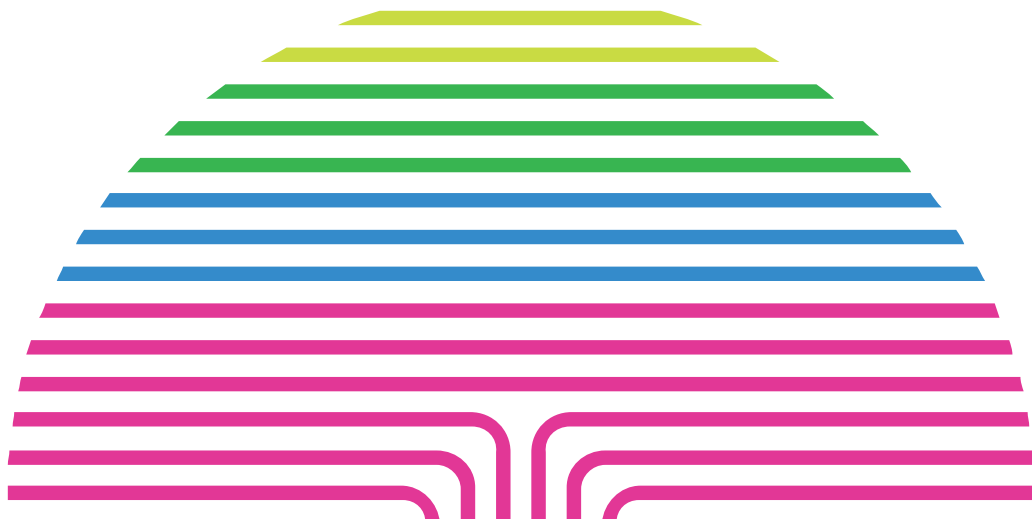


Teknikföretagen

Today's societal challenges are
tomorrow's opportunities for
Swedish engineering industries

The Association of Swedish Engineering Industries'
input to the EU industrial strategy





Today's societal challenges are tomorrow's opportunities for Swedish engineering industries

Europe is currently facing major challenges. The politicisation of world trade is increasing, and the multilateral trading system is being undermined. At the same time, industry is undergoing a digital and green transition. This means companies must capitalise on new technological advancements and simultaneously address one of the greatest threats of our time: climate change.

The EU must develop an industrial policy that optimises the conditions for industry to find the solutions to today's and tomorrow's societal challenges. This can be achieved through innovation, and by taking advantage of the strategic opportunities that these challenges present. It requires increased investment in research and development and a regulatory framework that can adapt to new technologies. With the support of an ambitious free trade policy agenda, European companies can spread innovative solutions worldwide.

Sweden is one of the most innovative countries in the world and our engineering industries are world leaders when they are allowed to compete on equal terms. In the absence of international agreements, we therefore need a European industrial policy that safeguards a level playing field based on free market principles, both on the EU single market and beyond.

Global competitiveness starts at home, by ensuring the best possible conditions for European industry to prosper. With the right conditions, today's challenges become tomorrow's opportunities for our companies!

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Summary by policy area

1 An EU that attracts and supports companies' research and development activities

A world-class research and innovation system forms the basis of Europe's long-term sustainable competitiveness. Other countries are aggressively investing in research and innovation, which is increasing competition for corporate investment. Through private sector investment in knowledge and the development of value-creating goods and services, opportunities to expand to new markets emerge. However, in order for such investments to flourish, companies must be able to operate in an attractive innovation climate. Ecosystems that encourage the exchange of knowledge between different actors and enable new technologies to reach the market are critical.

All actors, including public bodies, should invest more resources in research and innovation. Collaborative models for industrial research and innovation should be further developed within the EU joint research and innovation programmes, in particular Horizon Europe. The focus should be on application through, for example, technology infrastructures with more participation from small and medium-sized enterprises (SMEs).

2 A regulatory framework fit for new technologies and global competition

The large regional trading blocks are competing for the role as global rule maker. In order to influence the rules of international trade, European legislation and standards must be able to adapt to new technologies and the latest market developments. This enables Europe to set international standards, which strengthens the global competitiveness of our companies.

The European Commission is increasingly overregulating product rules and the technical content of European standards. This makes the EU legislative model cumbersome, which impedes our ability to set international rules and thus limits our competitiveness. Regulations shall be designed according to the basic principles of the so-called New Approach. This means the essential requirements should be set in legislation and the technical specifications in harmonised standards, providing presumption of conformity illustrated by the CE mark.

3 Sustainability as a strategic growth opportunity

Climate change is one of the greatest societal challenges of our era. At the same time, the green transition, which permeates all policy areas, creates a strategic opportunity for European industries that are at the forefront of the development environmental technology solutions. These solutions can then be exported to other countries and regions.

A sustainable society depends on a competitive industry. An ambitious EU common policy can lead to a greater European impact on a global level, which in turn translates into increased competitiveness for our companies. The alternative is diverging, national specific requirements which fragment the EU single market.

4 A future-proof and robust digital infrastructure

Digitalisation contributes to the increased functionality and value of products. In order for digital applications to work, infrastructure and spectrum for 5G, for example, should be able to handle multiple users and connected things as well as high data levels.

Europe cannot depend on outdated technology if the potential of digitalisation is to be realised. The expansion of 5G networks needs well-developed networks. Sufficient spectrum is also required, while networks should be robust enough to withstand interference and stress.

5 Upgraded and in-demand skills

Europe is competitive due to its knowledge base. It is only through an educated population that societal challenges can be met, solutions to the sustainable development goals are identified, and the business community can grow.

Lifelong learning that continuously improves skills is crucial for technological advances and for achieving a climate-smart and modern welfare society. In addition, Europe needs more exchange between educational institutions and business.

6 An ambitious trade policy that opens up new markets and promotes a level playing field

European technology industries benefit from frictionless international trade. Our companies import input for export and are deeply integrated into global value chains. Free trade agreements eliminate costly barriers to trade and facilitate global trade flows. An open trade environment enables new technologies to spread globally and helps European solutions to today's societal challenges reach other countries and regions.

The EU shall strive to liberalise global trade through an ambitious and expansive free trade policy. It shall also work to strengthen the multilateral trading system within the World Trade Organization (WTO). In the absence of multilateral or bilateral agreements to address distorted competition, the EU should develop modern trade defence instruments to safeguard legitimate business interests on free market terms.

An EU that attracts and supports companies' research and development activities

A world-class research and innovation system is the basis for Europe's long-term sustainable competitiveness. If Europe is to continue being a leader in developing new technologies and establishing globally successful companies, we must invest more in research and innovation (R&I), both from private actors and the public sector.

Private investment in knowledge and value-creating goods and services will result in growth opportunities in new markets. However, to encourage investment, there needs to be an attractive innovation climate, an ecosystem that encourages the exchange of knowledge between different actors, and an ability to create, combine and use new technologies.

Strategic research and innovation cooperation between public and private actors should continue to be developed at European level. It is therefore vital that Public-Private Partnership (PPP) models for research and innovation are further developed with an industry focus in the EU research and innovation programmes (especially within Horizon Europe). The focus should be on the application of research, for example, through technology infrastructures, with the increased involvement of SMEs.

EU initiatives to strengthen strategic value chains, or strategic value networks, for European industry should build on the work carried out by European technology platforms and collaborative programmes such as PPPs. Instruments that make exceptions to the state aid rules (IPCEI) should solely be used in exceptional cases and only where other instruments are not an option. Special consideration must be given to smaller countries' industrial systems to encourage their involvement.

Teknikföretagen considers that:

- The EU's long-term budget should be updated and indeed modernised by prioritising investment in research and innovation (R&I) and by reducing support for agriculture and regional funds. We are in favour of the European Parliament's proposal of € 120 billion to Horizon Europe and € 9 billion to the Digital Europe Programme.
- Horizon Europe should focus more on R&I initiatives that meet industry challenges and further develop the PPP model for private and public collaboration.
- Industry efforts to develop skills and adopt new technologies with a particular focus on SMEs must be priority.
- A forward-looking EU strategy for investment and the use of technology infrastructures is needed.
- Future work on strategic value chains should be based on activities carried out by industry-driven initiatives, such as PPPs.

A regulatory framework fit for technological advancements and global competition

Rapid technological development and the emergence of large regional trade blocs have led to growing competition for the role as global rule maker. To maximise our impact on the rules governing international trade, European legislation and standards must adapt faster to new technologies and market developments. Europe needs to continue to set standards and shape global rules for trade and economic development. This is a fundamental prerequisite for our companies' international competitiveness and for companies to continue to invest and develop their operations in the EU.

The EU's industrial policy shall optimise the conditions for European companies in an increasingly competitive global market place. To this end, the design of EU's technical regulations is crucial for the competitiveness of our companies. Therefore, it is with great concern we have seen an increased bureaucratisation of the standardisation process and the regulatory environment of the single market. This takes the form of ever new emerging safety interests, the design of which often deviates from the basic principles of the single market: namely, harmonisation, self-certification and presumption of conformity through harmonised standards.

Therefore, within the framework of the new industrial policy, the aim of EU product regulations must continue to be to promote trade while protecting health, environment and safety interests. It is also important that European regulations are, to the largest extent possible, aligned with rules and requirements developed by international organizations. When regulations create the best possible conditions, companies will invest in tomorrow's ventures and solutions.

Teknikföretagen considers that:

- The main rule for EU regulatory work must be harmonisation in order to preserve and further develop the single market, and to eliminate national specific requirements.
- The essential requirements shall be set in directives and regulations. Technical specifications for complying with legal requirements shall be developed through an open process.
- Manufacturers and producers should, almost invariably, be given the opportunity to prove that their product meets all necessary requirements without the involvement of a third party.
- The use of harmonised standards gives presumption of conformity, but the manufacturer can also show compliance with essential requirements through any other way offered by any of the Modules of the New Approach.

Sustainability as a strategic growth opportunity

Climate change is one of the greatest societal challenges of our time. The EU has the ambition to be a global leader in this area and sustainability will permeate all policy areas. The green transition creates a strategic opportunity for European companies to export their often world-leading technical solutions that can contribute to the transition on a global level.

An ambitious EU common policy on sustainable growth can lead to a greater European impact on a global level, which in turn translates into increased competitiveness for our companies. It also helps elevate the issue on the global agenda. The alternative is diverging, national specific requirements which fragment the EU single market.

A level playing field needs to be maintained both among EU member states and on a global level. Clear common goals and ambitions are desirable for creating new environmental regulations, but technical details are best handled through standardisation. Rules should be technology neutral and verifiable.

A society where sustainability goals are met is contingent upon a competitive industry. Industry is the actor that can develop the solutions and is an important part of the system for research and innovation. European engineering industries' emission reduction technologies contribute not only to their own operations but also to other actors and markets.

Teknikföretagen considers that:

- The EU must have an ambitious climate policy while maintaining Europe's industrial competitiveness.
- The EU should investigate how trade agreements or climate clubs can be used to maintain a level playing field for European companies compared to countries that are not actively pursuing emission reductions.
- Through a more circular economy and sustainable use of natural resources, climate change can be reduced and competitiveness maintained.
- The EU shall work to ensure that goods and materials intended for recycling are included in the single market.
- The proposed EU Chemicals Policy 2030 should have clear objectives regarding the substitution of hazardous substances and what is needed for increased circularity.
- The EU should invest in infrastructure, research and development, as well as digital solutions that support the transition to a climate-neutral society. Such investments can also benefit European industry through the development of new knowledge.
- The EU shall push for ambitious international climate targets and also implement measures to reduce global emissions.

A future-proof robust digital infrastructure

Digitalisation contributes to the increased functionality and value of products. In order for digital applications to work, an electronic infrastructure based on a fine-branched fibre network and large amounts of spectrum is needed. Such an infrastructure enables multiple users, a high number of connected devices and large amounts of data traffic.

The EU shall work to connect the whole of Europe's business community. This requires a pan-European structure of fibre-based backbone networks that divide into a fine-branched network of capillaries. Much of electronic communication in Europe today depends on outdated copper networks that were previously used for telephony and cable television. These networks are substandard and create limitations in functionality and negatively impact digital services.

With a fibre-based infrastructure, connectivity is not an inhibitory factor for developing and using digital applications. In this way, fibre networks catalyse digitalisation and the development of industry 4.0. Since networks are at the very heart of digitalisation, they must be designed robustly and with redundancy. The network must be able to cope with stress and disturbance. Broadband networks should be deemed critical infrastructure.

The EU should ensure that wireless access is promoted. This requires increased coordination between different member states and that spectrum is immediately made available to new technologies such as 5G. Europe is strong in electronic communications, but to maintain this position requires legislation and reforms that will enable business to develop new products. The testing of new technologies and their rapid commercialisation should be promoted. However, security concerns and the risk of networks being exposed to cyberattacks should always be taken into account. A screening mechanism based on a common situational assessment is therefore welcome.

Teknikföretagen considers that:

- The EU shall work to phase out and shut down obsolete copper-based broadband networks.
- The EU shall promote the development of future-proof electronic infrastructure that enables ultra-high speeds and minimal response times by offering investment support in areas where market failure exists.
- The EU must emphasise the importance of robust and secure communication and that networks can withstand stresses and disruptions.
- The EU should put in place mechanisms that prevent the possibility of cyberattacks and industrial espionage.
- The EU shall act to promote the development and application of new wireless technologies, not least 5G. Spectrum intended for broadband use should therefore be prioritized.

A skills base with upgraded and sought-after skills

Europe is competitive due to its knowledge base. It is only through an educated population that societal challenges can be met, solutions to the sustainable development goals are identified, and the business community can grow. Lifelong learning that continuously enhances skills is crucial to achieve a climate-smart society with a modern social welfare system.

The EU must work to ensure that there are enough people that have the skills and qualifications that business needs. Today, there are a number of professions where there is a skills shortage, and this hinders companies' opportunities to develop and expand. This is particularly true when it comes to engineering graduates and people with industrial vocational training. The interest in STEM (Science, Technology, Engineering and Math) is insufficient, which means that there are not enough graduates to meet the market's needs. Furthermore, the possibility of retraining and upgrading knowledge is insufficient. The EU should work to increase labour mobility between member states. Comparing experience and qualifications between different member states' systems must therefore be simplified and become more transparent.

Europe also needs a better exchange between educational institutions and business. This means putting in place a system of continuous lifelong learning, which lays the foundation for a competence base that has the knowledge and skills that are sought after and valued by society and business. Rapid technological development means that it is no longer possible to make a distinction between educational and professional life. Instead, they must reinforce each other.

Teknikföretagen considers that:

- The EU's initiative to stimulate young people's interest in science, technology and mathematics should be given top priority over the next programming period. In turn, member states need to increase the incentives for individual education in science, technology and mathematics, both at the undergraduate level as well as for professionals.
- It must be ensured that specialised vocational training courses demanded by the business community are available at a reasonable cost throughout the EU.
- Further training of professionals should be facilitated quickly across the EU through more cooperation between educational institutions and the business community.
- Educational institutions ensuring educational programmes that correspond with business needs for competence should be rewarded.

An ambitious trade policy that opens up new markets and promotes a level playing field

European engineering industries benefit from frictionless trade. Our companies import input for export and are deeply integrated into global value chains. Free trade agreements eliminate costly barriers to trade and facilitate global trade flows. An open trade environment enables new technologies to spread globally and for European solutions to today's societal challenges to reach other countries and regions.

The EU's industrial policy shall optimise the conditions for European industry in an increasingly competitive global market place. Free trade agreements are crucial as they remove barriers to trade, create norms and set the rules for global trade. This means that companies do not need to adapt their production to other countries' diverging regulatory framework, product requirements or standards. In this way, costly market-specific solutions that impede companies' internationalisation are avoided.

The EU shall work to liberalise global trade through an ambitious and expansive free trade policy. It shall also work to strengthen the multilateral trading system within the WTO. European engineering industries are global actors that benefit from global solutions. A well-functioning multilateral trading system must remain a cornerstone of EU external trade policy and is an important facet of a holistic European industrial policy.

In addition to eliminating trade barriers, EU free trade agreements also contribute to attracting foreign investment and establishments, which in turn stimulates production and creates more jobs. The EU benefits from an open trade and investment climate – at the same time, the EU's legitimate business interests must be protected from investments made by states that intend to acquire key technology or critical infrastructure for non-commercial purposes.

In the absence of multilateral or bilateral agreements to address distorted competition, the EU should develop modern trade defence instruments to ensure a level playing field with third countries. Third-country companies with discriminatory state aid or unregulated market power in their home markets risk distorting competition to the detriment of European companies on the EU single market.

Teknikföretagen considers that:

- The EU shall pursue an ambitious and expansive free trade policy. The EU shall finalise ongoing negotiations, work to ratify the EU's concluded agreements, and continually evaluate new countries and regions to initiate negotiations with.
- The EU shall safeguard a close trade relation with the UK following its withdrawal from the EU. A deep and comprehensive free trade agreement is vital to facilitate trade and maintain a level playing field.
- The EU shall be a driving force in ensuring a well-functioning multilateral trading system within the WTO.
- In the absence of multilateral or bilateral agreements, the EU should develop modern and balanced trade defence instruments to safeguard a level playing field in trade with third countries.



Teknikföretagen

Technology makes the world a better place

The Swedish engineering sector's companies supply the solutions with which to tackle the greatest challenges of our times. These companies are members of Teknikföretagen.