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Teknikföretagen

The Association of Swedish Engineering Industries (Teknikföretagen) input to the European Critical Raw Materials Act

Responding to the Call for Evidence for an Impact Assessment published by the European Commission on September 30, 2022.

Summary

The Association of Swedish Engineering Industries (Teknikföretagen) represents over 4,300 member companies that constitute one third of Sweden's exports, making Teknikföretagen the primary representative of Swedish industry. Our member companies comprise both major, renowned, global corporations as well as a majority of micro, small and medium-sized enterprises. A common denominator is that they develop technologically advanced products and services necessary for the twin transition, which are exported in fierce international competition thereby contributing to the transition on a global scale.

The technologies produced by our member companies are dependent on intermediary goods and raw materials that are often imported from other regions of the world. With an increasing demand for critical raw materials needed to develop innovative (green) technologies that is set to outpace supply, it is instrumental for the competitiveness of our member companies to secure reliable sourcing of these input materials at a competitive price.

The mission of Teknikföretagen as an organization is to strengthen the competitiveness of our member companies. As such, Teknikföretagen welcomes the ambition behind the European Critical Raw Materials Act (ECRMA) to strengthen the security of supply of critical raw materials for European industry. To that end, well-functioning markets are vital whereas political intervention in industrial supply chains may have distortive effects that can prove detrimental to the ambitions set out in the ECRMA.

Security of supply is contingent upon both internal and external diversification to broaden the base of available suppliers for European industry to source from. In terms of internal diversification, it is instrumental to de-risk private investments and incentivize exploration activities by reviewing existing EU legislation to remove regulatory barriers. Social and environmental concerns must be balanced with economic and security interests, and mining and industrial projects should qualify as *imperative reasons of overriding public interests* (IROPI). Without reviewing existing barriers currently discouraging investments, public support to domestic strategic projects along the value chain will mainly uphold current activities and risks distorting competition to the detriment of competitive markets. An innovation-friendly legislative framework – resting on the principles of the New Approach – along with investments in research and development are also important factors for circularity and secondary use of raw materials.

In terms of external diversification, Teknikföretagen is an adamant proponent of an ambitious open trade agenda to liberalize trade with third countries. In addition, international partnerships can play an important role in trade facilitation including

added value from a more strategic approach to international development. Finally, it is important to ensure policy coherence with other EU initiatives that may limit the possibility for industry located in the EU to source from third countries.

Key recommendations

- *Pursue internal and external diversification to strengthen security of supply and reduce overreliance on a limited number of actors*
While reliance on imports in itself is not an issue, overreliance concentrated to a limited number of suppliers can leave European industry vulnerable to disturbances to global trade or economic coercion. Broadening the base of suppliers for industry to source from increases the agility of industrial supply chains and enables industry to manage risk to increase resilience. This requires policymakers to actively pursue both internal and external diversification.
- *Focus on removing regulatory barriers to de-risk private investments before considering public support to strategic projects in Europe*
Incentivizing exploration in Europe is a necessity to strengthen domestic production capabilities and capacity for internal diversification. The predominant barriers for investments are due to EU environmental legislation regulating land use, river basin management and nature conservation. A review of current legislation is needed to balance social and environmental concerns with economic and security interests. Given their vital importance for EU ambitions, mining and industrial projects should qualify as imperative reasons of overriding public interests (IROPI).
- *Invest in research and development to promote circularity, recycling and secondary use, and ensure an innovation-friendly legislative framework*
Increased circularity, recycling and production from secondary sources requires continued technology development and innovation. There is a need to accelerate research and innovation across the whole critical raw materials value chain through investments in initiatives and programmes with the dual objectives of both ensuring a competitive edge and fostering a sustainable and circular industry. Safeguarding the principles of the New Approach is essential to ensure a legislative framework that can adopt the most recent technological advancements and the uptake of innovations.
- *Promote an ambitious trade liberalization and facilitation agenda and limit public intervention in industrial supply chains*
Enabling external diversification requires a renewed focus on an ambitious trade liberalization agenda. Synergies can be found between international partnerships and a more strategic approach to international development projects to facilitate trade with third countries. Requirements on documentation and monitoring of industrial supply chains must be carefully considered in order not to impose undue administrative burdens on companies, limit the ability for European industry to source competitively and lead to retaliatory measures from third countries.

General comments

Critical raw materials are key inputs to innovative technologies and technological advancements necessary to achieve EU policy objectives such as the twin transition, increased resilience and EU security and defense interests. Meanwhile, demand for critical raw materials is set to outpace supply. Currently, the EU also has a significant import dependency on critical raw materials. Whereas import dependency in itself is not an issue, overreliance concentrated to a limited number of suppliers can leave European industry vulnerable to disturbances to global trade or economic coercion as a result of geopolitical tensions. Against this background, Teknikföretagen welcomes the ambition behind the ECRMA to strengthen the security of supply of critical raw materials for European industry, requiring the EU to take measure to enable industry to source from as many suppliers as possible both within the EU and from beyond EU borders.

As the primary organization representing industry in Sweden, Teknikföretagen is prepared to actively contribute to the ongoing work of the European Commission to strengthen the security of supply of critical raw materials for European industry.

It is important to note that the value chain of mining starts with exploration. The greater the exploration activities are, the stronger the potential for supply becomes. Meanwhile, the exploration stage is also characterized by very high risk as approximately only one out a thousand exploration projects becomes a mine. Currently, Europe only attracts approximately three percent of global investments going into exploration. Therefore, it is imperative that the ECRMA increases the attractiveness for exploration in Europe by taking action to de-risk the early stages of the mining value chain by removing legislative barriers on EU level that disincentivize private investments in exploration.

The Swedish bedrock alone holds more than half of the substances on the 2020 list of critical raw materials, but until today none of this is mined. The Nordic bedrock (Sweden, Finland, Norway and Greenland) together holds a potential for all the substances on the critical raw materials list. A study performed in 2021 by the Nordic Geological Surveys¹ concluded that *“In mineral-richness, the Nordic bedrock can be compared with the most mineral-rich areas of the world, such as Canada, the USA, Brazil and Australia, and can supply almost all of the critical raw materials defined by the EU. [...] In addition to creating sustainable economic growth and employment, the Nordics can ensure Europe and the rest of the world access to critical raw materials produced with high sustainability, ethic and environmental standards.”* Together with mineralization in other parts of Europe, there is a significant potential to increase domestic supply of critical raw materials within the EU.

The lack of investments in mineral exploration that prevents turning the EU's mineral potential into operating projects is not due to issues with funding, but rather the risk posed by regulatory barriers resulting from a failure to balance social and environmental concerns with economic and security considerations. Without addressing the regulatory barriers disincentivizing investments in new mining projects in the EU, public funding to strategic projects along the supply chain is

¹ [The Nordic Supply Potential of Critical Metals and Minerals for a Green Energy Transition | Nordic Innovation](#)

likely to result in support only to existing projects and may further disincentivize new investments by distorting competition. These aspects concerning the internal dimension of the ECRMA need to be taken into account when drafting the proposal.

Attention must also be given to several proposals for EU legislation that may further restrict foreign sourcing or increase the price of important input materials for industrial production in Europe, primarily for social and environmental concerns. This exacerbates the need to compensate for diminished ability to source both in terms of availability and to competitive prices. As such, enabling mining in Europe, increasing production of raw materials from secondary sources, opening up new markets and facilitating trade with trading partners that uphold EU social and environmental requirements will remain key policy priorities for European industry. This is also key in order to limit overreliance concentrated to a few actors.

In sum, European industry must be able to source input materials reliably and to competitive prices. This is instrumental to enable industry to drive the twin transition and increase European resilience. For this, both an ambitious internal and external diversification agenda is needed to broaden the base of suppliers for European industry to source from, through (1) a regulatory framework that incentivizes investments in Europe and (2) expansive trade liberalization and facilitating access to foreign markets.

When developing governance models and structures, including industrial alliances, it is essential to ensure close industry dialog, safeguard well-functioning markets and limiting public intervention in the management of industrial supply chains to achieve set ambitions.

Detailed comments

Internal dimension

Scope, definitions, and governance

It is important to note that critical raw materials are often by-products. The security of supply of critical raw materials can be significantly improved by locating new resources, better understanding the abundance and distribution of critical raw materials in existing ore deposits and by improving the processes of recovering them from the primary ore. It is fundamental to understand that most critical raw materials are linked to carrier metals such as copper, zinc, iron and gold. The main economic value lies in the extraction of the primary ore and critical metals most often constitute by-products. Extracting critical metals as by-products makes the mine production less sensitive to the volatile price markets often associated with critical raw materials and less sensitive to market manipulation.

To restrict any regulatory measures to only critical raw materials is therefore counterproductive as the market around exploration focuses on venture capital to finance extraction of primary ores. The economic feasibility relies on the primary ore, which must be considered in the ECRMA.

Teknikföretagen welcomes the objective to revise the existing 2020 list of critical raw materials and establish an updated new list. Teknikföretagen considers that this is an opportunity to reassess the criticality of a number of raw materials that are essential manufacturing inputs for the technology industry and key enablers for European industry to contribute to the twin transitions. Further, Teknikföretagen

considers that the list needs to be kept up-to-date and that a close dialog with industry is essential in order for it remain relevant as a point of reference.

However, Teknikföretagen asserts that information must be gathered on a voluntary basis as information on individual companies supply chains can be highly sensitive and contain trade secrets. When accumulated, it can also constitute critical information for national security and defense interests that need to be protected from foreign adversaries. Teknikföretagen strongly opposes setting up similar mechanisms as in recent proposals from the European Commission, with mandatory information gathering concerning industrial supply chains and the possibility to prioritize among orders and impose export controls in times of crisis. Such instruments and governance thereof may undermine fundamental principles of a market economy, disincentivize foreign investments, spark trade conflicts and lead to retaliatory measures from third countries to the detriment of European industry.

Teknikföretagen also opposes mandatory provisions on the set up and/or redistribution of strategic stocks of critical raw materials by industry, which would constitute unnecessary and disproportionate interventions in the marketplace. The existence of strategic reserves should be a national issue primarily based on national security considerations.

Further information on considerations to be taken when identifying critical raw materials for European industry can be found in the response to this consultation from Orgalim, representing the technology industries of Europe, to which Teknikföretagen is a member organization.

Regulatory barriers in EU legislation in need of revision to encourage investments

There are significant regulatory barriers in EU legislation that disincentivizes investments in the early stages of the mining value chain that need to be revised. Important trade-offs between different land use interests need to be made at an earlier stage than today, especially for those sectors that require significant investments over a long period of time. This is particularly important for mining establishments as these are tied to the location of the deposit. Today, the risk of investing in exploration and mining in the EU is often considered too great. The EU therefore needs to initiate an investigation into EU environmental legislation to identify inconsistencies, obstacles or other regulatory barriers for the raw materials value chain. Special attention should be given to EU legislation on land use, river basin management and nature conservation, to assess whether there are adequate opportunities to balance competing interests. Swedish industry considers that the following proposals need to be included in such an investigation:

- A mine is of major public interest in securing access to raw materials and metals for European industries to meet political objectives, such as the twin transition and increased resilience, including the security and defense interest of the EU. It should therefore be possible to classify mining and industrial projects as *imperative reasons of overriding public interests* (IROPI). This would give a possibility to take mining activities into due consideration in permitting procedures or comparable administrative processes where the intended land use may conflict with the objectives of EU legislation. This must be clarified and/or included in current EU legislations.

- To secure investments in exploration, the trade-offs between different land use interests must be made at an earlier stage than the current EU legislation allows. Today, the assessment carried out under Article 6 (3) of the Habitats Directive must contain complete, precise, and definitive findings and conclusions capable of removing all reasonable scientific doubts as to the effects of the works proposed on the protected site concerned (Ref. Case. C258/11 Sweetman and others). It is not possible to justify capital intensive investments in exploration under the current conditions.
- The EU Water Framework Directive (WFD) lacks possibilities to balance between economic, social, and environmental interests. The objective good ecologic status cannot continue to be defined in relation to a static original state without human influence (reference state). Article 4.7 in the WFD needs to be broadened to enable new and existing societally important activities and projects. In addition, there is a need to improve the method of evaluating and reporting on the status of the environment.

Swedish industry strives to comply with the highest environmental standards and the Swedish mining industry has stated a goal that the industry by 2030 shall contribute to increased biodiversity in all regions where mining and minerals activities and exploration are ongoing.

Without a mining policy that takes the specific challenges of the mining industry into account, the lack of investments in exploration will continue. Therefore, there is a need to investigate how the EU can de-risk investments that are dependent on the use of land and water. This is an instrumental step to broaden the base of suppliers for European technology industries to source from within the EU.

Circularity, recycling and secondary use

To meet the needs of European industry, an increased production of both primary and secondary raw materials is required. Metals are well suited for recycling and can be recycled again and again, for example from batteries and electrical products. There is also a potential of large amounts of critical raw materials in existing mining waste. To increase circularity, recycling and production from secondary sources, continued technology development and innovation is required. An innovation-friendly legislative framework – resting on the principles of the New Approach – along with investments in research and development are important factors for circularity and secondary use of raw materials. In this regard, Teknikföretagen is concerned by an increasingly prescriptive approach by the European Commission to the European Standardization System that risks making the EU legislative framework less responsive to new technological advancements.² A potential over-use of common specifications developed by the European Commission must be avoided in order to safeguard the principles of the New Approach and, in extension, the functionality of the Single Market. This also

² For more information, please find Teknikföretagen's comments on the European Commission's Standardization Package [here](#).

essential in order to avoid costly technical barriers to trade to arise for European industry when accessing global markets.³

It is also important to take into account the synergies between the production of metals and chemicals from primary and secondary raw materials, for example in terms of technology development and innovation and, in practical terms, that secondary sources can benefit of mixture with primary sources for best results. In a circular economy the value of products, materials and resources are kept as long as possible, and waste is minimized. In order to achieve this, the starting point must be that all materials that can be used must be seen as a resource regardless of whether it is about primary, recycled or reused materials. Therefore, today's waste- and chemicals legislation needs to be harmonized and adapted to enable effective and competitive circular solutions.

There is a need to accelerate research and innovation across the whole critical raw materials value chain. Today there are several initiatives and programmes with the dual objectives of both ensuring a competitive edge and fostering a sustainable and circular industry. The Horizon Europe programme, including the EIT Raw Materials are the most prominent and successful initiatives, tackling research and innovation, as well as skills.

Europe needs a world-class ecosystem that encourages the exchange of knowledge between different actors and an ability to create, combine and use new technologies. To achieve that there is a need to invest more, both from the public and private sector.

Strategic research and innovation projects with partners ranging from academia to civil society and research institutes to industry should continue to be developed at European level. Further efforts are needed to involve small and medium-sized enterprises (SMEs). It is important to expand the research and innovation on for example waste processing, advanced materials and substitution. There is also a need to develop expertise and skills around mining.

External dimension

Trade liberalization, facilitation and international development

Teknikföretagen is an adamant proponent of an ambitious and open EU trade agenda to liberalize trade with third countries. Being highly integrated in global value networks, the competitiveness of our member companies is contingent upon access to foreign markets, for both supply and distribution but also in areas such as innovative research and development cooperation. An ambitious European trade policy, that facilitates market access, removes barriers to trade and behind the border obstacles, while ensuring a level playing field, is therefore a central priority for Teknikföretagen.⁴ As such, Teknikföretagen is concerned by a deceleration of the EU trade liberalization agenda during this Commission. Mainly,

³ For more information, please find a joint statement by the Federation of German Industries (BDI), the General Confederation of Italian Industry (Confindustria) and Teknikföretagen [here](#).

⁴ For more information, please find Teknikföretagen's answer to the European Commission's consultation on the Trade Policy review [here](#).

this can be exemplified in a lack of progress on EU free trade agreements and the ratification thereof, as well as an increased focus on unilateral defensive instruments to protect a level playing field on the EU Single Market. In this light, Teknikföretagen welcomes the acknowledgement of the importance of free trade agreements and other international partnerships in order to secure a stable and sufficient supply of critical raw materials for European industry.

Teknikföretagen calls on the European Commission to push for the timely entry into force of already concluded free trade agreements with third countries that can supply critical raw materials to the EU, such as Mercusur, Chile, New Zealand and Mexico. Similarly, Teknikföretagen also calls for a rapid conclusion of free trade agreements currently being negotiated with trading partners such as Australia, Indonesia and India. In addition, current free trade agreements should be reviewed in order to assess market access on raw materials and ad-hoc agreements on raw materials negotiated with third countries with which the EU already has a free trade agreement that does not feature a chapter on raw materials (notably Vietnam).

In order to reinvigorate the EU's free trade agenda, it is also important to consider new creative means of liberalizing trade with third countries. In the early stages of the Covid-19 pandemic, Teknikföretagen called for an elimination on tariffs on important inputs and intermediary goods needed for industrial production in Europe. This was repeated subsequent to Russia's invasion of Ukraine, adding a proposal for mutual recognition of rules of origin to allow for an increased use of foreign suppliers while still qualifying for preferential treatment under EU free trade agreements. The proposals would both cut costs of imports and broaden the base of suppliers for European exporting industries to source from.

Teknikföretagen supports entering into additional international partnerships through memorandums of understandings focused on cooperation on critical raw materials, such as the ones signed with Canada in June 2021 and Kazakhstan in November 2022, with likeminded partners (for example the United States). International partnerships can play an important role in trade facilitation, while additional momentum can be found by drawing synergies from a more strategic approach to international development. In this regard, the European Commission should consider the area of critical raw materials to be incorporated into the Global Gateway strategy, and funding for international development to be directed for projects in line with EU strategic (trade) interests.

While questioning of the necessity for a list of critical raw materials to guide investments in the EU – cognizant of the risk for market distortive effects as a result of increased state intervention in the supply chain rather than focusing on an enabling regulatory framework to attract investments – such list maybe useful to guide strategic international development projects and in connection to international partnerships.

It is also important to increase collaboration and enhance dialogue with strategic likeminded trading partners (such as the United States and United Kingdom) on industrial policy initiatives, including the increased focus on security of supply, to avoid a subsidy race and generate synergies in strategic approaches. Rather than exacerbating a politically driven regionalization process that limits the benefits to be gained from deepened trade ties, focus must be to cooperate on research and development initiatives, removing barriers to trade and strengthening cooperation on strategic standards setting.

EU legislation and political intervention restricting foreign sourcing

Legislative requirements that may restrict European industry's ability to source from third countries or increase the price of important materials for industrial production in Europe must be closely considered and, preferably, avoided. To that end, policy coherence with other EU initiatives must be ensured.

While understanding of the ambition behind the legislative proposal for a Directive on Corporate Sustainability Due Diligence and the legislative proposal for a Regulation prohibiting products made with forced labor onto the EU market, the proposals are likely to place considerable administrative burdens on European companies that risks being unmanageable especially for micro, small and medium-sized enterprises. As a result of future obligations arising from these proposals, companies located in Europe may not be able to source from certain locations that are rich in minerals. In addition, they will likely refrain from investing in value chains for certain critical raw materials for fear of being held liable for adverse human rights, social or environmental impacts, even when companies themselves do not directly contribute to them. This could have a negative impact on European industry's capability to secure a stable and sufficient supply of critical raw materials, whereby Teknikföretagen reiterates the necessity for the proposals to be limited to the first tier of suppliers, or direct contractual relations. In general, imposing (overly burdensome) requirements on supply chain documentation may also lead to more rigid supply chains and limit the agility for companies to adapt sourcing when disturbances to global trade occur.

Additionally, the legislative proposal for a Regulation establishing a Carbon Border Adjustment Mechanism will effectively impose a carbon tax on imports of key raw materials such as steel and aluminum into the EU, thereby, increasing the cost of inputs for manufacturing for European industry. This will result in a loss of competitiveness vis-à-vis third country manufacturers, which will be able to access raw materials at a more competitive cost and market downstream products at lower prices, both on the EU Single Market and on third country markets on which they compete with European exporting industries.

Similar effects can be generated from EU defensive instruments, such as anti-dumping measures and safeguard measures, that may (further) constrain European industry's access to key manufacturing inputs at competitive prices and thereby hampering the international competitiveness of European exporting industries. In this context, Teknikföretagen calls on the European Commission to reassess the necessity of the current safeguard measures on steel and ensure that EU trade defense measures currently in place do not disproportionately constrain European industry's access to key raw materials, such as steel and aluminum.

Finally, the legislative proposal for a Single Market Emergency Instrument enables the monitoring and collection on information by public actors on European industrial supply chains, and subsequently the prioritization among orders in a time of crisis. Teknikföretagen strongly opposes such mechanisms and calls on the European Commission not to mirror such proposals in the European Critical Raw Materials Act. As previously expressed, in addition to undermining fundamental principles of a market economy, this may disincentivize foreign investments, spark trade conflicts and lead to retaliatory measures from third countries to the detriment of European industry. The collection of information of European industrial supply chains may also entail infringing on individual companies' intellectual properties,

trade secrets, and when accumulated constitute critical information for national security and defense interests that must be protected from foreign adversaries,

On reducing strategic dependencies and the importance of international trade

In general, Teknikföretagen has been critical to an overemphasis on limiting dependencies on foreign supply in comparison to generating strengths by building upon capabilities and competitive advantages in EU industrial policy. Teknikföretagen is concerned by the current direction of EU industrial policy⁵ that is moving away from creating favorable framework conditions and towards an increased state intervention in the European economy, more prescriptive requirements in proposals for EU legislation and a political will to manage industrial supply chains. Teknikföretagen stresses that this is not a development that is conducive to enabling European industry to develop world-leading, cutting-edge technological advancements that contribute to the twin transitions, nor increasing the resilience of industrial supply chains.

This can be exemplified by the political will to reduce strategic (import) dependencies by building production capabilities in certain politically identified economic areas and technologies, primarily through an increased use of targeted subsidy schemes.⁶ There is an inherent risk that the use of import substitution policies focused on addressing vulnerabilities may migrate parts of the economy into sectors that are not competitive and taking resources from areas that enjoy competitive advantages. This can result in a less vibrant and dynamic European economy. It may also distort the competition on the Single Market to the detriment of innovative companies that are vital for European industry's market driven industrial ecosystems and create centralized supply chains that are vulnerable to disturbances to global trade. Along with a more prescriptive approach to the EU legislative framework potentially causing technical requirements in European and international standards to diverge, this may exacerbate a politically driven decoupling process that is detrimental to the functionality of our global value networks. Ultimately, there is a risk that this may lead to a less innovative and less globally competitive European industry. Rather, Teknikföretagen asserts that the primary focus should be on removing barriers and strengthening framework conditions on a systemic level, which will attract investments and industry to locate operations in Europe.

When identifying and pursuing policies to address strategic dependencies, policymakers must also respect the complexity of global value networks. Thousands of input materials go into a final product, and production patterns include several tiers of suppliers of intermediate goods and materials that multiply and become exponentially more complex for each tier. Therefore, Teknikföretagen finds the European Commission's ambition, presented in recent proposals, to

⁵ For more information, please find Teknikföretagen's comments on the European Commission's Communication on Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery [here](#).

⁶ For more information, please find Teknikföretagen's analysis of the revised Communication from the European Commission on the Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest [here](#). Teknikföretagen's answer to the preceding consultation on the review of the criteria can be found [here](#).

monitor industrial supply chains and, in time of crisis, grant itself powers to prioritize among orders and, in some cases, impose export controls, highly problematic for several reasons. First, it challenges fundamental market economic principles; second, it poses questions concerning data governance and intellectual property for the companies concerned; third, it may disincentivize foreign investments in Europe; and fourth, it may spark trade conflicts and lead to costly countermeasures from third countries.

In this context is important to note that about sixty percent of all EU imports are inputs such as materials or intermediary goods that are refined or used for manufacturing in Europe. And, already by 2024, eighty-five percent of the global GDP is expected to come from outside of the EU. As such, Europe is fundamentally contingent upon international trade and foreign sourcing for our industry to be competitive; and trade liberalization will continue to play a pivotal role for European prosperity. With this in mind, exacerbating a politically driven decoupling process would be especially harmful for Europe. Self-sufficiency is simply not attainable due to the complexity of our global value networks, nor is it desirable from an efficiency standpoint. International trade is fundamentally built upon mutual dependencies and generating efficiencies through competitive advantages. As such, strengthening EU capabilities will yield mutual and reverse dependencies that limit vulnerabilities to economic coercion. This does not necessarily have to entail an entire supply chain, but can be yielded in certain segments of a value network. Focusing on the end product, such as batteries or semiconductors, does not necessarily reduce dependencies. Rather, such process must start upstream in the supply chain to secure sourcing of raw materials and commodities, while developing the necessary competencies and skills for producing new key technologies competitively in Europe.