

Letter of 17 October 2025 from the Minister of Economic Affairs to the House of Representatives on industrial policy

The Netherlands is a prosperous country, but that prosperity cannot be taken for granted. Our economic potential¹ is under pressure. The country is struggling with stagnating productivity, low R&D investment and a business climate that is creaking at the seams. Consider the congestion on the electricity grid, increasing water scarcity, the tight labour market, the limited space for new factories,² or the lack of appropriate financing for SMEs and growing, promising companies. These issues affect the broader business community, and especially the industrial sector, which is crucial to our prosperity.

In addition, the current international economic and geopolitical situation requires a more active role on the part of the government. The playing field has changed drastically in recent decades, as also shown by the Draghi Report.³ International competition and geopolitical tensions have increased, with major consequences for international trade, from which the Netherlands has traditionally benefited greatly. Other countries, including EU member states, are pursuing much more vigorous industrial policies and actively emphasising the development of certain technologies and markets within their own country, a decision that could harm Dutch companies. The number of industrial policy instruments and measures worldwide has grown sharply over the past 10 years.⁴ Economic power is increasingly being used for political purposes. Consider the import tariffs imposed by the United States on specific goods, or China's Made in China 2025 strategy which involves government investment in strategic markets such as solar panels and electric vehicles. As a result, the economic power and technological position of the US and various Asian countries, including China, have grown significantly.

In this international playing field, those who act swiftly are increasingly gaining significant advantages, such as economies of scale, market power and spillovers to other sectors. Examples include the rise of artificial intelligence (AI) and the dominance of a small number of countries in semiconductor manufacturing. Those who are late to the game will never be able to catch up and will be forced to watch talent and investment drain away. It is a winner-takes-all game in which speed, focus and decisiveness make the difference.

In this world the Netherlands cannot afford to adopt a wait-and-see approach. Both the political situation and society require the government to make clear choices. In light of the government's current caretaker status and the uncertainty about how long it will have to remain in office, the government feels that it is important to present a necessary and new course with regard to industrial policy to parliament now.

As part of this new course, the government is giving an additional boost to various choices that have already been made, within the existing budgetary frameworks. Through targeted industrial policy, the government is focusing on further strengthening the Netherlands' position in when it comes to semiconductors, biotechnology, growth markets related to the Defence Strategy for Industry and Innovation 2025–2029 (DSII)⁵

¹ Economic potential refers to the capacity to generate both structural prosperity and wellbeing in both the short and long term, simply by earning money.

² 'Ruimte voor industrieclusters' (Scope for industrial clusters), Parliamentary Paper no. 29 826-258.

³ Draghi, 2024. *The Future of European Competitiveness*.

⁴ Juhász, Lane, Oehlsen and Pérez, 2022. 'The Who, What, When and How of Industrial Policy'. Analyses by the World Bank and the New Industrial Policy Observatory (NIPO) estimate that the number of industrial policy interventions from 2017–2023 has increased ninefold. (World Bank, 2024. 'The Renaissance of Industrial Policy: Known Knowns, Known Unknowns, and Unknown Unknowns').

⁵ As set out in the Defence Strategy for Industry and Innovation, 2025–2029.

(in particular 6G, radar, laser satellite communication and quantum), digital services (especially AI), mechanical engineering and innovative chemistry. These are markets identified through technology and market analyses (Annexe 1) that directly contribute to addressing the societal challenges as formulated in the mission-driven innovation policy (Annexe 2). The further development of these markets cannot wait for the next government.

In this letter, I present a framework for targeted market interventions. A future government can build on this course. The independent advisory report by Mr Peter Wennink, to be published by the end of 2025, will play an important role in shaping the focus on these six markets and possibly additional markets in the future.⁶

A key strength of the Dutch economic structure is its great diversity in terms of sectors, regions and activities. Therefore, alongside targeted industrial policy, the government continues to work on maintaining a strong foundation for entrepreneurship and growth for all companies that drive the Dutch economy, from regional entrepreneurs and SMEs to international market leaders. The government pays attention to all entrepreneurs and sectors of the economy: from retail to hospitality, creative industries to logistics, from construction to agrifood and horticulture, and from water management to the maritime and aviation sectors. These sectors create opportunities for new markets and technological applications, both domestic and international, thereby contributing more to broad prosperity in our country and helping the Netherlands maintain and expand its leading global position.

Obtaining and maintaining access to international markets, creating and seizing export opportunities, and promoting international cooperation are crucial to achieving economies of scale, fostering innovation and enabling the sectors of this new industrial policy to flourish. Wherever possible and necessary, all Dutch companies can therefore make use of our embassy network and trade instruments when doing business abroad or aspiring to do so.

In addition, the government continues to use mission-driven innovation policy to connect business activities to the societal challenges identified by the line ministries. Under this mission-driven innovation policy, government bodies, knowledge partners and businesses work together on innovation that contributes to solutions to societal challenges with respect to the energy transition, the circular economy, healthcare, agriculture, water and food, and security. These are essential challenges for Dutch prosperity and therefore remain a priority for the government. Parliament will be informed in a future letter about the further development of this policy.

This letter aligns with the societal missions and, given the urgent international economic and geopolitical situation, focuses on strengthening the Netherlands' future economic potential and resilience. The first part of this letter explains the targeted approach as it relates to industrial policy. The second part addresses the general policies through which the government serves all sectors of the economy. This letter also implements various motions and commitments from the past year, through which the House urged me to establish a renewed industrial policy.⁷

⁶ Request for an advisory report from Peter Wennink, Parliamentary Paper no. 32 637-707.

⁷ Motion by MP Claire Martens-America to include the lessons learned from the targeted Beethoven approach in the new version of the innovation and industrial policy and regional economic development; Motion by MP Mustafa Amhaouch et al. on exploring a National Strategic Industry and Technology Platform suitable for the Netherlands; Motion by MP Jimmy Dijk calling for an overview of strategic sectors vital to the Netherlands and current international dependencies, and for proposals on how production can be maintained or reshored; Motion by MPs Laurens Dassen and Pieter Grinwis on exploring how sandboxes for different technologies can be established within the National Technology Strategy; Motion by MP Ines Kostić et al. on a well-argued vision and

A new course for Dutch industrial policy

The main task in formulating industrial policy is twofold: strengthening our economic potential to continue financing sustainability efforts, education, security, healthcare and infrastructure in the future, and increasing our economic resilience. Among other things, this entails reducing risky strategic dependencies on other countries, for goods like medicine, energy, raw materials (for example through circularity) and food (for example by ensuring food supply security through innovative food production). However, completely eliminating all dependencies is neither possible nor desirable. It is therefore important that we have sufficient economic weight in the global market. This means retaining and building essential capacities in markets and technologies, thereby creating mutual dependencies.⁸

To achieve this, as previously argued,⁹ additional investments are needed from both business and government. These investments, together with existing capacities and resources, must be deployed in a targeted way. As a relatively small country with limited factors of production, we must choose where we are willing and able to be a world leader. Because failing to choose means losing, as we cannot excel in everything, and a broad approach carries the risk of fragmentation of resources and capacity, resulting in diminished impact.

The government is opting for a new course in industrial policy centred on a 'smart focus'. Based on technology and market analyses (Annexe 1),¹⁰ we are fully committed to a limited number of markets where there is already traction and where analyses show strong contributions to Dutch economic potential, our economic resilience and societal missions. In these markets, the Netherlands can distinguish itself internationally. Therefore, we are allocating extra capacity, strengthening our knowledge base and seizing opportunities in these markets, while also tackling bottlenecks in a targeted way. Building on experiences from recent years and on new insights, the government intends to organise its industrial policy as follows:

1. We will focus more on industrial policy by concentrating on a smaller number of markets and technologies than is currently the case (hereafter referred to simply as 'markets').
2. In these markets, we will develop programmes together with industry that include concrete goals and actions, following the example of the semiconductor approach. The Ministry of Economic Affairs will also strengthen its knowledge base in these markets.

action plan for the future of Dutch industry; undertaking given during the semiconductor debate of 2 September 2025 to make clear choices and link them to the NTS (TZ202509-007); undertakings given during the debate of 13 February 2025 on the Netherlands' economic potential to send a letter in Q3 2025 on the new industry and innovation policy (TZ202502-139) and on the National Technology Strategy (TZ202502-142); undertaking given during the debate of 25 September 2025 on the Netherlands' economic potential that the new AI strategy and industry policy would be sent to parliament in the near future (TZ202509-114).

⁸ TNO, 2024. 'Grip op control points' (Control points under control).

⁹ 'Investeren in een weerbare en toekomstbestendige economie: het 3%-R&D-actieplan' (Investing in a resilient and future-proof economy: the 3% R&D action plan), Parliamentary Paper no. 33 009-165.

¹⁰ The NTS and the report 'Groeimarkten voor Nederland' (Growth market for the Netherlands) use societal challenges as a key factor in their analyses. New technologies and markets are often driven by societal challenges. The interconnection between the NTS, growth markets and efforts to address these challenges on the basis of the mission-driven innovation policy is outlined in Annexe 2.

3. We will align our policy instruments as closely as possible with the priorities of the National Technology Strategy (NTS). This will create a strong technological foundation for the growth of these new markets.
4. The Ministry of Economic Affairs will coordinate the programmes and the associated organisations, working within these programmes with line ministries, local authorities, knowledge institutions, implementing agencies and other stakeholders.

This industrial policy makes an important contribution to innovative industrial development and aligns with the government's goals for 2030: a strong, diversified industrial sector that accounts for at least 15% of GDP¹¹ and public-private R&D investments of at least 3%.¹² In this way, we are building a powerful and resilient economy that creates jobs, maintains scope for smart ideas, and ensures that the Netherlands is prepared for the future. This fulfils the motion by Kostić et al.¹³

This new approach will bring an end to the top sectors policy as of 1 January 2026. This means that the tripartite top teams will be dissolved. The top sectors policy has shown that businesses, government and knowledge institutions can achieve a great deal together. The renewed industrial policy builds on the cooperation established within the top sectors in recent years to address societal challenges and to work across sectoral boundaries. This collaboration has led to concrete results and robust ecosystems, which have been developed through joint efforts on mission-driven challenges, innovations, application and scaling.

The Ministry of Economic Affairs will work not only with programmes in the chosen markets. Under the new industrial policy the government will also continue to pay attention to all sectors, including those included in the top sectors policy. The challenges, opportunities and issues faced by Dutch businesses are of course not limited to a few markets. More specifically, this means that the Ministry of Economic Affairs has designated 'sector leads' (points of contact) for all sectors, who are abreast of current developments and can take appropriate measures when necessary. The sector leads will also encourage innovation within sectors. This will occur in close cooperation with the line ministries: together we share responsibility for the various sectors.

We will therefore continue to build on the strong collaboration within the top sectors policy, using existing platforms wherever possible. The government works closely with businesses, industry organisations, knowledge institutions, regional authorities and other stakeholders to use available knowledge and instruments effectively. A good example of such a platform is the Construction Council (*Bouwberaad*), which identifies opportunities and bottlenecks within the sector and develops action plans aimed at improving productivity, linked to the NTS and suitable programmes.¹⁴ Another example of existing cooperation is Aviation in Transition (LiT), a multi-year collaboration between government and industry focused on increasing the Netherlands' economic potential and making the Dutch aviation sector climate-neutral by 2050. However, my ministry will

¹¹ Letter to parliament presenting an overview of priorities, Parliamentary Papers no. 36 600-XIII-65.

¹² 'Investeren in een weerbare en toekomstbestendige economie: het 3%-R&D-actieplan' (Investing in a resilient and future-proof economy: the 3% R&D action plan), Parliamentary Paper no. 33 009-165.

¹³ Motion by MP Kostić et al. on a well-argued vision and action plan for the future of Dutch industry, Parliamentary Paper no. 29 826-250.

¹⁴ The construction sector's productivity and innovation capacity must increase to provide sufficient buildings and infrastructure for economic activity. This will not only form a solid base for growth in specific markets but also a broad foundation for all businesses. The Construction Council is composed of representatives of the relevant ministries, public-sector public clients, industry organisations and knowledge institutions.

streamline its sectoral focus to free up capacity for the additional, programmatic efforts in markets where the Netherlands can distinguish itself internationally.

This new industrial policy is not something that I, as Minister of Economic Affairs, will be implementing alone. It relies on the Netherlands' unique expertise, knowledge and organisational ability in public-private cooperation. This is why, together with other ministries, I am promoting and investing in networks and structures between governments, businesses and knowledge institutions so that this country can continue to innovate. The continuation of strong public-private cooperation provides the freedom to further develop new, future-oriented markets while making optimal use of existing ecosystems. The same applies to the programmes: only through comprehensive cooperation – as in the semiconductor approach and the sector agenda for the maritime manufacturing industry – can we succeed. Depending on the outcome of the evaluation, we will consider what is needed for the possible continuation of the sector agenda for the maritime manufacturing industry.

Furthermore, the majority of the Ministry of Economic Affairs' instruments remain general in nature. One example is the Research and Development (Incentives) Act (WBSO), which companies will still be able to rely on. The same applies to the trade instruments of the Ministry of Foreign Affairs. As mentioned earlier, we will also continue to invest fully in the mission-driven innovation policy, with the Ministry of Economic Affairs playing a coordinating and facilitating role. The line ministries will be given more control within the mission-driven innovation policy than before. The Top Sector Alliance for Knowledge and Innovation plays an important role in establishing public-private cooperation and will continue to occupy a prominent place in the mission-driven innovation policy. As announced, the public-private cooperation innovation scheme¹⁵ will be revised, partly to further promote cooperation between companies and knowledge partners at the intersection of technologies, markets and societal challenges.¹⁶

The cooperative ventures forged under the top sectors policy form a solid foundation for stable government policy that can be further developed. In the new industrial policy, we build on this foundation, with a sharper focus on technologies and markets where domestic and international economic potential, economic resilience and societal challenges¹⁷ converge. We pay more attention to the necessary conditions for these markets, look more closely at the practical application and scaling of technology, and address obstructive legislation and regulations where needed. In doing so, we build on the top sectors approach and the mission-driven innovation policy, and we achieve a stronger impact than before on both the economy and society.

Targeted industrial policy

Programmes for specific markets

¹⁵ 'Investeren in een weerbare en toekomstbestendige economie: het 3%-R&D-actieplan' (Investing in a resilient and future-proof economy: the 3% R&D action plan), Parliamentary Paper no. 33 009-165.

¹⁶ The House will be informed in a separate letter about the further development of the mission-driven innovation policy and the public-private cooperation innovation scheme.

¹⁷ The societal challenges are formulated as 'missions' by ministries within the mission-driven innovation policy. Together with all partners in the voluntary agreement on knowledge and innovation, we are currently working to improve the organisational structure of mission-driven innovation policy. The new setup follows the Advisory Council for Science, Technology and Innovation (AWTI) report 'In dienst van de toekomst' (In service of the future) and places greater emphasis on the challenges themselves. Parliament will be informed later this year.

Targeted industrial policy consists of targeted interventions in specific markets, as is already the case in the semiconductor market (see text box below). A key success factor here is the whole-of-government approach, where the lines of action involve a joint effort by several ministries. The approach taken in these markets serves as an example for other markets, in line with the motion by Claire Martens-America et al.¹⁸ The Ministry of Economic Affairs is already working with local authorities, companies and other ministries in flexible programmes that give these markets an additional boost.

Integrated approach to semiconductors

- Through Project Beethoven, regional, interministerial and public-private partnerships have taken a major step forward in facilitating the continued growth of the semiconductor value chain in the Netherlands. Beethoven helps to ensure a sufficient supply of technically trained talent and to create region-specific conditions in the Brainport region for affordable housing and accessibility of key economic locations.
- Semicon Board NL was launched under Project Beethoven to develop policy recommendations for international competitiveness, capital, talent and economic resilience, for the period up to 2035. In this way we are working to shape a public-private agenda at strategic level, including an innovation and investment strategy.
- Internationally, on 29 September, at the initiative of the Netherlands, the European Semicon Coalition declaration was signed, specifying the joint efforts that will be undertaken to amend the European Chips Act. By way of the Important Project of Common European Interest (IPCEI) for Advanced Semiconductor Technologies (AST), we are strengthening the semiconductor value chain in the Netherlands and Europe.

Continuing along the path already established by our industrial policy, we are now choosing to step up our efforts in the six markets described below. These markets are of great importance to the Netherlands' economic potential and our economic resilience, and they contribute significantly to major societal challenges:

- Semiconductors: Building on the insights from Beethoven and in conjunction with the IPCEI-AST, more urgent investments will need to be made in innovation and the production capacity of the semiconductor chain to facilitate continued growth in the Netherlands. This will be done in consultation with the Semicon Board NL and the Semicon Coalition.
- Growth markets related to the DSII (in particular 6G, radar, laser satellite communication, quantum): The recently published Defence Strategy for Industry and Innovation (DSII) 2025–2029 serves as a framework for investment in innovation and industry. A programme for DSII-related growth markets gives an extra boost to this.
- Biotechnology: The government's vision for biotech provides a widely supported foundation for a targeted market approach aligned with the announced lines of action. Building on existing government initiatives such as Biotech Booster, CropXR and Cellular Agriculture, will be possible.

¹⁸ Motion by MP Claire Martens-America to include the lessons learned from the targeted Beethoven approach in the revised innovation and industrial policy and regional economic development.

- **Digital services (especially AI):** With the recently approved EU funding to build an AI plant in Groningen and with the development of an AI strategy by stakeholders from the ecosystem with the involvement of the Ministry of Economic Affairs, there is momentum to further advance the development of digital services and AI in the Netherlands.
- **Mechanical engineering:** With the Beethoven approach, the government’s existing focus on robotics in the agriculture, med tech and robotics domains under NXTGEN Hightech, there is a solid basis for a programme in mechanical engineering.
- **Innovative chemistry:** The publication of the Innovative Chemistry Investment Agenda has quantified the growth potential of innovative chemistry and materials between now and 2030. This can be developed further, building on initiatives such as Circular Plastics NL, Biobased Circular, GroenvermogenNL, Material Independence & Circular Batteries, and the National Vision on Sustainable Carbon in the Chemical Industry and the report on the future of the chemical sector in the Netherlands, which will be shared with the House in October.

The table below summarises the considerations for further developing these markets:

Market	Earning capacity	Economic resilience	Societal challenges
<i>Digital services (esp. AI)</i>	<p>Breakthroughs in the development of AI, the cloud, 6G and cross-sector applications offer new growth opportunities. For AI applications, annual growth¹⁹ is estimated to be 16.8% between 2023 and 2032.²⁰ Planned large-scale EU investments create opportunities for market development.</p> <p>The Netherlands has a strong position: high-quality research in data science and software,²¹ excellent digital infrastructure²² and a high degree of digitalisation.²³</p> <p>The five biggest Dutch players have a combined market value of about €170 billion (cf. the total value of the AEX index: €872 billion).²⁴</p>	<p>Risky strategic dependencies on foreign (and especially non-European) parties, as exist with respect to cloud services, can only be prevented through substantial and targeted investment in digital services and AI.</p> <p>The market is characterised by network effects, leading to platform dominance and a potentially undesirable winner-takes-all dynamic.</p>	<p>The digital transition cuts across all sectors and markets.</p> <p>The AI market has promising applications in many areas, such as healthcare, energy, high-tech industry, mobility, food production, and security/defence.</p>
<i>DSII-related applications</i>	In hybrid warfare, economic and technological leadership positions are crucial, in areas	Geopolitical developments underscore the need for	The market contributes directly to the

¹⁹ Compound Annual Growth Rate (CAGR).

²⁰ Statista, 'The Impact of Artificial Intelligence on Productivity, Distribution and Growth', 2024.

²¹ Dutch researchers account for 4.4% of all top-1% research publications worldwide in the field of data science and 2% of all research publications that are cited in patents, and 3.6% of all top-1% research publications in related data-science fields and 3% of all research publications cited in patents. Source: *Elsevier*, 'Quantitative Analysis of Dutch Research and Innovation on Key Technologies', 2023.

²² Report on the state of digital infrastructure, Parliamentary Paper no. 26 643-1119.

²³ Of all EU countries the Netherlands has the highest share of people with digital skills within its population (79%). Source: Statistics Netherlands (CBS), 'Nederlanders digitaal steeds vaardiger' (The Dutch are becoming more digitally savvy), 2023.

²⁴ AEX as of April 2024; Booking.com, Adyen, JustEatTakeaway, Picnic, Mollie. Source: Dealroom, April 2024.

	<p>such as quantum applications, radar systems and 6G networks. Annual growth for radar systems is estimated at 8.4% from 2023 to 2027²⁵ and for quantum at 14–17% from 2023 to 2040.²⁶ This is partly driven by developments in AI.</p> <p>The Netherlands has a well-developed defence and security cluster²⁷ and is a world leader in quantum technology research.²⁸</p> <p>The market is characterised by public sector clients which offers opportunities for market creation via innovation-driven government procurement.</p>	<p>investments in defence applications.</p> <p>The Netherlands and NATO allies have agreed that 5% of GDP will henceforth be allocated to defence and related investments.²⁹ The market contributes directly to the safety and economic resilience of the Netherlands.</p>	<p>Netherlands' security and economic resilience.</p> <p>In addition, applications such as quantum may spawn new uses in various sectors, including healthcare, energy, finance and security.</p>
Biotechnology	<p>Due to convergence with technologies such as AI, the global innovation pace of biotechnology is on the rise. The market has many applications in healthcare, food, plant breeding and the chemical sector.</p> <p>The Netherlands has a leading global position in the field of biotechnology. In terms of bioinformatics, cell technology, biomanufacturing, biosystems and plant breeding, the Netherlands has a very high share in the top 1% of cited scientific publications and patents.³⁰ The Dutch plant breeding sector accounts for nearly 35% of the global trade in vegetable seeds.³¹</p> <p>The market has many promising niches with high growth expectations in which the Netherlands has a</p>	<p>Knowledge and expertise in biotechnology constitute an essential capability and carry geopolitical weight due to their broad range of applications.</p> <p>This is an important market for reducing strategic dependencies, e.g. achieving food security through innovative food production.</p>	<p>Due to its many applications, this market helps to address various societal challenges, particularly healthcare (new medicines), the circular economy (new circular materials such as bioplastics) and sustainable food production (plant breeding and alternative proteins).</p>

²⁵ 360 Research Reports, 'Digital Array Radar Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030', August 2024. Most market estimates from other analysts are in the same range.

²⁶ McKinsey, Quantum Technology Monitor, 2024.

²⁷ Innovation Quarter, 'Defensie en veiligheid in Zuid-Holland' (Defence and security in South Holland), March 2024.

²⁸ Australian Strategic Policy Institute, Critical Technology Tracker, 2023.

²⁹ <https://www.defensie.nl/actueel/nieuws/2025/06/25/verhoogde-navo-norm-officieel-vastgelegd-in-den-haag>.

³⁰ The Netherlands's share in the world total: Bioinformatics: 7.2% of top-1% publications and 6% of all research publications cited in patents; cell technology: 6% of top-1% publications and 5% of patent citations; biosystems: 5% of top-1% publications and 5% of patent citations; bio-manufacturing: 5% of top-1% publications and 4% of patent citations. Source: *Elsevier*, 'Quantitative Analysis of Dutch Research and Innovation on Key Technologies', 2023.

³¹ LEI, 'Uitgangsmaterialen, motor voor export en innovatie' (Raw materials: engine for export and innovation), 2011.

	<p>leading role, including cell and gene therapy (15.4% annual growth, 2020–2030)³² and alternative proteins (14.1% annual growth, 2020–2035).³³</p>		
<i>Semiconductors</i>	<p>An annual growth rate of 8.7% is expected for this market between 2022 and 2030.³⁴ The rapid growth of AI and the corresponding demand for more computing power and data centres, in particular, increases the need for semiconductors (microchips).</p> <p>The market has promising niches where the Netherlands holds a leading position, such as photonics.</p> <p>There are major spillovers to industries such as electronics, mechanical engineering and the automotive sector.</p>	<p>Semiconductors are crucial for a wide range of products. A position in this value chain is therefore of great strategic importance.</p> <p>Countries are pursuing an active industrial policy, underscoring the importance of urgent action to maintain and strengthen our leading position.</p>	<p>Semiconductors are essential hardware for the digital transition and increasingly vital for security in the context of cyber warfare.</p> <p>They also have many applications in the energy transition, e.g. in solar panels, wind turbines and electric vehicles.</p>
<i>Innovative chemistry</i>	<p>The Netherlands has strong knowledge potential in process technology, biotechnology and knowledge-intensive chemistry for advanced materials. It has a highly developed chemical industry with economies of scale in industry clusters and the logistics connections between supply chain partners needed to occupy a strong market position.</p> <p>The Netherlands is relatively specialised when it comes to the chemical sector. Strong growth is expected with respect to innovative chemistry, with an annual percentage of 21.9% (2023–2030) for biofuels and 27% (2023–2028) for circular, biobased and advanced materials.</p>	<p>A strong position in innovative chemistry enhances economic resilience by reducing dependencies on other countries for materials (circularity) and energy carriers (biofuels, hydrogen).</p>	<p>Innovative chemistry contributes significantly to sustainability by providing renewable and circular alternatives to fossil products. It also has cross-sectoral applications, from pharmaceuticals to food production, and from automotive to semiconductors.</p>
<i>Mechanical engineering</i>	<p>The market has many promising niches in which the Netherlands has a leading position, such as chip machines, agrifood machinery, energy technologies and med tech. The Netherlands' has a unique position when it comes to chip machines, thanks to a number of major industry players and a large</p>	<p>Countries are actively pursuing industrial policies due to the market's strategic importance, thanks in part to large spillovers into sectors such as healthcare, food and chemistry. This underscores the importance of urgent action in order to</p>	<p>Mechanical engineering helps address cross-sector societal challenges, including security, digitalisation, sustainability, the energy transition, healthcare and food security – e.g. med tech applications that help address staff shortages in healthcare.</p>

³² BioSpace, 2022. 'Cell and gene therapy manufacturing market size to be worth around \$67.4 billion by 2030'.

³³ Boston Consulting Group, 'Food for Thought: The Protein Transformation', 2021.

³⁴ McKinsey, 'The Semiconductor Decade: a Trillion-Dollar Industry'.

	<p>network of suppliers, most of which are SMEs. Export data shows that the Netherlands accounts for about 25% of global exports of chip machinery.³⁵</p> <p>Developments in AI, data and the cloud offer new growth opportunities under the banner of 'Industry 4.0'. Annual growth for smart farming machinery is 17.1%³⁶ and for med tech 5.2%.³⁷ Demand for chip machines will grow along with semiconductors (8.7% annual growth, 2022–2030).³⁸</p>	<p>maintain and enhance our leading position.</p> <p>The Netherlands' position as a leader in chip machinery gives it geopolitical weight.</p>	
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Possible actions within programmes

The opportunities and bottlenecks, necessary interventions and appropriate instruments will differ from market to market. A customised approach is therefore essential. Collaboration with the private sector, other government bodies, knowledge institutions and financiers is crucial for developing and implementing the programmes. For this reason, we are building on the strong public-private partnerships established under the top sectors policy and aligning them as closely as possible with the mission-driven innovation policy. For each programme, the government is working towards a coherent package of investments³⁹ and policy instruments. A comprehensive approach is indispensable for success: cooperation must take place across ministries, regions, Europe and internationally.

For each programme, we will, where necessary, take the following actions:

- **Capacity and intelligence:** Deploy additional capacity (including staff and expertise) for each programme in order to address opportunities and bottlenecks, and strengthen the knowledge position of the Ministry of Economic Affairs in these markets.
- **Building ecosystems:** Invest in process-related and other forms of innovation, applications and scaling up, bringing together entrepreneurs, researchers and designers in creative ecosystems, with due regard for spillovers between markets and technologies.
- **Financing:** Improve access to financing (including private financing) to reduce the capital gap.
- **Regulation:** Remove obstructive rules by addressing bottlenecks in legislation at both national and EU level, in cooperation with the European Commission and other member states.
- **Space, infrastructure, water and buildings:** Resolve bottlenecks related to physical space, environmental capacity, infrastructure, water availability, construction (including housing), grid congestion and permits for specific markets.
- **Internationalisation and acquisition:** Strengthen the internal market and our geopolitical position through trade promotion, attract foreign investment and

³⁵ Statistics Netherlands (CBS), 'Relatieve specialisatie Nederlandse economie 2022' (Relative specialisation of the Dutch economy, 2022), June 2024.

³⁶ Statista, 'Smart Agriculture', 2023.

³⁷ KPMG, 'Medical Devices 2030', 2019.

³⁸ McKinsey, 'The Semiconductor Decade: a Trillion-Dollar Industry'.

³⁹ For example, the intended IPCEI-AST investment announced in the Budget Memorandum.

companies (Netherlands Foreign Investment Agency, NFIA) and cooperate within the EU on specific markets (e.g. IPCEIs, Horizon Europe, Net-Zero Industry Act).

- **Human capital:** Promote the Netherlands as a magnet and training location for digital and technical talent, in cooperation with the private sector.
- **Market creation:** Create and stimulate new markets in the Netherlands and Europe, for example through strategic procurement.
- **Knowledge and research:** Invest in fundamental and applied research to stimulate spillovers between knowledge institutions and companies.

In the coming months, the programmes will be fleshed out in greater detail, and the government will map out which specific actions will be implemented, their expected impact on economic potential, economic resilience and societal challenges, their possible financial consequences, the expected duration of each initiative, and the parties involved.

No additional funds have yet been allocated for implementing the programmes. However, the government is exploring the reprioritisation of resources for this purpose. It is, of course, also up to the next government to consider setting aside additional funds. The 3% R&D Action Plan provides nine concrete proposals to mobilise investment in technology and markets.⁴⁰ For example, the government's own procurement policy offers significant potential by way of an exploration of a National Agency for Disruptive Innovation (NADI). The independent advisory report by Mr Peter Wennink on strengthening the Dutch investment climate and future economic potential, which will be published by the end of 2025, will provide insight into the required investments and the associated private commitment.⁴¹ The proposed national investment institution, which is currently under consideration, could play a role in attracting, allocating and managing such funds. However, for this programmatic approach to achieve a real impact, additional resources will be necessary. The decision on this lies with the next government and will form part of the regular budget process.

A solid technological foundation for the growth of new markets

Innovation and solutions to societal challenges are the key to new markets. Technology plays a crucial role in this. The National Technology Strategy (NTS)⁴² has already prioritised 10 key technologies that are essential to the development of new markets ('enabling technologies'). These technologies were chosen for their contribution to the mission-driven innovation policy, economic potential and national security. The missions serve as a compass for innovative developments, ensuring that they help to address societal challenges. An important aspect here is the relationship between technology and social innovation – real change arises from a fusion of design, ideas, and technology.⁴³

The NTS offers guidance for public and private efforts in fundamental, experimental and industrial research. Companies, knowledge institutions and other stakeholders are drawing up action agendas to implement the NTS, focusing on market applications and on solutions to societal challenges. These agendas are expected to be delivered in December 2025.

The further a technology is developed, the closer it is to application. This is where the greatest economic opportunities arise, with the greatest impact on societal challenges.

⁴⁰ 'Investeren in een weerbare en toekomstbestendige economie: het 3%-R&D-actieplan' (Investing in a resilient and future-proof economy: the 3% R&D action plan), Parliamentary Paper no. 33 009-165.

⁴¹ Request for an advisory report from Peter Wennink, Parliamentary Paper no. 32 637-707.

⁴² National Technology Strategy (NTS), Parliamentary Paper no. 33 009-140.

⁴³ AWTI advisory report 2023, 'In dienst van de toekomst, van optimalisatie naar transformatie' (In service of the future: from optimisation to transformation).

The specific innovation instruments⁴⁴ of the Ministry of Economic Affairs will therefore be increasingly focused not only on these key technologies but also on more experimental and industrial research. This is intended to accelerate the application and scaling of knowledge and technology in the market. The instruments thus evolve in line with policy so that it can be deployed in technology markets in a targeted way. Last year, the House was already informed of the first steps in this area.⁴⁵ In addition, the following actions are underway:


Additional actions:

- The SME Innovation Stimulation Scheme for Regions and Top Sectors (MIT) encourages R&D collaborations by SMEs in line with regional priorities, the mission-driven innovation policy and the NTS in particular. In conjunction with the evaluation and the budgetary targets, the provinces and I are exploring the possibility of integrating the MIT into the national co-financing of the European Regional Development Fund (ERDF) from 2028 onwards. The aim is to create a single simpler instrument that is better aligned with the NTS priorities and regional strengths.
- The Thematic Technology Transfer (TTT) scheme brings research organisations and investors together to effectively translate exceptional research into new startups; the most recent round was explicitly aligned with the NTS. Through this scheme, we are launching a targeted call to stimulate defence-related applications.
- In the new Dutch Research Council-Applied Technical and Applied Sciences Perspectief round, technological development has been added as an assessment criterion, with bonus points available for contributions to the NTS. Perspectief promotes collaboration between researchers and businesses for innovations with economic and societal impact.
- Instruments such as the Innovation Attaché Network, innovation missions and the Tech Bridge programme are aimed at positioning knowledge-intensive companies and research institutions within globally leading innovation ecosystems. The NTS provides the framework for this effort.
- In terms of attracting investment through the NFIA, the NTS serves as a guide.
- In response to the motion by MPs Laurens Dassen and Pieter Grinwis, regulatory sandboxes are being explored for startups, scale-ups and other companies working with NTS key technologies.⁴⁶ Specifically, we are looking into a potential biotech sandbox as a follow-up to the government's Biotechnology Vision 2025–2040, and a sandbox in the field of AI and autonomous transport, in which companies can safely and responsibly test key technologies such as optical systems and AI. There are also potential linkages with the Cyber Resilience Act.

⁴⁴ Alongside these specific instruments, the government maintains a set of general innovation instruments. A broad base of innovative companies and knowledge will continue to be able to take advantage of the Research and Development (Incentives) Act and the innovation credit scheme. In practice, both contribute significantly to the NTS. The House was recently informed about efforts to improve the act based on the evaluation.

⁴⁵ An elaboration of the National Technology Strategy, Parliamentary Paper no. 33 009-150.

⁴⁶ Motion by MPs Laurens Dassen and Pieter Grinwis on exploring how sandboxes for other technologies can be incorporated into the National Technology Strategy, Parliamentary Paper no. 36 600-XIII-40.



Additional actions are underway at other ministries as well. The NTS choices are being linked to the five priority national technology domains in the Defence Strategy for Industry and Innovation 2025–2029,⁴⁷ and the Ministry of Finance has launched a pilot scheme whereby innovation would be covered by export credit insurance.⁴⁸

A stronger foundation for all businesses

As stated at the beginning of this letter, the main objective of industrial policy is to strengthen the Netherlands' economic potential and economic resilience. In addition to targeted efforts in markets and technologies, the government is therefore also enhancing the conditions for growth and economic security. Several cross-cutting themes are of great importance for ensuring that economy can function properly.

It is clear that companies in all markets need the right conditions to grow. Physical space, financing, talent and knowledge, a reduced regulatory burden, a level playing field, access to business premises and housing, a sustainable water supply and affordable access to energy are essential for every business. The government is therefore strengthening the business climate in several areas, as outlined in recent letters to parliament.⁴⁹ Startups and scale-ups are an important target group within this plan, as they are often active in technological markets. I recently shared with the House an action agenda for startup and scale-up policy⁵⁰ that helps such companies to grow further.

Moreover, the basic conditions for economic security must be in order. As explained in my recent letter to parliament, access to knowledge, technology and critical raw materials is increasingly determining our national security.⁵¹ Other countries do not hesitate to use economic instruments as geopolitical leverage. We must not be naïve; we need to protect and strengthen our national and European capabilities. The government is doing this through the National Approach to Economic Security. As part of this, the government is identifying dependencies through confidential analyses within the Taskforce on Strategic Dependencies, and control measures are being developed wherever possible, thus implementing the motion by MP Jimmy Dijk.⁵²

A solid foundation also requires attention to cross-cutting opportunities and challenges such as productivity growth, digitalisation, sustainability, food security, nature restoration, the energy-related, circular and resource transitions, water, logistics chains, construction (including housing) and creative design capacity.

⁴⁷ Defence Strategy for Industry and Innovation, 2025-2029, Parliamentary Paper no. 31 125-134.

⁴⁸ The follow-up to undertakings regarding the export credit insurance mandate, international benchmark, policy review, OECD rule and reassessment of the Mozambique project; and follow-up to the motion by MPs Aukje de Vries and Tom van der Lee on enabling Atradius as soon as possible to also support Dutch companies in key technologies and strategic raw materials, without this coming at the expense of the regular export credit insurance (Parliamentary Paper no. 26 485-446), Parliamentary Paper no. 36 600-IX-39.

⁴⁹ Status of efforts to enhance the investment climate and reduce the regulatory burden on businesses, Parliamentary Paper no. 32637-706; Plan to address congestion in the power grid, Parliamentary Paper no. 29023-566; Economic vision on spatial planning, Parliamentary Paper no. 33 043-229.

⁵⁰ Action agenda for startup and scale-up policy, Parliamentary Paper no. 32 637-709.

⁵¹ Progress report on the National Approach to Economic Security, Parliamentary Paper no. 30 821-302.

⁵² Motion by MP Jimmy Dijk calling for an overview of strategic sectors vital to the Netherlands and related international dependencies, and for proposals on how production can be maintained or reshored, Parliamentary Paper no. 31 985-89.

The Productivity Agenda sets out measures to enhance productivity in the Netherlands. It contains actions, explorations and proposals that contribute to increasing labour productivity across the economy.⁵³ The development and application of digital technology across nearly all sectors makes a major contribution to overall economic development. Breakthroughs in AI, data and cloud technologies – and their broad adoption by companies – accelerate and amplify the digital transformation.

With regard to the sustainability challenge in the context of industrial policy, the government recently sent the House a document on future prospects for energy-intensive industry.⁵⁴ In it, the government indicates that there are clear prospects for energy-intensive industry, since efforts to boost sustainability are closely linked to our future economic potential, economic resilience and supply security. It is therefore crucial to take measures that unlock investments, especially in projects that enable the energy transition and circular transition of entire value chains. Additionally, the House was recently informed – in the context of sustainability and biodiversity restoration – about the National Biodiversity Plan⁵⁵ and progress on implementing the Nature Restoration Regulation. The energy and raw materials transition is a prerequisite for our future economic potential and economic resilience. New energy technologies act as an investment engine in that regard, creating innovative export products and economic opportunities for the Netherlands. Moreover, the energy and raw materials transition reduces future dependencies on other countries for our energy supply, for instance through increased circularity, in line with the National Circular Economy Programme (NPCE).

Food security is an important prerequisite for a resilient Netherlands and Europe within a changing geopolitical context. The Dutch agriculture, horticulture and food sector makes a crucial contribution to food security, reducing dependencies and strengthening the Netherlands' economic potential through innovative solutions. This sector, which is characterised by globally leading innovative companies, is internationally recognised as a frontrunner in agri-tech. Many growth markets converge here: Dutch companies, from innovative startups to established players, are leaders in biotechnology, digitalisation, robotics, precision agriculture, smart greenhouses and new processing technologies.

Another cross-cutting theme for business is water – whether in terms of availability, security or quality. For the future development of the economy, efficient water use and a reliable water system are essential for long-term growth. Water systems are changing; water-quality guidelines are stricter, and the risk of both drought and flooding is increasing. Innovations in water technology contribute to more efficient water use, circularity and cleaner wastewater. The public and private sectors must therefore work together closely to meet environmental standards and to ensure a reliable network for drinking water and other purposes. Water technology and water engineering are therefore crucial cross-sectoral themes in economic development.

A robust logistics infrastructure and well-functioning supply chains are also indispensable for a well-functioning economy. Without reliable export corridors, multimodal accessibility and supply-chain cooperation, economic development will stall. Logistics forms a foundation on which economic potential and economic resilience rest – from supply security to strategic autonomy.

Another cross-cutting theme for economic development is the construction sector, for adequate real estate (for the private sector and other parties), housing, good accessibility, an efficient logistics chain and grid connections. Construction has an

⁵³ Productivity Agenda, Parliamentary Paper no. 2025D37684.

⁵⁴ Prospects for energy-intensive industry, Parliamentary Paper no. 29 826-265.

⁵⁵ National Biodiversity Plan, Parliamentary Paper no. 26407-155; Progress report on the implementation of the Nature Restoration Regulation, Parliamentary Paper no. 33 576-440.

enabling position in the economy, and given its many production linkages, is indispensable for a strong base for all businesses. A shift towards industrialisation and digitalisation to improve labour productivity in construction will strengthen and accelerate the possible growth of economic potential. Moreover, the creative industry's design capacity is a crucial condition for the Netherlands' economic potential and innovation power. Real change occurs where technology and social innovation meet, and design, ideas and technology converge.

International cooperation

More than one-third of the Netherlands' GDP is earned through international trade. The sectors covered by the new industrial policy are therefore important for our trade policy. Achieving international impact and economic potential requires a strong industrial base — and vice versa: success in international markets is essential in order for Dutch sectors to flourish. Strong international cooperation is thus crucial for an effective industrial policy. Working with international and European partners gives the Netherlands greater leverage, which benefits both our economic potential and economic resilience. The European Union is our most important partner in this. A strong Europe is the cornerstone of a resilient and prosperous Netherlands. Both inside Europe and beyond, the government is focused on strong international logistics chains, access to foreign markets, an extensive network of trading partners (so that we are not dependent on a single partner) and a level playing field, inside and outside Europe.

The new industrial policy aligns with the priorities set out in the trade policy letter by the Ministry of Foreign Affairs.⁵⁶ The focus is on sectors and countries where Dutch companies stand to gain the most and on what contributes most to the resilience of the Dutch economy. Through the efforts of the PPS Coordination Team and other parties, trade, innovation and industrial policy have been linked together, enabling support for priority sectors through the available instruments. Linking these policy areas has already proven to be a successful strategy.

In addition to the goals mentioned above, trade policy can also be used for other sectors and purposes, such as strengthening bilateral relations (including trade relations) and future international growth markets. The general trade instruments therefore remain available to all Dutch companies. The policy letter on international development,⁵⁷ which focuses on our economic interests and areas in which the Netherlands stands out, such as water management, food security and health, is also aligned with innovation and industrial policy. Linking industrial policy with foreign policy, including the economic dimension, ensures coherence and allows effective coordination of public and private efforts.

The new industrial policy also aligns with our efforts at European level, as set out in the government's vision on EU competitiveness⁵⁸ and the document on the prospects for energy-intensive industry.⁵⁹ At European level, the government advocates for strengthening industry, with an emphasis on favourable preconditions and stimulating demand so that companies have the freedom to innovate and scale up. In terms of sustainability, the government focuses on stimulating market demand for sustainable products, improving the business case for sustainable products and processes. The Netherlands actively participates in the Joint European Forum for IPCEI, coordinates the IPCEI AST in Europe, and explores financial and other opportunities for participating in the IPCEIs Compute Infrastructure Continuum (CIC), AI and Biotech. In the European

⁵⁶ Policy Agenda for Foreign Trade 'The Netherlands: prosperous and resilient', Parliamentary Paper no. 36 180-164.

⁵⁷ Policy letter on international development, Parliamentary Paper no. 36 180-133.

⁵⁸ Government vision on EU competitiveness, Parliamentary Paper no. 21 501-30-621.

⁵⁹ Prospects for energy-intensive industry, Parliamentary Paper no. 29 826-265.

negotiations on the Multiannual Financial Framework, strengthening competitiveness is one of the government's three priorities.⁶⁰ The government advocates for a European competitiveness fund with a clear focus on strategic sectors, to strengthen cross-border value chains. Within the EU, the Netherlands is also calling for tough choices when it comes to strategic research priorities and technology areas, as well as for long-term, targeted support for cross-border ecosystems within the next Horizon Europe framework programme, covering the entire knowledge chain from fundamental research to market introduction.⁶¹ Finally, the Netherlands attaches great importance to the EU Innovation Fund. In this way, the Netherlands ensures that cooperation at European level contributes directly to the position of the Dutch business community.

Conclusion

The government wants to organise the involvement of businesses, financiers, knowledge institutions and public sector partners in this industrial policy on a permanent basis. In addition to intensive cooperation with our partners in the aforementioned programmes, the government is also transforming the existing consultation structure into a joint industry and technology platform, following the motion by MP Mustafa Amhaouch et al.⁶² Here, government and stakeholders will regularly discuss economic progress, translate real-world input into policy and make choices about international opportunities and challenges. This will be elaborated in close consultation with relevant stakeholders in the coming months.

By following this course of action, the government is taking a significant step towards an industrial policy that will prepare the Netherlands for the challenges and opportunities of the coming decades. We are focusing on markets in which we excel and sharpening our focus by aligning instruments and policies with technologies in which Dutch companies can lead globally. We are also strengthening the investment climate so that all companies have the scope to grow into world leaders.

This stronger approach at regional, national, European and international levels is intended to foster a better business climate, measurable growth and more investment in production and R&D in the Netherlands. Together, we are investing in an economy that creates jobs, increases prosperity and addresses societal challenges – an economy resilient enough to absorb shocks and smart enough to seize opportunities. Thus, today, we are taking the first step towards coming out on top in the markets of tomorrow.

⁶⁰ The government's assessment of the MFF and Council Decision on Own Resources proposals by the European Commission, Parliamentary Paper no. 21 501-20-2268.

⁶¹ The Netherlands' vision paper on the future EU Framework Programme for Research and Innovation ('FP10'), Parliamentary Paper no. 2024D38477.

⁶² Motion by MP Mustafa Amhaouch et al. on exploring a National Strategic Industry & Technology Platform suitable for the Netherlands, Parliamentary Paper no. 36 410-XIII-55.