

> Retouradres Postbus 20401 2500 EK Den Haag

De Voorzitter van de Tweede Kamer
der Staten-Generaal
Prinses Irenestraat 6
2595 BD DEN HAAG

**Directoraat-generaal
Bedrijfsleven & Innovatie**
Directie Topsectoren en
Industriebeleid

Bezoekadres
Bezuidenhoutseweg 73
2594 AC Den Haag

Postadres
Postbus 20401
2500 EK Den Haag

Overheidsidentificatienr
00000001003214369000 T 070
379 8911 (algemeen) F 070 378
6100 (algemeen)
www.rijksoverheid.nl/ez

Ons kenmerk DGBI /
98481714

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Betreft **Letter of 27 May 2025 to the President of the House of
Representatives from the Minister of Economic Affairs, in
conjunction with the Minister of Education, Culture and Science,
the Minister for Foreign Trade and Development, the Minister of
Defence and the State Secretary for Defence, containing a
progress report on the semiconductor industry in a changing
geopolitical climate**

Semiconductors are of crucial importance for all kinds of sectors and products, including our electricity supply, electric cars, medical devices, communications, artificial intelligence, food production and advanced military systems. The semiconductor market is a strong global growth market, which is expected to pass the \$1 trillion mark by 2030.¹ The semiconductor value chain is extremely complex, specialised and highly concentrated internationally. The Netherlands holds an important position in that international value chain. The sector is therefore important for our economy, prosperity and national security.

In previous letters² the government shared its ambitions for strengthening the Dutch semiconductor sector with the House. However, given the current geopolitical situation, our strong position in the semiconductor industry is now under pressure. I am therefore writing to the House about the urgency of further raising our ambitions so that, together with the sector, we can ensure that the Netherlands still has a leading and sustainable industry and knowledge position in 2035.

With last year's launch of Project Beethoven we took a solid, meaningful step to help the semiconductor sector in the Netherlands continue to grow.³ But more needs to be done. Project Beethoven is focused on the preconditions that will allow the facilitation of the sector's growth, but does not involve investment in the sector's innovative capacity and competitiveness. Furthermore, the international arena has changed rapidly and now poses a threat to the Netherlands and Europe.

¹ [\\$1 trillion by 2030: the semiconductor devices industry is on track.](#)

² Parliamentary Papers: 33 009, no. 138; 33 009, no. 141 (including appendix containing letter to ASML about giving extra impetus to microchip sector); 33 009, no. 151; 29 338 no. 276 and 29 338, no. 280.

³ The economic interests concerned are considerable: the five biggest Dutch semiconductor companies together account for revenues of around €46 billion.

In the past year the semiconductor industry has been the subject of global geopolitical tensions to an even greater extent than before. In the sphere of technological competition and trade, a technological leadership race is underway with regard to the control, production and supply of semiconductors. International tensions are rising, and countries such as the US and China are seeking to reshore an ever larger share of the value chain. At the same time, other players with a significant share of the value chain, such as Taiwan, South Korea, Japan and Singapore, are strengthening their position. They are investing many billions, in both private and public funding, in this industry.⁴ In the Netherlands and Europe we are currently lagging behind in this regard. For this reason, I recently visited South Korea, Japan and Singapore to boost our economic and technological relations with those countries and help foster cooperation with Dutch companies. Since the Netherlands and Europe control only a modest part of the overall semiconductor value chain, we are becoming increasingly dependent on other countries. This poses risks to security of supply of semiconductors, with all that entails.

Without additional commitment from both the government and the private sector, the Netherlands and Europe could become increasingly vulnerable. This would put pressure on our world-leading R&D position, our future earning capacity and our economic resilience. I want to prevent these risks. To this end, the Netherlands and Europe need to focus on (i) control points: essential parts of the semiconductor value chain in which the Netherlands or Europe has a world-leading position. A good example of this is the knowledge and expertise used by ASML in the production of the world's most advanced chip manufacturing machines. More control points need to be created in order to establish mutual dependencies, thereby enhancing our resilience; (ii) production capacity: Europe currently holds around 10% of the semiconductor value chain's total revenues.⁵ That is not to say we have sufficient resources to produce our own chips: various key steps in the chip manufacturing process are only marginally present in Europe at the moment. Given the expected increase in demand for chips and the large-scale foreign investments described above, we will become more and more dependent on other countries for our chip supply unless we have our own manufacturing plants.

In addition, Mario Draghi's report on the future of EU competitiveness states that Europe is falling further and further behind. Draghi has called on the EU to launch a major European effort as a matter of urgency, and to work to build a competitive and resilient economy. The government supports this message and endorses its urgent call for policy action.⁶

⁴ By means of the CHIPS and Science Act the US has now invested \$52 billion. Japan has invested \$65 billion in building its own advanced semiconductor ecosystem. China has shown unwavering determination to stimulate innovation and increase its independence through the National Integrated Circuit Industry Investment Fund (also known as 'The Big Fund', which is worth \$95 billion). It is estimated that between now and the end of 2030 Europe will need to invest €150-250 billion to ensure its resilience in the geopolitical arena.

⁵ [Report on the state of the Digital Decade 2024 | Shaping Europe's digital future](#). In 2022 the EU earned 9.8% of total revenues in the semiconductor value chain. According to European Commission estimates, this will rise only to 11.7% by 2030, despite the introduction of the EU's European Chips Act. What is more, there are major attendant risks in this connection relating to geopolitical and market developments.

⁶ Parliamentary Paper 21 501-30, no. 614.

The main message the government seeks to underline in this letter is that technological leadership in this sector is crucial if we are to retain our strategic autonomy, resilience, military-technological advantage and earning capacity. This is not a given, however. In view of recent international developments, we need firmer ambitions at both national and EU level, and the Netherlands and Europe need to invest in the sector with greater urgency. To boost those ambitions I am currently working on renewed industrial policy for the semiconductor sector, and I have established the Semicon Board NL. At EU level, I am taking the lead in mobilising my fellow ministers. In preparation for the parliamentary committee debate on the semiconductor industry on 4 June 2025, I will inform the House below regarding:

- A. the progress of Project Beethoven;
- B. initiatives aimed at enhancing the semiconductor sector.

A. Progress of Project Beethoven

In early 2024 the semiconductor industry, led by ASML, expressed its concerns about the problems it is experiencing in achieving its growth ambitions within the Netherlands. By launching Project Beethoven⁷, the government sought to give a national boost to the semiconductor business climate. The aim is to create the preconditions necessary to enable companies such as ASML to make major investment decisions that will facilitate further growth and expansion in the Netherlands. In total, central government, the Brainport region and the sector have made €2.51 billion available for this national initiative between now and 2030. Of that amount, €1.73 billion will come from central government and €778 million from the region and the sector.

Area-based project for Brainport region

The 'Brainport' top technology region occupies a crucial position in the semiconductor sector. The majority of the sector is based in this region. The region's growth therefore needs to be accommodated with sufficient affordable housing and good accessibility. Between now and 2030, the national boost provided by Project Beethoven will contribute to the construction of 62,000 homes, a major improvement to road infrastructure and a rapid transit system between the centre of Eindhoven and various top campus locations, including those of ASML, High Tech Campus Eindhoven (HTC) and the Brainport Industries Campus (BIC), where ASML plans to build new premises.

This area-based project is a major one, entailing decision-making responsibilities that are divided between the regional and central government. Cooperation between central government, the region and ASML on the housing and accessibility aspects has so far been outstanding. I am overseeing the effective execution of this area-based project together with the regional administrators, the Minister of Infrastructure and Water Management, the Minister of Housing and Spatial Planning, the Minister of Education, Culture and Science, and the Minister of Climate Policy and Green Growth. An inter-authority consultative structure for the Brainport region has been established for this purpose (BO Brainport). Together with these partners I expect to adopt an implementation agenda during

⁷ Parliamentary Paper 33 009, no. 141.

the BO Brainport consultations before the summer. This agenda will be used to monitor area-based progress, identify problems and help manage the project's efficient and effective implementation.

Key conditions

In addition, sufficient power and sufficient scope for activities that cause nitrogen emissions will be essential for the Dutch semiconductor industry's continued growth, and thus also for our resilience and international competitiveness. We must ensure that energy-grid demand and nitrogen deposition do not prompt the semiconductor industry's departure from the Netherlands. I am therefore explicitly prioritising these two issues. I am currently exploring possible solutions that will facilitate the sector's continued growth.

National Plan for Developing Talent in the Microchip Industry

The National Plan for Developing Talent in the Microchip Industry, which is part of Project Beethoven, is aimed at training extra talent in the microchip industry as soon as possible. This is both necessary and urgent: between now and 2030, 38,000 extra technically qualified personnel (across all professional and higher education levels) are expected to be needed. In order to meet the challenge of developing that talent a one-off figure of €450 million has been made available (as part of the €2.51 billion allocated for Project Beethoven) for the period up to 2030, and from 2031 a structural figure of €80 million a year has been set aside.

Given the Dutch semiconductor industry's strong growth, the availability of qualified technical talent needs to be scaled up dramatically at all levels. Four training regions are listed in the voluntary agreement covering Project Beethoven: Brainport Eindhoven, Twente, South Holland and the North of the Netherlands. Those regions have been designated on the basis of curriculum, existing cooperation with the semiconductor industry and data on training locations in relation to the location of current jobs in the semiconductor industry. As far as the government is concerned, all regions beyond the four named in the voluntary agreement, can contribute to Project Beethoven if they are able to join one of the four training regions.

On 20 November 2024 the government announced that a total of €80.9 million from the one-off €450 million budget would be allocated to the four regions to increase the recruitment of students in initial education programmes.⁸ This allocation was made on the basis of the regional plans submitted, and covers 2025 and 2026. To find extra talent, it is essential that we also work to promote lifelong learning: in other words, reskilling and upskilling. In late January the regions submitted additional details of their plans in this area. In May 2025 the House was informed in a separate letter about the allocation of lifelong learning resources for the period 2025-2026.

Within the sector and the educational institutions there is also great enthusiasm about implementing the Talent Development Plan. On 12 March 2025 around 200 people from across the country were present at ASML's headquarters to kick off

⁸ Parliamentary Paper 29 338, no. 280.

the plan's implementation. This led to the establishment of new partnerships. Companies and educational institutions now find it easier to approach and work with each other on this topic.

B. Initiatives aimed at enhancing the sector

Alongside Project Beethoven and existing policy programmes, other initiatives are also needed to enhance our position worldwide, so that we still have an internationally leading and sustainable knowledge and industry position in 2035.

European and international level

European Semiconductor Coalition

Collaboration within Europe is essential. Together with a leading group of EU member states (Austria, Belgium, Finland, France, Germany, Italy, Poland and Spain) and in close cooperation with the European Commission, on 12 March 2025 I announced the launch of the European Semiconductor Coalition.⁹ I initiated this coalition because we cannot afford to wait for the European Commission to develop new policy in this area. We need to act more quickly, and the Netherlands wants to take on a bridge-building role with respect to other EU member states. Both the European Commission and the member states have expressed great appreciation for this.

Early this summer I expect to agree on a statement with the member states concerned and with the support of the industry, with a view to achieving the necessary enhancement of the European semiconductor industry, aimed at the revision of the European Chips Act. Dutch efforts are focused both on enhancing our indispensability in the value chain by strengthening European control points, and on expanding semiconductor production capacity in Europe. This will make us more resilient to geopolitical disruption and ensure that strategic sectors (such as automotive, AI, healthcare and defence) remain operational. These efforts enjoy the sector's full support via the Semicon Board NL, which gives us a powerful voice in Europe. The European Commission too has fully embraced the revision of the European Chips Act. Other countries have now also indicated that they wish to participate.

IPCEI Advanced Semiconductor Technologies (IPCEI AST)

In recent decades, globalisation has led to a shift in chip production capacity towards the US and Asia. This trend has also affected European businesses, many of which have moved their manufacturing activities to locations outside Europe. In the meantime, Europe has remained a world leader in the field of research and development, supported by its outstanding research institutions and robust knowledge infrastructure. Now that other countries are accelerating their investment and capacity-building, the Netherlands and Europe cannot afford to fall behind. With global competition growing stronger, Europe needs a clear focus and proper coordination in order to remain resilient.

⁹ [Common Statement: Kick off Semicon Coalition | Government.nl.](#)

The Netherlands is therefore coordinating the EU's exploratory study on a possible Important Project of Common European Interest (IPCEI) for Advanced Semiconductor Technologies (IPCEI AST). Currently there are 15 member states participating in the study, including those that are part of the European Semiconductor Coalition. The aim of the IPCEI AST initiative is to reach targeted decisions on strategic elements of the value chain in which Europe, thanks to its technological leadership, can make a difference globally and make itself indispensable. By coordinating projects and making targeted investments in first industrial deployment of 'beyond state of the art' technology, Europe can have a serious impact in global value chains. The Netherlands can only continue participating in this IPCEI if a budget is available. I am currently exploring the possible financing options, and I expect to make a decision this summer regarding our participation.

International partnerships

The Netherlands and Europe cannot produce everything they need themselves; we will also have to continue building international partnerships outside Europe. These partnerships, led by the Minister for Foreign Trade and Development, largely focus on cooperation on trade, investment, innovation and knowledge, and talent. Closer partnerships will strengthen our own position in the global ecosystem and can provide a catalyst for investment talks with third countries. Various long-term dialogues and partnerships are currently under way. Examples of partnerships or collaborations that the Netherlands, together with Dutch knowledge institutions and businesses, has established include an MoU with South Korea (cooperation on talent development for the semiconductor sector), an MoU with New York State and Arizona (cooperation on innovation and talent), a talent programme with India (involving various technical universities and Dutch companies), two national multi-annual public-private programmes aimed respectively at Taiwan and Malaysia (with potential for future programmes involving Singapore and Vietnam) and various dialogues (Japan, South Korea, Taiwan, the US and Singapore).

Export control measures

In an international context we also take careful account of national security concerns. On 1 September 2023 the Minister for Foreign Trade and Development introduced additional export control measures on advanced semiconductor manufacturing equipment. This means that in the Netherlands a national license requirement applies to the export of certain advanced equipment. This ministerial order relates to specific technologies that are essential for the development and production of advanced semiconductors. Given those semiconductors' potential advanced military applications, the uncontrolled export of these technologies could pose risks to national and international security. Given our leading position in this technological field, the Netherlands has a crucial role to play in this regard. The measures in question are country-neutral. On 7 September 2024 and 1 April 2025 export control measures were further expanded. On these dates an additional set of specific technologies became subject to a national license requirement. These measures were tightened because the security risks associated with uncontrolled exports have increased where these technologies can be used in combination

(with those from other countries) to manufacture advanced semiconductors that could then play an important role in the military applications referred to above.

The government continues to follow international developments very closely. Before the summer the Minister for Foreign Trade and Development will issue a policy letter on foreign trade in which she will discuss the government's efforts with regard to international trade, partnerships and export controls.

National level

National innovation programme ChipNL – Motion by MP Inge van Dijk

As we await the results of the Semiconductor Coalition and the IPCEI AST, steps need to be taken now to finance a number of national programmes to enhance our innovation capacity and prevent our competitiveness from coming under further pressure. I am therefore pleased that on 29 January 2025 a consortium of 64 parties from the Dutch semiconductor sector (SMEs and multinationals) presented me with the research and innovation programme ChipNL. It originally began as a proposal for the fourth round of the National Growth Fund, but that route has been discontinued. I am pleased to see how energetically the sector has worked on this initiative to enhance the Dutch semiconductor ecosystem. The programme is focused on development opportunities for chip design, advanced packaging, and equipment – three strengths of the Dutch ecosystem. In addition ChipNL will provide valuable building blocks for the action agenda of the National Technology Strategy (NTS) for semiconductor technologies, which is currently being developed by the industry.¹⁰

At the Semicon Board NL meeting of 29 January 2025, the sector indicated when submitting the programme it was making a private investment commitment of €315 million. A contribution from central government was also requested to allow the programme to be implemented. During a brief plenary debate on earning capacity held on 10 April 2025, MP Inge van Dijk asked the government not to wait until the autumn to decide on ChipNL, given the urgency and the swift action required, and requested an earlier decision on the cofinancing of the innovation programme. Currently, I am having the feasibility of the programme assessed.

Cooperation with the Ministry of Defence

In order to boost Europe's resilience, the European Commission has announced plans to enable member states to invest extra funds in strengthening European defence capabilities. Particularly relevant is Europe's interest in technological development and security of production and supply of defence materiel. Given the rapid development of, and growing dependence on, advanced technologies in modern warfare, gaining and maintaining a military-technological advantage is crucial in order to guarantee armed forces' operational effectiveness and security. It is thus essential that our armed forces possess better technology than our adversaries. To this end, the Ministry of Defence has identified five priority knowledge and technological areas (smart materials, intelligent systems, sensors,

¹⁰ Parliamentary Paper 33 009, no. 140.

quantum technology and space technology).¹¹ In each of these areas, chips and fast computing power are of decisive importance. For the Ministry of Defence, semiconductor technology is therefore an enabling technology. In this regard the Netherlands has a major head start over other countries when it comes to the knowledge and technology at our disposal. By continuing to invest in the semiconductor industry, while innovating and at the same time protecting our knowledge, we can maintain and perhaps even extend that lead. Therefore, working together with the Minister and the State Secretary of Defence and the sector itself, I aim to use new innovation programmes to strengthen our joint efforts and ensure that the Ministry of Defence's needs are met.

Semicon Board NL

To enable us to move forward with renewing our industrial policy, on 29 January 2025 I established the Semicon Board NL. In doing so, and in accordance with the government's commitment, I took the lead in working with the sector to ensure an attractive and resilient, internationally competitive business and investment climate, in which the semiconductor industry should be able to continue innovating, investing and growing.¹² Co-chairing this 'advisory platform' with me are the other members from Dutch government ministries: the Minister of Education, Culture and Science, the Minister for Foreign Trade and Development, and the Minister of Defence. Participating in the Board on behalf of the sector are ASML, ASM, VDL ETG, NXP, SMART Photonics, Nearfield Instruments, Axelera AI, High Tech NL (representing SMEs) and TKI HTSM¹³ (representing the relevant knowledge and innovation ecosystem).

Together with the members of the Semicon Board NL, I am currently drawing up a sector agenda for renewed industrial policy, which includes an investment strategy. This agenda is intended to provide shape and substance to the challenges, ambitions, instruments and investments necessary to ensure the Netherlands still has a internationally leading and sustainable knowledge and industry position in 2035. Key topics of this agenda include international competitiveness, capital, talent and resilience.

I expect to be able to share the sector agenda and investment strategy with the House in the autumn. The agenda is being coordinated closely with the relevant action agendas under the National Technology Strategy, which are also being developed this year.¹⁴

Conclusion

The Dutch semiconductor ecosystem is distinguished by its highly intertwined nature, its close collaboration with knowledge institutions and its world-leading position in a range of value chains. This puts the Netherlands in the top flight of the semiconductor sector. At the same time, there is absolutely no guarantee that

¹¹ Parliamentary Paper 31 125, no. 134.

¹² Brainport Eindhoven, Twente, Arnhem-Nijmegen and Zuidvleugel Randstand are the four regional centres of gravity for the Dutch semiconductor industry.

¹³ Topconsortium Kennis en Innovatie voor High Tech Systemen en Materialen (Holland High Tech, top sector for High Tech Systems and Materials).

¹⁴ Parliamentary Paper 33 009, no. 150.

we will retain this position without further public and private commitment and investment. Particularly in the midst of large-scale geopolitical shifts that have found expression in the ambitions advanced by various countries and regions with regard to enhancing their chip industries, the Netherlands and Europe cannot afford to fall behind. Through Project Beethoven we have taken meaningful steps to enhance the conditions required by the semiconductor industry. In order to consolidate and develop our earning capacity, resilience and strategic autonomy in the Netherlands and Europe, we need to further strengthen this industry. Together with the sector and my colleagues in the government I am working with full conviction to that end.