



**Holland  
High Tech**  
Global Challenges,  
Smart Solutions



# **NATIONAL TECHNOLOGY STRATEGY: Action Agendas & Innovation Coalitions**

**NETWORKING EVENT 2026**



# LEO WARMERDAM

EXECUTIVE DIRECTOR,  
HOLLAND HIGH TECH

NL

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# PROGRAMME

- **National Technology Strategy developments**
  - KIA ST perspective, Leo Warmerdam
- **Future steps**
  - Mieke Lam, Ministry of Economic Affairs & Climate Policy
  - Leo Warmerdam, Holland High Tech
  - Yvette Tuin, NWO
- **Action Agenda's perspective**
  - Wilbert IJzerman, Optical Systems & Integrated Photonics
  - Julian Rabbie, Quantum Technologies
- **Questions and round-up**



Knowledge & Innovation Agenda  
Key Enabling Technologies





Ministerie van Economische Zaken  
en Klimaat



# De Nationale Technologiestrategie

Bouwstenen voor strategisch technologiebeleid

# From National Technology Strategy to Action Agendas



## NTS AGENDA

### Level

Strategic, ambitions

### Describes

Definition, current position, 2035



## ACTION AGENDAS

### Level

Concrete, specific, actionable

### Describes

Why, what and how

## Ambition KIA ST

Realise Action Agendas for each of the 10 National Technology Strategy topics, based on the National Technology Strategy Agenda

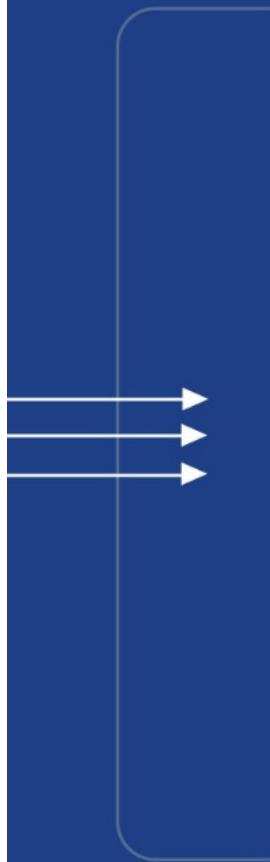
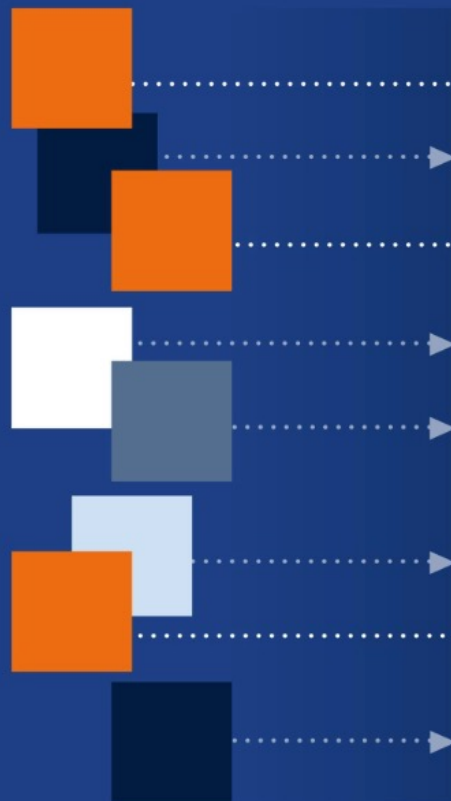
# From National Technology Strategy to Action Agendas



MARKETS & APPLICATION AREAS

ACTION AGENDAS

MARKETS



# Verkenning Actieagenda's



# Realisation of NTS ambitions



## ACTION AGENDAS

Position NL  
2024

- **Current** activities + **Current** funding
- .....→ **New** activities + **Current** funding
- .....→ **New** activities + **New** funding

Ambition  
NTS Agenda  
2035

# Actieagenda's voor de Nationale Technologiestrategie 2026





**10 actieagenda's**

**1.000 organisaties**

**53 innovatieprogramma's**

**€ 14 miljard**

# Innovation Coalitions





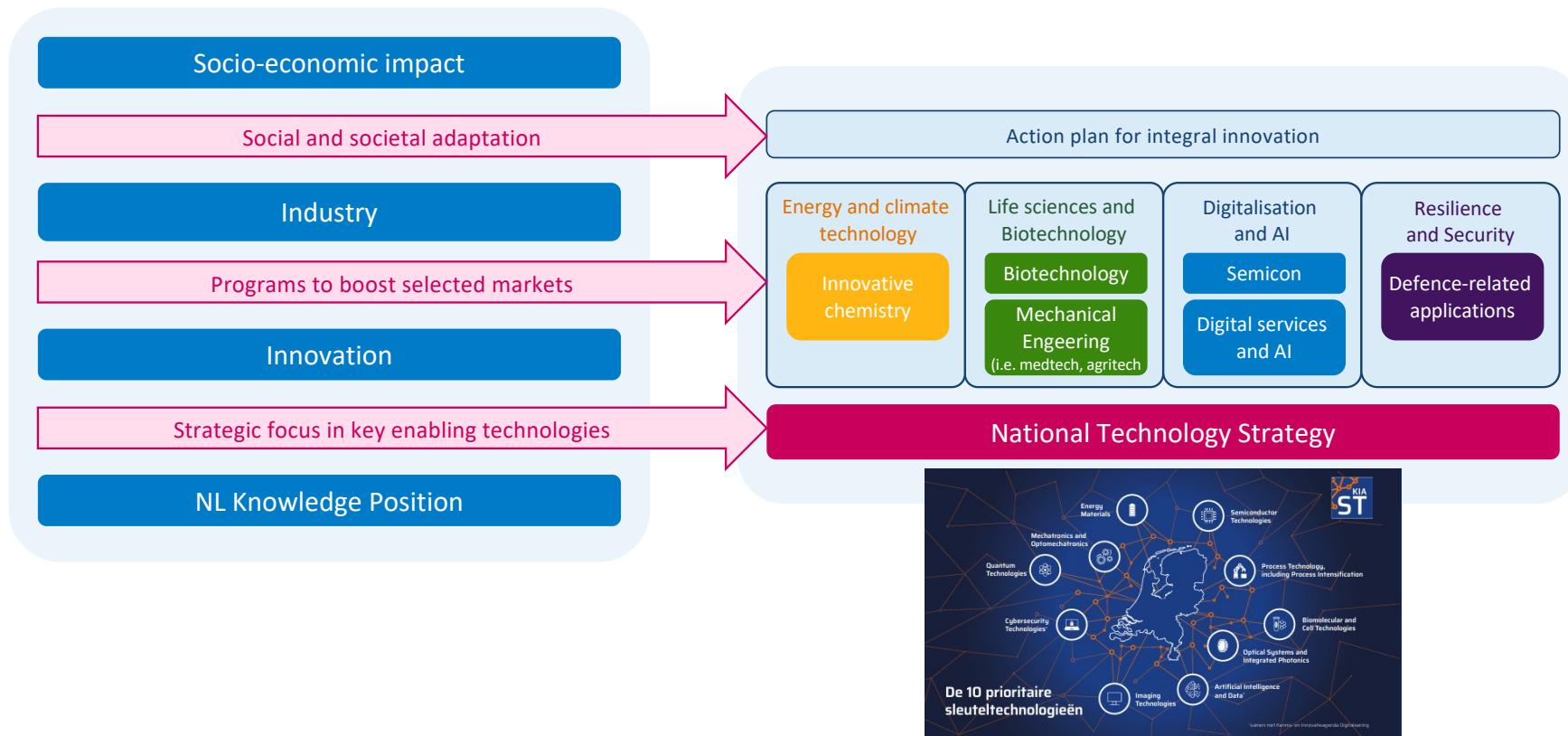
## **MIEKEE LAM**

**SENIOR POLICY OFFICER PPP & HIGH TECH,  
MINISTRY OF ECONOMIC AFFAIRS & CLIMATE POLICY**

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# From strong technological base to socio-economic impact





# YVETTE TUIN

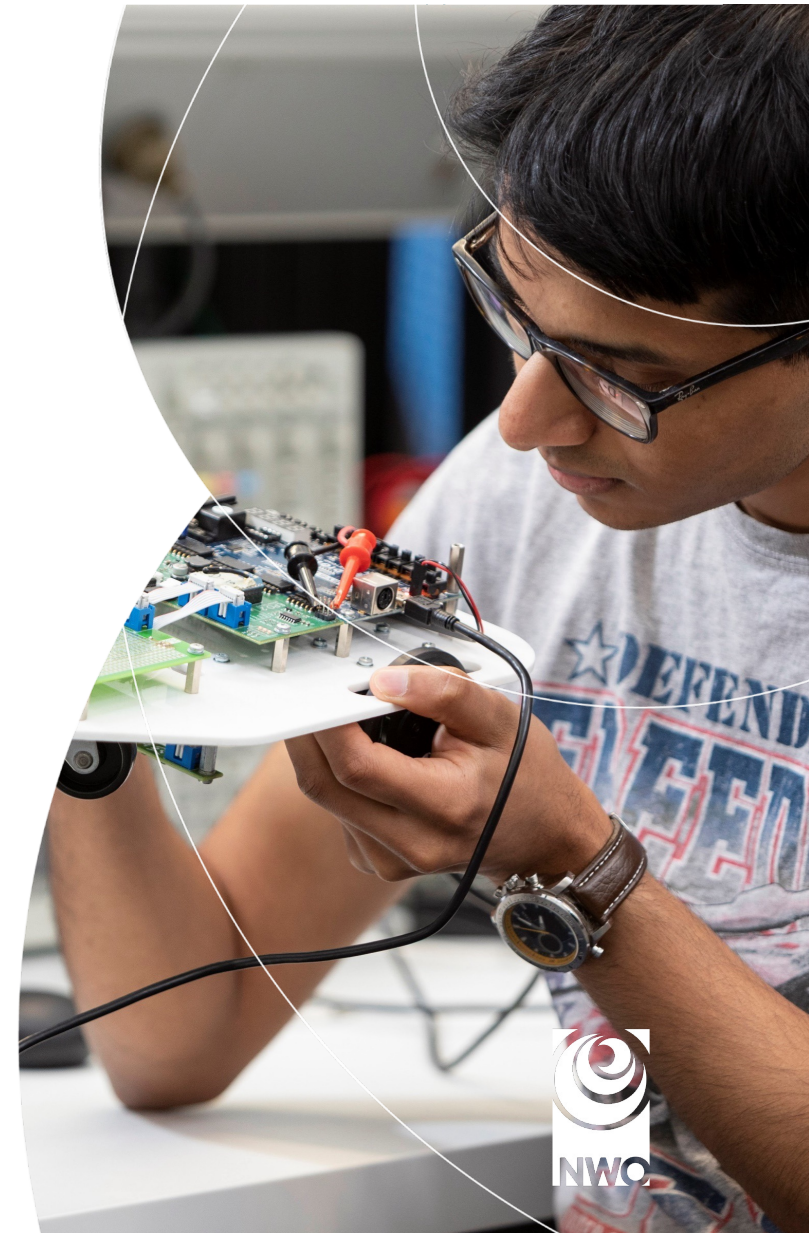
HEAD OF KIC,  
NWO

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# NWO Funding Opportunities 2026/2027

Yvette Tuin



	Perspectief	KIC Missie ST	KIC Missie Digi	KIC Missie HTSM	KIC V4C S	KIC Partner	Open Technology Programme
<b>Aim</b>	The objective of Perspectief is to develop and further advance innovative technologies (key enabling technologies) that strengthen the (international) positioning of the Dutch knowledge and innovation system.	Primarily driven by the development of key technologies, with an eye to potential applications.	Primarily driven by the development of digital information technologies, with an eye to potential applications.	Primarily driven by market needs, which are translated into the further development of key enabling technologies.	Stimulate demand-driven public-private partnerships in order to contribute to the economy, people and the planet. The focus is on the societal challenges described in the Dutch government's mission-driven innovation policy.	Research question submitted by partners: demand-driven partnerships Knowledge question identified by a partner, always aligned with one or more KIA's NWO and partners jointly fund the knowledge question on a 50/50 basis.	The Open Technology Programme provides funding for application-oriented technical scientific research that is open and unconstrained, and not limited by disciplinary boundaries.
<b>KET</b>	All 44 KET's, NTS part of criteria preproposal	NTS	Digital Information Technologies (NTS: AI and Cybersecurity)	NTS	Not only KET's	Not only KET's	Not only KET's
<b>Budget/jaar Funding/project</b>	About € 25 M budget € 2 M- € 5 M per project	€ 7 M budget € 600 k - € 3,2 M per project	€ 7 M budget € 600 k - € 3,2 M per project	€ 6 M budget € 1 M - € 3,2 M per project	€ 7,5 M budget € 350 k - € 1,05 M per project	€ 3 - € 10 per project 50% NWO, 50% partner	€ 25,9 M budget (2026) € 950 k per project
<b>Cofinancing</b>	30% total, from which min. 10% in cash	20% total in-kind/in-cash	20% total in-kind/in-cash	20 % total in-kind/in-cash	30%, minimum 15% private – of which at least half cash	At least 30% of the total size of the partnership must be funded by private parties.	The required minimum co-funding is 25% of the project costs exceeding €700,000, with no distinction between cash and in-kind co-funding.
<b>Applicants in addition to universities and UMC's</b>	Universities of applied sciences and TO-2 as co-applicant	Universities of applied sciences as (co)applicant	Universities of applied sciences as (co)applicant	Universities of applied sciences and TO-2 as co-applicant	Universities of applied sciences (co)applicant	Universities of applied sciences and TO-2 as (co)applicant	No Universities of applied sciences and TO-2

## Calls in preparation

- **KIC Missie HTSM** - open in Q4 - **Semiconductor technologies / Mechatronics and Optomechatronics**
- cooperation NWO-KIC and Holland High Tech, € 6 M budget
- 3D integration technologies & sustainable systemic design techniques for next-gen semiconductor equipment
  
- **KIC Missie** - open in Q4 – **Imaging Technologies, AI**
- KIA ST – selection of Innovation Programme from NTS Action Agenda Imaging Technologies, € 7 M budget
- Mobile and modular imaging technology for a healthy and safe society
  
- **KIC Missie Sovereignty over Software** - **Including AI, among others**
- KIA Digitalisering, € 7 M budget
  
- **KIC Human Capital and Digital Innovation in the Netherlands** - open in Q4 - **including AI, among others**
- Social and technological innovation, € 7 M budget
  
- **KIC Missie New materials and manufacturing processes for large-scale energy storage and conversion** - **Energy Materials**
- KIA Klimaat & Energie, € 7 M budget



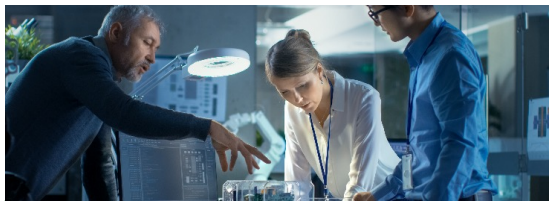
## Open Calls

- **KIC Missie LWV- AI for agriculture, horticulture, water and food - Including AI, among others**
- Deadline letter of intent: 30 June 2026, € 7 M budget
- <https://www.nwo.nl/en/calls/kic-ai-for-agriculture-horticulture-water-and-food-2026>
  
- **NWA Resilient Digital Ecosystems - Cybersecurity Technologies**
- Deadline: 15 September 2026, € 8.702.072 budget
- <https://www.nwo.nl/en/calls/nwa-resilient-digital-ecosystems>
  
- **Perspectief (opening July/August) - All key enabling technologies, with emphasis on NTS**
- Deadline letter of intent: 6 October 2026, about € 25 million budget
- <https://www.nwo.nl/en/researchprogrammes/perspectief>
- **KIEM HighTech (SIA and Holland High Tech), € 2.121.262 budget - All key enabling technologies**
- **KIEM GoChem (SIA and ChemistryNL), € 1.251.746 budget - Process Technologies**
- **KIEM Arbeidsbesparende AI (SIA and Digital Holland), € 1.800.000 budget - AI**
- <https://regieorgaan-sia.nl/financiering/kiem/>



# Perspectief round 2026/2027 (last round!)

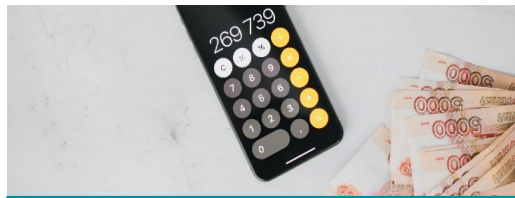
Developing new technology through an interdisciplinary approach



## Context



- **Aim: creating technological innovations with societal and economic impact**
- Close interdisciplinary collaboration between researchers, companies and societal organisations
- Researchers of TO2 institutes and universities of applied sciences can be co-applicants
- Research projects focus on major societal challenges and key enabling technologies, including the National Technology Strategy



## Budget



- About € 25 million budget
- **€ 2 million minimum, € 5 million maximum funding per project**
- 10% co-funding in-cash, 30% co-funding in total (in-cash and in-kind)
- Max. duration of project: 6 years



## Timetable



- **6 October 2026: Deadline statement of intent**
- **24 November 2026: Deadline pre-proposal**
- **25 May 2027: Deadline full proposal**
- November 2027: Grant decision

More information: [www.nwo.nl/perspectief](http://www.nwo.nl/perspectief) | Contact: [ttw-perspectief@nwo.nl](mailto:ttw-perspectief@nwo.nl)





**Wij  
stimuleren  
innovatie**

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# Holland High Tech

Holland High Tech is the Sector High Tech Systems and Materials (HTSM). We offer structural solutions to societal challenges and create economic growth. Teams of experts develop (key) enabling technologies focussed on the National Technology Strategy. Our overall aim is to stimulate impact in international innovation via public-private partnerships.

# Netherlands & Holland High Tech in numbers

**€18 B**  
billion euros in  
production value

**€70 B**  
billion euros in  
export value

**#13** Strategic  
Programmes

**89,000**  
Companies in  
high tech  
ecosystem



**500,000**  
Professionals in  
hightech

**#1** Digitally & hightech  
skilled people in  
Europe 2024

**#11** Innovation  
Domains

**#8** Global  
innovation  
index 2024

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# INNOVATION DOMAINS

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**CIRCULAR  
ECONOMY**



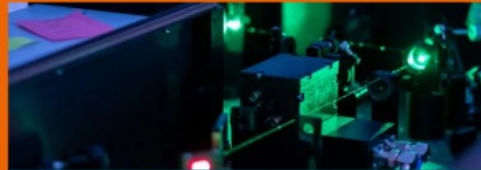
**ENERGY  
MATERIALS**



**HIGHTECH  
SECURITY**



**IMAGING  
TECHNOLOGIES**



**MECHATRONICS  
& OPTOMECHANICS**



**OPTICAL SYSTEMS  
& INTEGRATED PHOTONICS**



**QUANTUM  
TECHNOLOGIES**



**SEMICONDUCTOR  
TECHNOLOGIES**



**SMART  
INDUSTRY**



**SUSTAINABLE  
MOBILITY**



**SYSTEMS  
ENGINEERING**

Ministerie van Economische Zaken

> Retouradres Postbus 20401 2500 EK Den Haag

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

Datum 17 oktober 2025  
Betreft Industriebeleid met focus

Geachte Voorzitter,

Nederland is een welvarend land, maar die welvaart is niet vanzelfsprekend. Ons  
verdienvermogen<sup>1</sup> staat onder druk. Nederland worstelt met stagnerende  
productiviteit, lage R&D-investeringen en een ondernemingsklimaat dat piept en  
kraakt. Kijk naar de files op het stroomnet, toenemende waterschaarste, de  
krapte op de arbeidsmarkt, de beperkte ruimte voor nieuwe fabrieken<sup>2</sup> of het  
gebrek aan (passende) financiering voor het mkb en groeiende, veelbelovende  
bedrijven. Dit raakt het brede bedrijfsleven en vooral de industrie, die cruciaal is  
voor onze welvaart.

Daarnaast vraagt de huidige internationale economische en geopolitieke situatie  
om een actievere rol van de overheid. Het speelveld is de afgelopen decennia  
ingrijpend veranderd, zoals ook het Draghi-rapport<sup>3</sup> laat zien. Internationale  
concurrentie en geopolitieke spanningen zijn toegenomen en hebben grote  
gevolgen voor internationale handel, waar Nederland traditioneel veel aan  
verdient. Andere landen, ook binnen de EU, voeren veel actiever industriebeleid;  
ze sturen actief op de ontwikkeling van bepaalde technologieën en markten in  
eigen land, waardoor Nederlandse bedrijven benadeeld kunnen worden. Het  
aantal industriepolitieke instrumenten en maatregelen wereldwijd is in tien jaar  
tijd sterk gegroeid.<sup>4</sup> Economische macht wordt steeds vaker ingezet voor politieke  
doeleinden. Denk aan de importheffingen van de VS op specifieke goederen of de  
Chinese *Made In China 2025* strategie met overheidsinvesteringen in strategische  
markten, zoals zonnepanelen of elektrische auto's. Mede hierdoor is de  
economische macht en technologische positie van de VS en diverse Aziatische  
landen waaronder China sterk gegroeid.

<sup>1</sup> Verdienvermogen is de capaciteit om nu en op de lange termijn structurele welvaart én welzijn te genereren,  
door simpelweg geld te verdienen.

<sup>2</sup> Ruimte voor industrieclusters, Kamerstuknummer 29826-258

<sup>3</sup> Draghi, 2024. *The Future of European competitiveness*

<sup>4</sup> Juhazi, Lane, Oehlser, Perez, 2022. *The Who, What, When and How of Industrial Policy: A Analysis van de  
Wereldbank en de New Industrial Policy Observatory schatten in dat het aantal industriebeleidsinterventies van  
2017 – 2023 is vermenigvoudigd.* (World Bank, 2024. *The renaissance of industrial policy: Known knowns,  
known unknowns, and unknown unknowns*)

Directoraat-generaal  
Bedrijfsleven & Innovatie

Bezoekadres  
Bezuilenhoutweg 73  
2594 AC Den Haag

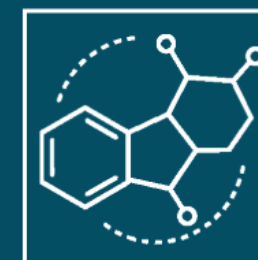
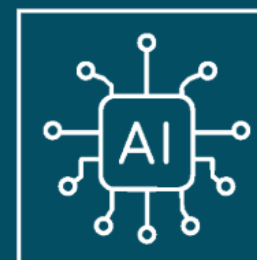
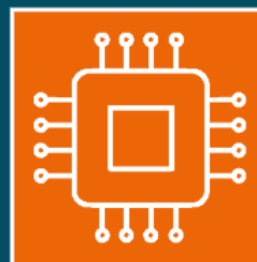
Postadres  
Postbus 20401  
2500 EK Den Haag

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00000001003214369000

T 070 379 8911 (algemeen)  
F 070 378 6100 (algemeen)  
www.rjsoverheid.nl/ez

Ons kenmerk  
DGBI / 101636279

Bijlage(n)  
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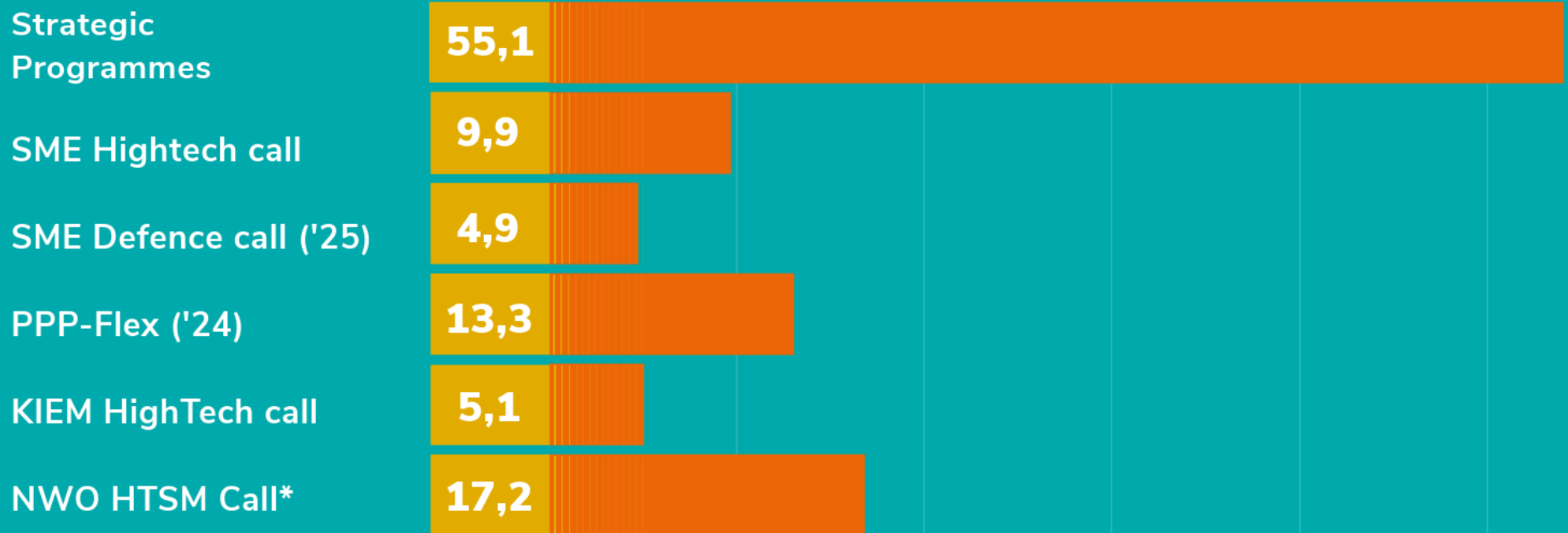
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# BUDGETS 2024 & 2025

€100,3 million in innovation

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 Total in millions of euros

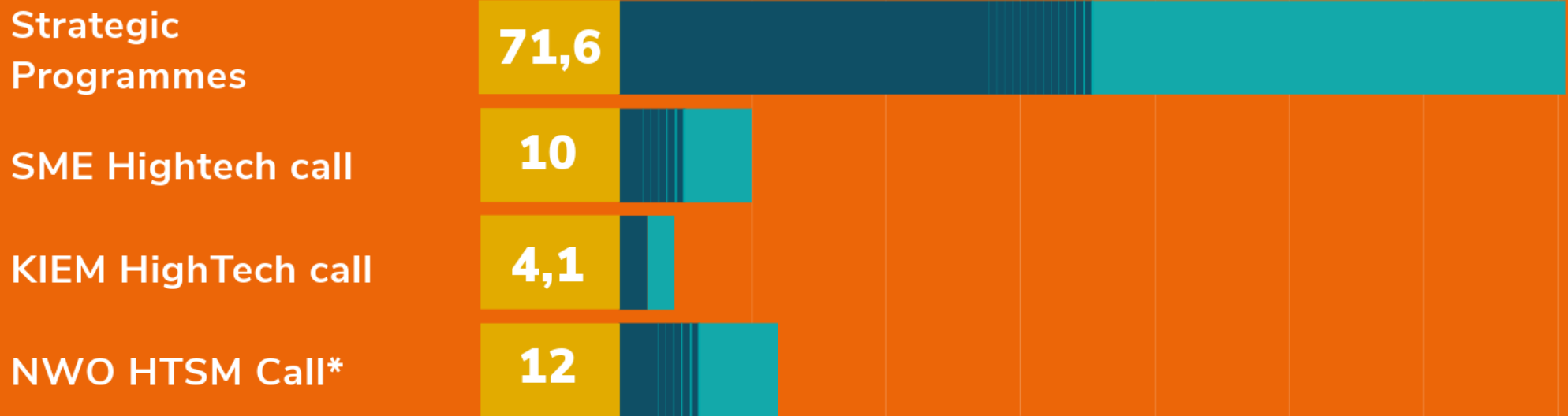
\*joint call by NWO & Holland High Tech

# BUDGETS 2026 & 2027

€97,7 million in innovation



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Total in millions of euros 2026 2027

\*joint call by NWO & Holland High Tech

# NATIONAL TECHNOLOGY STRATEGY

Budget allocation 2024-2025



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Strategic  
Programmes

€ 55,1 million



SME  
Hightech  
call

€ 9.9 million



SME  
Defence  
call ('25)\*

\*100% NLD

€ 4,9 million



PPP-Flex  
('24)

€ 13,3 million



NWO-HTSM  
call

€ 17,2 million



# Optical Systems & Integrated Photonics

**Wilbert IJzerman**  
**Signify**





# Optical Systems and Integrated Photonics



# Quantum Technologies

**Julian Rabbie**  
**TNO**



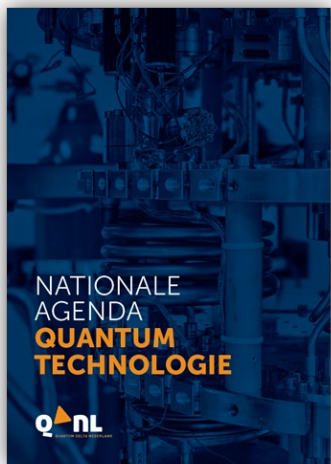
**HHT-network event**  
**National Technology Strategy: Action**  
**Agendas & Innovation Coalitions**

June 17<sup>th</sup>, 2026 15:15 – 16:30

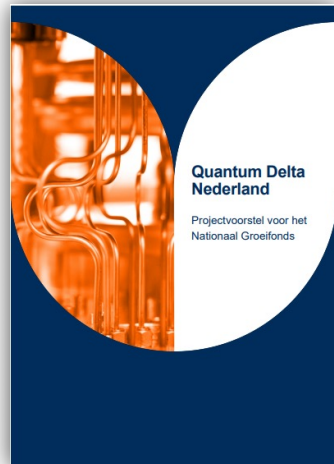




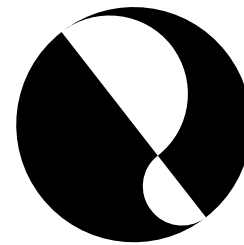
# The Dutch quantum ecosystem is in a transition from science-driven to industry-driven



2019



2020



Quantum  
Delta NL

National Growth Fund 2021 – 2028  
Budget: >€600 million  
Goal: ecosystem building and sustainable (economic) value creation



2025



2026

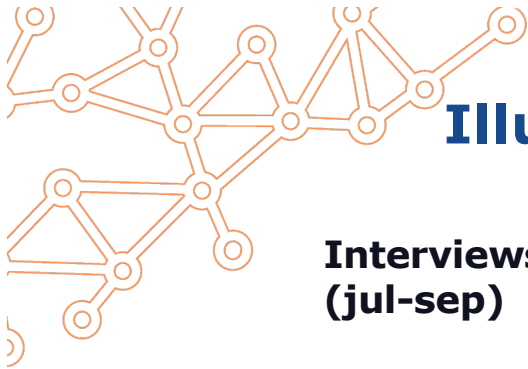


## We used the NTS ambition for quantum technology for 2035 as key long-term goal for the action agenda

“By 2035, the Dutch quantum ecosystem will be world-class, **both academically and industrially**, and an **international magnet for business and talent**.”

The Netherlands will be a **leading country with control points in international value chains** [...], with players **competing at an international level**.

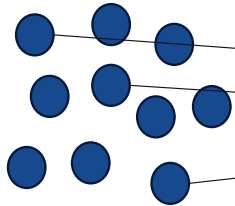
**Within the EU, the Netherlands will be part of the leading group** and will have a **strong position for manufacturing and commercialisation.**”



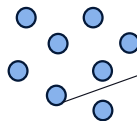
# Illustration of the development of our action agenda

## Interviews (jul-sep)

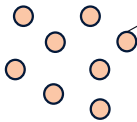
NL quantum companies



Other NL companies



Knowledge institutes, government, investors, etc.



## Roundtables (sep-nov)



Projects Consortia

## Innovation programmes (nov-dec)

Work package 1  
Partners: A, B, D

Work package 2  
Partners: B, E, F

...



Action Agenda



## The quantum action agenda consists of five industry-oriented innovation programmes

1. A grand challenge for an integrated quantum computer
2. Constructing quantum networks for socio-economic value
3. Building quantum sensors for critical applications
4. Manufacturing competences, components and (sub-)systems
5. Fast track to valuable application of quantum computing by 2035

**Total funding required until 2035: > €2 billion**





# The quantum action agenda consists of five industry-oriented innovation programmes

1. A grand challenge for an integrated quantum computer
2. Constructing quantum networks for socio-economic value
3. Building quantum sensors for critical applications
4. Manufacturing competences, components and (sub-)systems
5. Fast track to valuable application of quantum computing by 2035

**Total funding required until 2035: > €2 billion**

## Similar initiatives

### Quantum computing procurement programs

 PROQCIMA (€500 million)

 DARPA QBI (>\$1 billion)

 ProQure (£1 billion)

 Quantum Champions (\$330 million)

 DLR QCI (€740 million)

 EuroHPC (>€100 million)





**The innovation coalition will support the further expansion of our national ecosystem through industry-oriented R&D, fostering the creation of Dutch quantum champions**



**QuantWare Raises \$178 Million to Build World's Most Powerful Quantum Processors at an Industrial Scale**



# The innovation coalition will support the further expansion of our national ecosystem through industry-oriented R&D, fostering the creation of Dutch quantum champions



QuantWare Raises \$178 Million to Build World's Most Powerful Quantum Processors at an Industrial Scale



**HHT-network event**  
**National Technology Strategy: Action**  
**Agendas & Innovation Coalitions**

June 17<sup>th</sup>, 2026 15:15 – 16:15



**THANK  
YOU**

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The logo consists of the letters 'NL' in a bold, white, sans-serif font.

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The title 'IGNITE INNOVATION' is written in a large, bold, white, sans-serif font, centered within a yellow rectangular area. The background of the entire page is orange, with a dark teal horizontal bar above the yellow area and a teal horizontal bar below it. On the left and right sides, there are vertical lines of varying colors (orange and teal) that create a striped effect.

**ACCELERATING  
DUTCH HIGH TECH**

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