Annual Report Innovation Missions 2024

Netherlands

Content

1. Introduction

Innovation missions are an important driver for reaching the goals set in the Mission-Driven Topsector and Innovation Policy of the Dutch Government. For instance, by organizing innovation missions we can illustrate to potential partners abroad that The Netherlands should be one of the first countries of choice for innovation and technology cooperation. This is important because collaboration between business, universities, and governments from across the world is crucial in tackling national and global challenges such in climate, healthcare, agriculture, and security. This annual report provides an overview of the innovation missions that were organized in 2024 in close collaboration with the Netherlands Innovation Network (NIN) and the Netherlands Agricultural Network (LAN).

24 innovations missions in 14 different countries

Missions 2024

With the funding and support from the Ministry of Economic Affairs, Ministry of Climate Policy and Green Growth, and Ministry of Agriculture, Fisheries, Food Security and Nature, the Innovation Missions team of the Department of International Innovation Cooperation of The Netherlands Enterprise Agency was able to organize 24 innovations missions to 14 different countries.
By creating opportunities for Dutch companies, universities, and governments to collaborate with partners abroad, the innovation missions have played an important part in building the partnerships that can help to address the societal challenges of today and tomorrow, and to further develop the technologies that are essential in doing so. In the following chapters, we will provide an -overview and some highlights of the innovation missions carried out in 2024. We have thematically structured these on the following themes:

- Energy Transition & Sustainability
- Key Enabling Technologies
- Life Sciences & Health
- Agriculture, Nature & Food Quality

Benefits

As this report will show, participation in an innovation mission can bring many benefits in a short time:

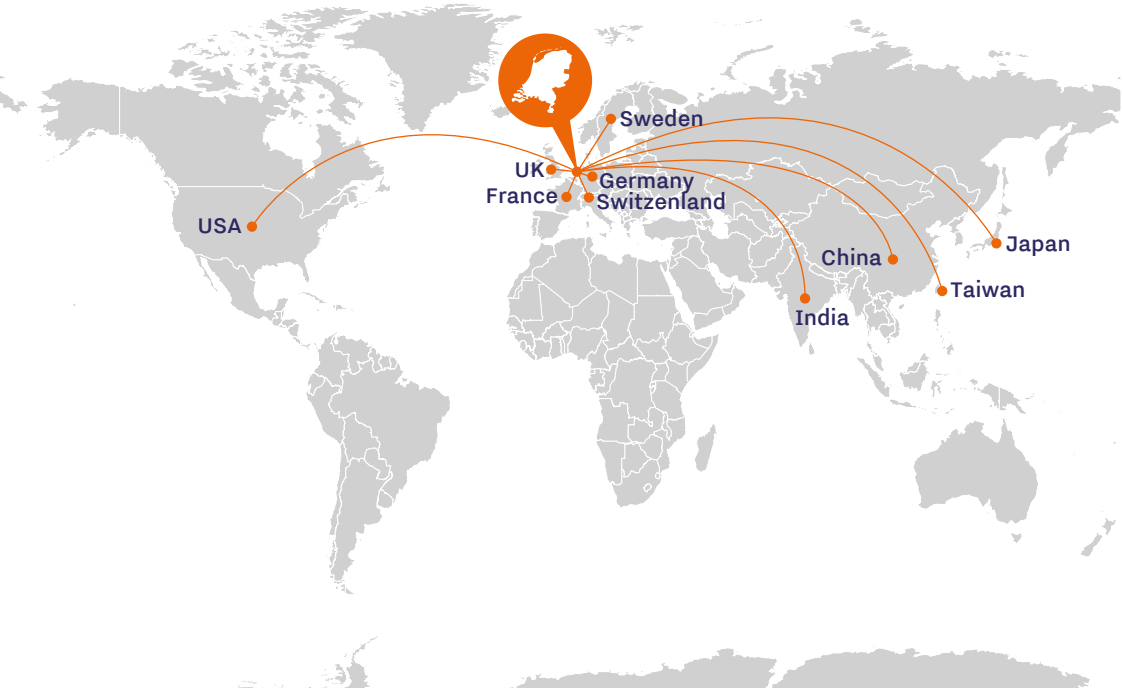
- Knowledge about the state of specific research in the target country or a region;
- Meetings with potential partners in the field of innovation and technology;
- Insight into local policy and local investment programs;
- Advice on possible connection to international (financing) programs like Eureka/Eurostars/Globalstars, Horizon Europe, PIB and EEN;
- Growth of the participants' international network.

Thank you for reading and we are looking forward to another successful innovation mission year in 2025.

Tong Jiang
Coordinator Innovation Missions
Team International Technology and Innovation Missions
Team MATCH
Netherlands Enterprise Agency (RVO)

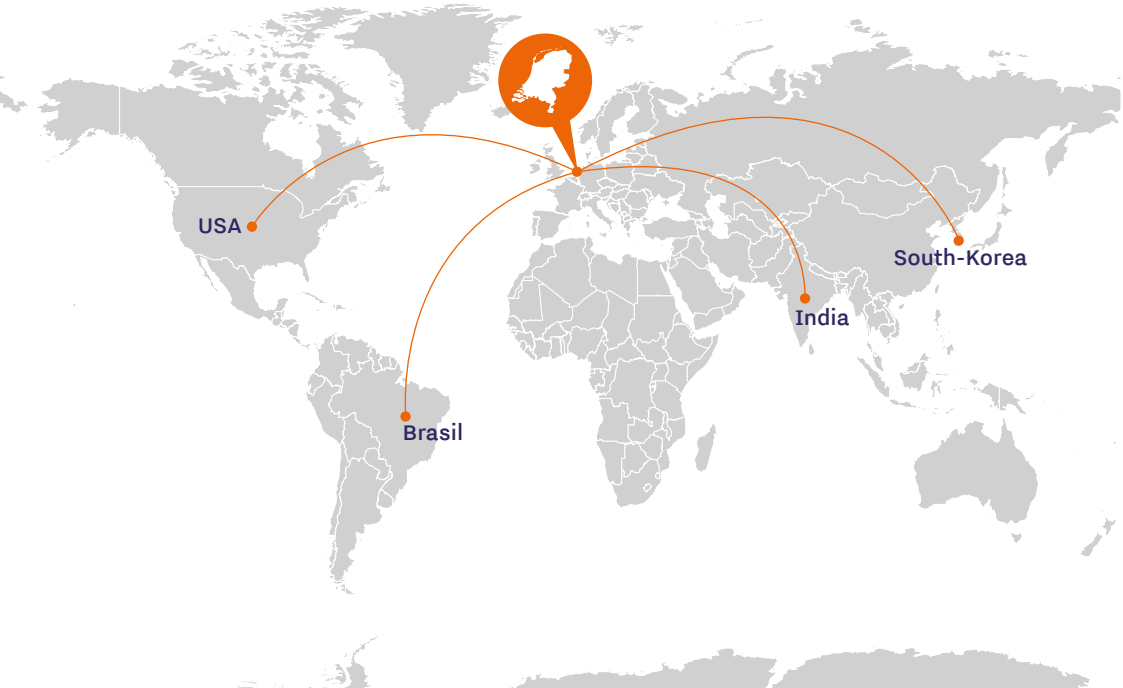
2. Overview

Overview Ministry of Economic Affairs



Topic	Country	Date
Sustainable aviation	France	12-14 Nov
Aerospace	USA	24-29 Mar
Sustainable chemistry and circular economy	China	18-21 Sep
Regenerative medicine	Germany	13-17 May
Medical isotopes and nuclear medicine	UK	18-22 Mar
Cell & gene therapy	Switzerland	21-25 Apr
Women's health design challenge	USA	23-27 Sept
AI and digitalization for health	Japan	27-31 May
Integrated photonics	Taiwan	2-6 Sep
Batttery tech	Sweden	10-12 Jun
Battery tech – experts factfinding	Japan and China	10-19 Apr
Space technologies	India (incoming)	27 May – 1 Jun

Overview
Ministry of Climate Policy and Green Growth



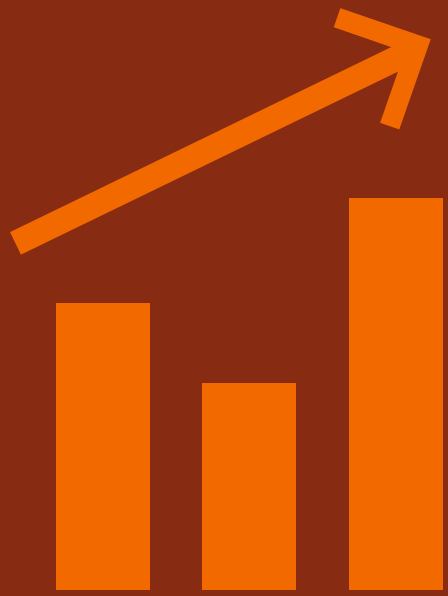
Topic	Country	Date
Hydrogen	Brazil	7-11 Oct
Offshore wind	USA	23-30 Oct
Biorefineries	India	14-18-Oct
Nuclear technologies	South-Korea	2-6 Dec

Overview
Ministry of Agriculture, Fisheries, Food Security and Nature

Topic	Country	Date
Agtech	Germany	24-28 Jun
Robotics & digitalization in open field crops	USA	21-25 Oct
Agtech experts factfinding	Sweden	28-30 Aug
Agtech, robotization & digitalization in horticulture	New Zealand	18-22 Nov
Sustainable livestock farming	Kenia	18-21 Mar
Alternative proteins	France	16-18 Apr
Bio-inputs	Brazil	18-22 Nov
Greentech & energy efficiency (incoming)	South-Korea	11-13 jun

"My key takeaways from the mission: new idea's, new inspiration, sharing learnings and solutions to pain points, and fostering dialogue between public and private actors takes us all forward."

3. Results

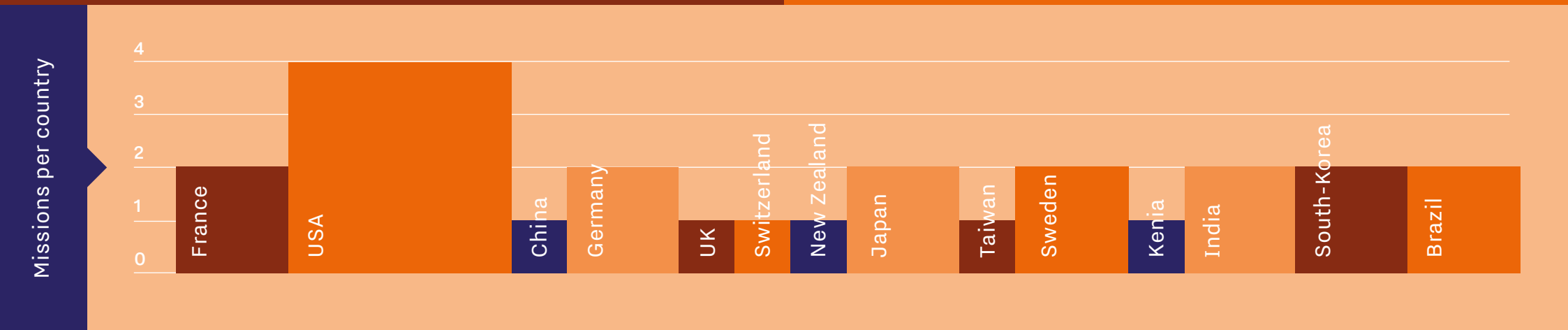


24 Missions

14 countries

22 outbound missions

2 inbound missions



Contribution to National Growth Fund Projects

NXT GEN hightech

PhotonDelta

Quantum Delta NL

REGMEDXB

Circular Plastics NL

Contribution to the topsectors

NL Holland High Tech
Global Challenges, Smart Solutions

Topsector Agri & Food

TOPSECTOR ICT
dutch digital

NL Health~Holland

Topsector Chemie

TOPSECTOR ENERGIE
Empowering the new economy

TOPSECTOR TUINBOUW & UITGANGSMATERIALEN

Contribution to SDG's

Ministry		#	Country	Participants	Average new contacts per participant
Ministry of Economic Affairs	Energy Transition & Sustainability	3	France, USA, China	63	17
	Key Enabling Technologies	5	Japan, Taiwan, Sweden, China, India	80	24
	Life Sciences & Health	4	Germany, UK, USA, Switzerland	99	19
Ministry of Climate Policy and Green Growth	Energy Transition & Sustainability	4	Brazil, USA, India, South-Korea	52	20
Ministry of Agriculture, Nature, and Food Quality	Agriculture, Nature & Food Quality	8	Germany, USA, Sweden, New Zealand, Kenia, France, Brazil, South-Korea	122	15

Innovation mission 2024

416 participants in total

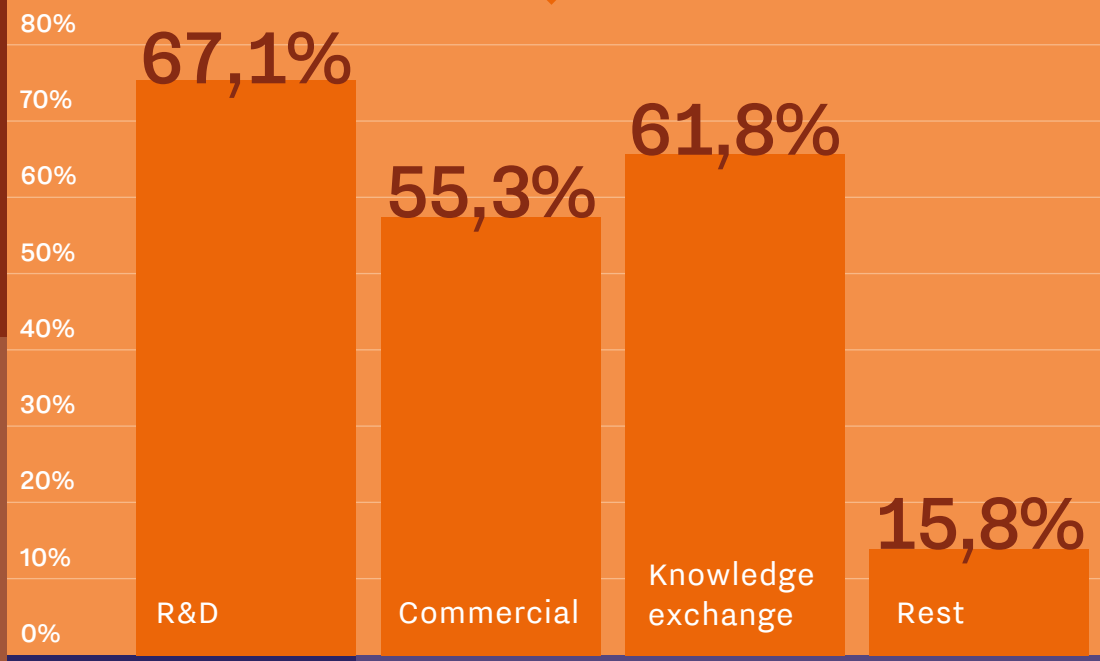
254 companies (61%)

72 research institutes (17%)

40 government (9,6%)

52 Rest (ROM's, cluster organisations) (12,4%)

Follow-up activities



Average rating per mission

8,4

Average new contacts per participant

20

4. Mission highlights

Highlight Energy Transition & Sustainability

Country + topic	Key takeaways	Participants	Average rating	Average new contacts per participant
United States 1 Offshore wind	• The jammed packed program created a good team spirit among the participants and many opportunities to create good connections with American clients. The mission was extremely helpful in exploring new innovation research opportunities • Offshore Wind in the USA has its challenges (the first one is the upcoming elections), but the industry is growing and the States are materializing their own needs. It would help to get the Federal level more motivated for offshore wind, for economic but definitely climate reasons • Very well organised, lots of opportunities to see how commercial offshore wind is developing in the US, opportunities to speak and a good profile raising exercise. Small meeting (e.g. Innovation Hub) needed more engagement from the US side to allow for more potential opportunities in the future	13	8.6	24
United States 2 Sustainable Aviation	• Very valuable to create high level strategic relationships across a wide variety of aerospace industry leaders • Gave great insights into the perceptions of American companies and institutions regarding sustainable aviation and the way towards NetZero aviation • Insights on the industry, specific US perspectives on sustainability, focus of activities and contacts to follow up on	14	8.3	21

Country + topic	Key takeaways	Participants	Average rating	Average new contacts per participant
China Sustainable Chemistry and Circular Economy	• Good exposure to private companies, governmental organizations and research institutes • a nice overall picture to the sustainability requirements and developments in China • Importance of China market, not only as a manufacturer, but also as a technology provider. Huge growth and growth potential especially for sustainability related products • Focus of Chinese companies in the sustainability field, especially on biodegradables. Common challenges faced by the companies, including challenging market conditions and lack of governmental support in developing and promoting sustainable option	27	8.6	23
France Sustainable Aviation	• The world is bigger than NL. Our neighbours encounter similar challenges regarding policy, technology, infrastructure, incentives and production. We can learn from each other and cooperate more • Good network with Dutch participants. Update on policy status in FR and NL and EU. Some useful conversations with French parties. Some useful insights on a potential French project • Was good to have a broad eco system participation. SAF has too much focus and we need to profile hydrogen differently as the term Sustainable Aviation Fuels as an overall umbrella term is confusing to stakeholders who then end up talking at tangent	22	7.6	7

Country + topic	Key takeaways	Participants	Average rating	Average new contacts per participant
India Biorefineries	• Participating in the mission was highly valuable, both for research and business opportunities, particularly in the context of product co-development. It opened co-development opportunities, aligning with both academic and industry • Good contacts, and good insights in policy collaboration between NL and India for Approach of collaboration between Dutch and India government is good supportive approach for early development of companies between both countries which can be supportive for green industry collaborations of both countries	8	8.3	21
Brazil Hydrogen	• In just 1 week we gained a good overview of the whole h2 ecosystem in Brazil • Insights into activities regarding hydrogen and derivatives in Brazil. It became clear what the potential is of the country do to its low electricity price, high greenness of the grid and interest in investing in industrial development • Brazil provides a great opportunity in progressing hydrogen and power2x technologies, because of its enormous renewable energy & feedstock potential, its low cost electricity and the green energy mix	10	9	19
South-Korea Nuclear technologies	• An excellent insight into the Korean nuclear sector, their capabilities to build large nuclear power plants and R&D efforts regarding SMR development • 1) Korean industry has a proven track record in delivering large nuclear power plants. 2) Korea is strongly committed to innovation of SMRs • The mission has provided many insights into the South Korean nuclear industry. Members of the delegation were able to visit to places that otherwise were not possible. • Better understanding of key players in the Dutch nuclear sector and relationships between the key players have been strengthened through this mission	22	8.5	17

Highlight Key Enabling Technologies

Country + topic	Key takeaways	Participants	Average rating	Average new contacts per participant
Japan AI and digitalization for health	• Good insight in Japanese ai eco system and possibilities and collaboration opportunities • EU shares common challenges with JP and the good way to tackle them is with collaborative and joined effort where we can share best practices and lessons learnt • Good conversations, enough collaboration ideas. Momentum in Japan for FAIR AI and Data sharing	18	8.6	19
Taiwan Integrated photonics	• Understanding of way of working and doing business in Taiwan. Established new contacts, renewed some existing ones • Taiwan has a very intersting ecosystem. Photonics is very heavily focused on SiPh, for which there is not strong focus in NL. We need to explore how our solutions fit in this broader field • Got a lot of answers to the questions. Based on this information to draft a long-term strategy for Advanced packaging and Integrated Photonics. Made a lot of very valuable connections, mostly to the "Dutch" participants	16	9.1	30
Sweden Batttery Tech	• It was very valuable to see how Sweden develps a heavy duty strategy around the complete value chain. The collaboration within the country, but also from European projects shows how well connected they are • Insight on the Swedish Heavy duty EV ecosystem and battery production capabilities, as well as a better understanding on different stakeholders in the Dutch battery ecosystem, plus invaluable connections • Sweden has a developed ecosystem for battery production, Sweden doesen't seem to have new generation battery cell research and development, in contrast to the Netherlands, A cooperation between our countries could be mutually beneficial	23	8.4	13

Country + topic	Key takeaways	Participants	Average rating	Average new contacts per participant
China / Japan* Battery Tech – experts factfinding	**China** • Dominates in production capacity and technological innovation with a comprehensive national roadmap for battery development. • Rapid advancements in Na-ion and solid state battery technologies are positioning China as a global leader in the battery industry. **Japan** • Focuses on high power applications and has a strong synergy between industry and academia. • Japan's strengths lie in specialized high performance batteries and steady, incremental advancements in recycling and solid-state technologies.	8	n/a	n/a
India Space technologies	• Participating in this mission was highly valuable as it provided insights into business opportunities in Europe, particularly highlighting the Netherlands as a potential location for establishing the company's base. The mission elucidated the process involved in setting up operations in the region, showcasing the collaborative efforts between the European Space Agency (ESA), the industry, and academia. Additionally, the opportunity to connect with other like-minded founders was a significant advantage, fostering a network of potential partnerships and shared knowledge. • Possible MoUs between NSO and TNO to connect the space ecosystem in Kerala with Netherlands, Possible collaboration between the International Institute for Air and Space Law, Leiden University and law institutions in Kerala on SPACE LAW	15	8.4	32

"For me, it was very exciting to participate in this mission trip. It opened my eyes to witness and learn how government, industry and fundamental research institutes worked together to boost the transition of the societal and energy sectors."

Highlights Life Sciences & Health

Country + topic	Key takeaways	Participants	Average rating	Average new contacts per participant
Germany Regenerative Medicine	• Inspiring to see the great innitiatives in Germany, also learnt about the proposition of both academic as private organizations within the regmed field. New insights for our own proposition from NL • Germany has amazing opportunities to collaborate in research but also strategy and groupies together as an upcoming field. We should aim for more collaboration with Germany • A lot of insight into the Germany regenerative medicine ecosystem. It was great to see so many different sites and speak to representatives of many organizations, including academic and industry parties.	16	8	11
UK Medical isotopes and nuclear medicine	• Insight in both the UK and NL innovation ecosystems in the field of medical isotopes. Made contact with quite some new people. A much better feel for the organisational aspects involved (government, funds etc) • There are many opportunities in this field, but it is imperative to work together. Many of the unmet medical needs deal with small(er) numbers of patients, making collaborations essential. The knowledge base in this field (as in many other technical fields) is fragile and requires attention	35	8.3	15
Switzerland Cell & gene therapy	• Connecting the ecosystems, sharing learnings and solutions to pain points, and fostering dialogue between public and private actors takes us all forward • Exchange with and investing in new contacts is very relevant. The Swiss ecosystem is strong and well organised and open for collaboration • New contacts established, approached by number of people on basis of pitch, met with old contacts to learn "what's new"	32	8.6	24

Country + topic	Key takeaways	Participants	Average rating	Average new contacts per participant
USA **Women's Health Design Challenge**	• Being on such a mission give a lot of insights in the world of startups and investors, as well as the process of designing a product • Effectiveness of the mission is in the future but it is up to us now to use the opportunities that were created. Definitely gained opportunities and insights	16	7.6	26

Highlights Agriculture, Nature & Food

Country + topic	Key takeaways	Participants	Average rating	Average new contacts per participant
Germany Agtech	• Participating to this mission has allowed the delegation to broaden their network, acquire and share knowledge and create the preconditions for future cooperation • New contacts with companies that we visited, or were present at the neworking event. Also new contacts with participating companies/ organizations, and catching up with existing contacts • A lot of potential for new technologies in the Bavarian agricultural sector, but some difficulties with the implementation of the new technologies in practice	17	8.1	13
USA Robotics & Digitalization in Open Field Crops	• Better insight of the US market. Better understanding of their start-up and innovation environment. Good contacts with Almond growers and development and distribution partner • US and NL agriculture are very different, it is going to be difficult to match NL technology in California • Partnering in US is key, otherwise we are not able to get it in the market and beat the John Deere mentality	14	8.4	12
Sweden Agtech experts factfinding	• Connecting the ecosystems, sharing learnings and solutions to pain points, and fostering dialogue between public and private actors takes us all forward • Exchange with and investing in new contacts is very relevant. The Swiss ecosystem is strong and well organised and open for collaboration • New contacts established, approached by number of people on basis of pitch, met with old contacts to learn "what's new"	6	n/a	n/a

Country + topic	Key takeaways	Participants	Average rating	Average new contacts per participant
New Zealand Agtech, Robotization & Digitalization in Horticulture	• New Zealand is a quality driven exporting country able to adapt quickly to the requirement of the (foreign) customer • Agriculture is highly adaptable and independent from subsidies, strongly customer oriented	9	8.3	14
Kenia Sustainable Livestock Farming	• It was very useful to get to learn a lot about the Dairy Value Chain, but also to be able to present alternative feed ingredients • Focus by Government, research and private sector (incl farmers, coops and processors) on feed & fodder and knowledge & skills, and dairy (and beef) as a business. Opportunities in the beef sector	15	7.9	10
France Alternative Proteins	• The connections made within the group and with the French were valuable. Many follow ups to start collaborations on several topics • Good insight in the protein transition developments in France. Very valuable relations within the delegation and in France. Much inspiration for business strategy and concrete business opportunities • It is a great way of immerging into new markets for geographical expansion, great catalyser of collaborations among mission members, Better understanding of what the future looks like for The Netherlands in regard to policy	20	8.8	24

Country + topic	Key takeaways	Participants	Average rating	Average new contacts per participant
Brazil Bio-inputs	• Thanks to this mission, we realized that Brazil is a key market for our GTM strategy, with many advantages (market size, time for registration, fast-forward mentality to adopt new technologies in the field...) and complexities (security, protectionist, language, culture...) to navigate through. • Bio approach in Brazil is even more advanced in Brazil compared to the Netherlands than expected. On farm implementation might be a good approach for EU. Implementation of bio-inputs on farm scale is common.	13	9.1	19
South Korea Greentech & Energy Efficiency (Incoming mission)	• The innovation mission was useful, especially in planning a cluster in Korea like Agriport A7. They will actively involve Dutch companies in the development.	28	n/a	n/a


"Establishing trust and building strong personal relationships are essential for successful business dealings in the region. This approach requires time, patience, and consistent engagement. As a result, one of our key objectives for the upcoming year is to focus on developing and nurturing local connections."

5. Contact

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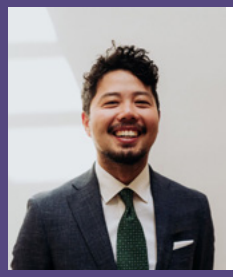

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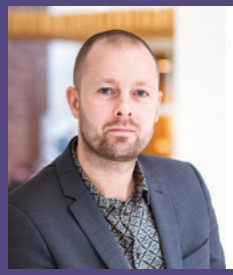

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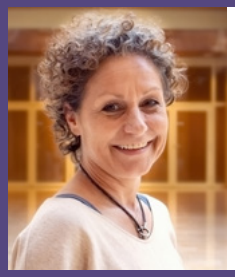

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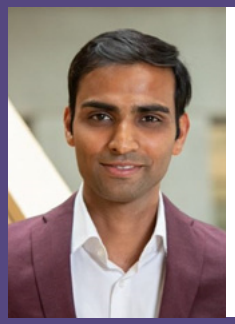

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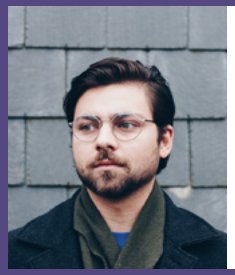

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For an overview of the Netherlands Innovation Network, please visit the page:

https://www.rvo.nl/onderwerpen/buitenlandnetwerk/ia-netwerk

For an overview of the Agriculture Attaché Network please visit the page:

https://www.rvo.nl/onderwerpen/buitenlandnetwerk/landbouw-attache- network-lan

Netherlands