

NEIKER

MEMBER OF
BASQUE RESEARCH
& TECHNOLOGY ALLIANCE



RESEARCH AND INNOVATIVE
SOLUTIONS FOR THE AGRO-FOOD
AND FORESTRY SECTOR

Report

2024

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President of Neiker
Amaia Barredo

AMAIA BARREDO, COUNCILLOR OF FOOD, RURAL DEVELOPMENT, AGRICULTURE AND FISHERIES OF THE BASQUE GOVERNMENT AND PRESIDENT OF **NEIKER**

2024 marks the beginning of a new stage in NEIKER, in which the technology centre renews its task as a key agent for the agro-livestock and forestry sector to successfully face the enormous challenges we already have before us.

In a context characterised by challenges such as climate change, generational change, food security and greater demand for food, NEIKER is working to support and strengthen this sector, developing applied innovation solutions that respond to its needs and contribute to its profitability and resilience.

Knowledge transfer plays an increasingly important role in ensuring the smooth functioning of the agri-food value chain. In this sense, in 2024 NEIKER has continued to make progress in strategic areas such as the competitiveness of the sector,

mitigation and adaptation to climate change, research into emerging diseases or obtaining plant varieties adapted to new scenarios.

We have also consolidated strategic alliances with public and private agents to lead transformational projects that position the Basque Country as a benchmark in agri-environmental innovation, thus contributing to food self-sufficiency, climate resilience and the revitalisation of the rural environment.

I would like to thank the NEIKER team for their dedication and commitment, as well as the institutions and entities that collaborate with the Basque Government so that innovation and knowledge continue to reach every farmer, stockbreeder and forester in the Basque Country.

INTRODUCTION



General Manager of Neiker
Olatz Unamunzaga

OLATZ UNAMUNZAGA GENERAL MANAGER OF NEIKER



I take on the management of NEIKER with enthusiasm and commitment, convinced that knowledge and applied R&D&I are key tools for tackling the challenges of the Basque agricultural, livestock and forestry sector.

In 2024 we are consolidating our role as a driving force for innovation, participating in national and international projects on climate change, soils or emerging diseases together with top-level partners. This exchange generates direct benefits for our sector, strengthening its competitiveness and resilience.

We promote the BALTSAN network, which integrates long-term agricultural trials in strategic crops such as cereals, fruit trees, vineyards and pastures. It will provide us with solid data to support decisions and will position the Basque Country as a European benchmark in agricultural R&D&I.

Another milestone in 2024 has been our recognition as a Knowledge Transfer Office by the Ministry of Science, Innovation and Universities, a distinction that reinforces NEIKER's role as a bridge between science and the sector.

We are making progress in key areas such as viticulture, where we contribute to a more sustainable and resilient production to climate change, and we develop agritech solutions aimed at a more attractive, competitive and sustainable agriculture.

In the context of One Health, we design vaccines to maintain the health of livestock and implement comprehensive strategies for the prevention and control of zoonoses, complemented by surveillance and epidemiological studies to assess their presence and distribution.

All this is possible thanks to the invaluable commitment of our team and the trust of institutions, industry and society.

NEIKER'S BOARD OF DIRECTORS

President	Amaia Barredo Martín	Basque Government's Minister for Food, Rural Development, Agriculture, and Fisheries
Non-Director Secretary	Sonia Masip Moriarty	Legal Technician at NEIKER
Member	Jon Karlos Aguirre Huerga	Director of Services at the Basque Government's Department of Food, Rural Development, and Fisheries
Member	Raúl Pérez Iracheta	Basque Government's Deputy Minister for Agriculture, Fishing, and Food Policy
Member	Oneka Zaballa González	Director of Agriculture and Livestock
Member	Iker Iglesias Eguia	Basque Government's Director of Quality and Food Industries
Member	Íñigo Robredo Guinea	Director of Digital Strategy. Basque Government's Department of Governance, Digital Administration, and Self-Government
Member	Federico Saiz Alonso	President of Baskegur
Member	Karmele Pikabea Echave	Director of Euskaber
Member	Alaitz Ortuondo Pérez	Aberekin, S.A.
Member	Nerea Múgica Herrán	Technical Director of Garlan Cooperative
Member	Arrate Lacalle	NEIKER workers' representative



WHO WE ARE...

We are a technology centre that specialises in creating innovative solutions for the agri-food and forestry sectors. As an entity dependent on the Basque Government's Ministry of Food, Rural Development, Agriculture, and Fisheries, we work to contribute knowledge and value to said sectors.

We are part of the Basque Research and Technology Alliance (BRTA), a Basque Government consortium

that brings together different technological players from the Basque Country to address the industrial challenges of the region and to compete with leading international corporations in terms of technology research and development.

We are also part of the Basque Science, Technology, and Innovation Network, which unites organisations and institutions from the fields of science and technology.



...AND WHAT WE DO

ABOUT NEIKER



We develop technologies to improve agricultural profitability and management, with a special focus on agritech, aiming to meet the quality and safety requirements demanded by the agri-food industry and end consumers.

We generate scientific knowledge and create transferable solutions that bring wealth and well-being to our society and the environment.

We contribute to the development of a more competitive Basque agri-food and forestry sector, to the conservation and sustainability of our agricultural context and natural environment, and to the development of policies that promote the circular bioeconomy in the Basque Country.

CONTRIBUTION TO THE SUSTAINABLE DEVELOPMENT GOALS



EXPERTISE

ABOUT NEIKER



PLANT RESEARCH

- Production systems and good agricultural practices.
- Genetic improvement of plants and indicators of resistance to diseases and physiopathies.
- Alternative crops and biomolecules of agri-food interest.
- Crop irrigation dosage.
- Diagnosis, epidemiology, and control of pests and diseases.
- Precision agriculture.

ANIMAL RESEARCH

- Genetic improvement.
- Food and nutrition.
- Production systems.
- Applied ethology and well-being.
- Diagnosis, control, and epidemiological surveillance of animal diseases.
- Zoonoses and food safety.
- Environmental biosecurity, wildlife, and vectors as a source of infection for farm animals and people.

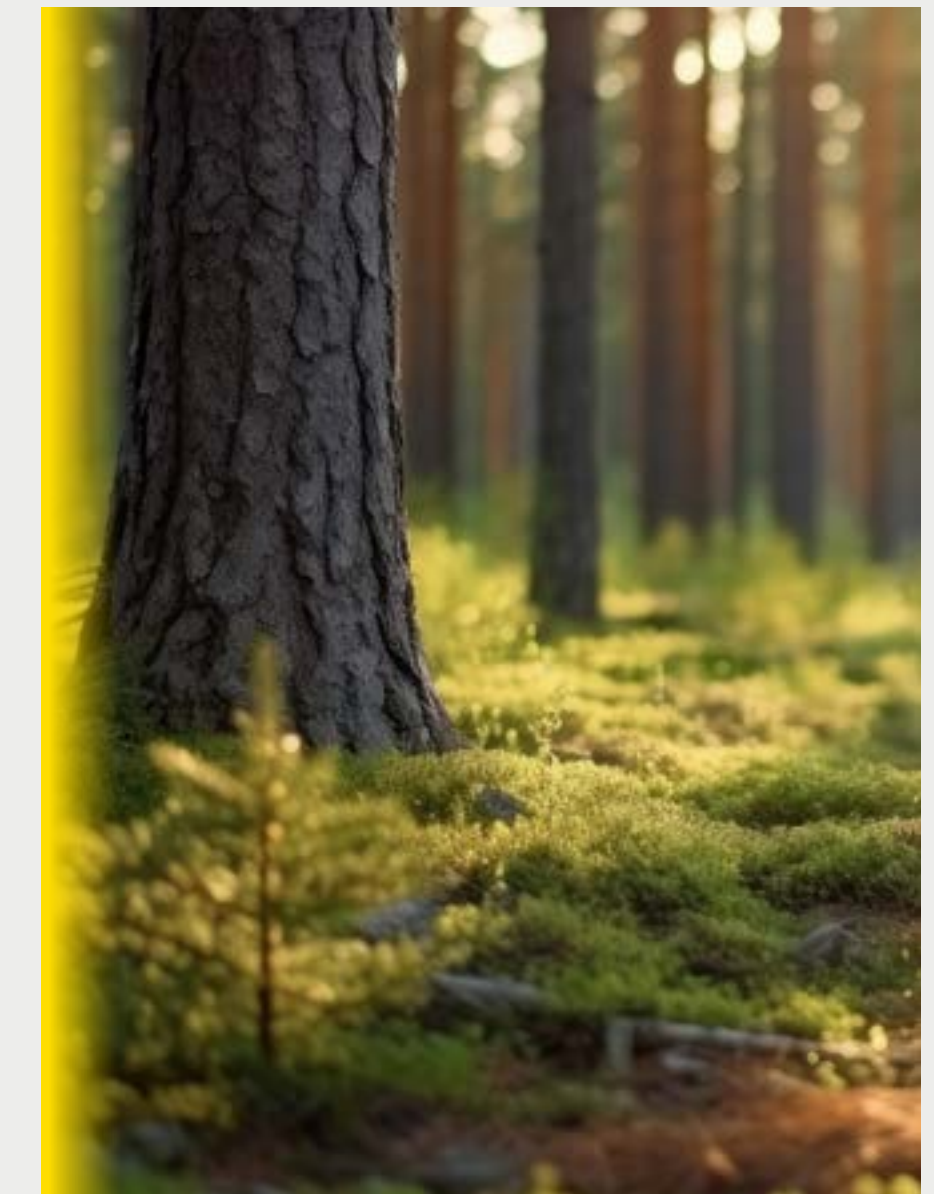


ENVIRONMENTAL RESEARCH

- Conservation and sustainable use of agricultural and natural resources.
- Recovery of degraded soils.
- Environmental monitoring.
- Impact, mitigation, and adaptation to climate change.
- Circular bioeconomy.

FOREST RESEARCH

- Plant physiology and tissue culture.
- Genomics.
- Forest pathology.
- Sustainability and ecosystem services.
- Improvement of biodiversity.



HELPING THE AGRICULTURAL SECTOR

We contribute to the competitiveness and sustainability of the agricultural, livestock, and forestry sectors through research and applied science.

ONE HEALTH

We study the relationship between animal, human, and environmental health. We strive to minimise the impact of zoonotic diseases and seek alternatives to streamline the application of pesticides in agriculture and reduce the use of antibiotics in livestock.

AGRITECH

We incorporate high-tech solutions into the agricultural, livestock, and forestry sectors to help them transform and advance towards more productive, sustainable, and climate-resilient systems.

SUSTAINABILITY

We promote sustainable and environmentally friendly production processes. We defend agricultural activity and promote its contribution to biodiversity conservation, climate change mitigation, and landscape maintenance.



COMPETITIVENESS

We use cutting-edge technologies and new production systems to increase the profitability, competitiveness, and sustainability of farms, ensuring their continued success.

CLIMATE CHANGE

We predict future scenarios and seek possible ways to mitigate and adapt to climate change, proposing alternatives to current production systems. We conduct inventories of greenhouse gas emissions from the livestock sector.

GENETIC IMPROVEMENT

We obtain more competitive products that are more geared towards the needs of the industry

and consumers, better adapted to climate change, and have a lower environmental impact - all thanks to genetic improvement.

ORGANIC PRODUCTION

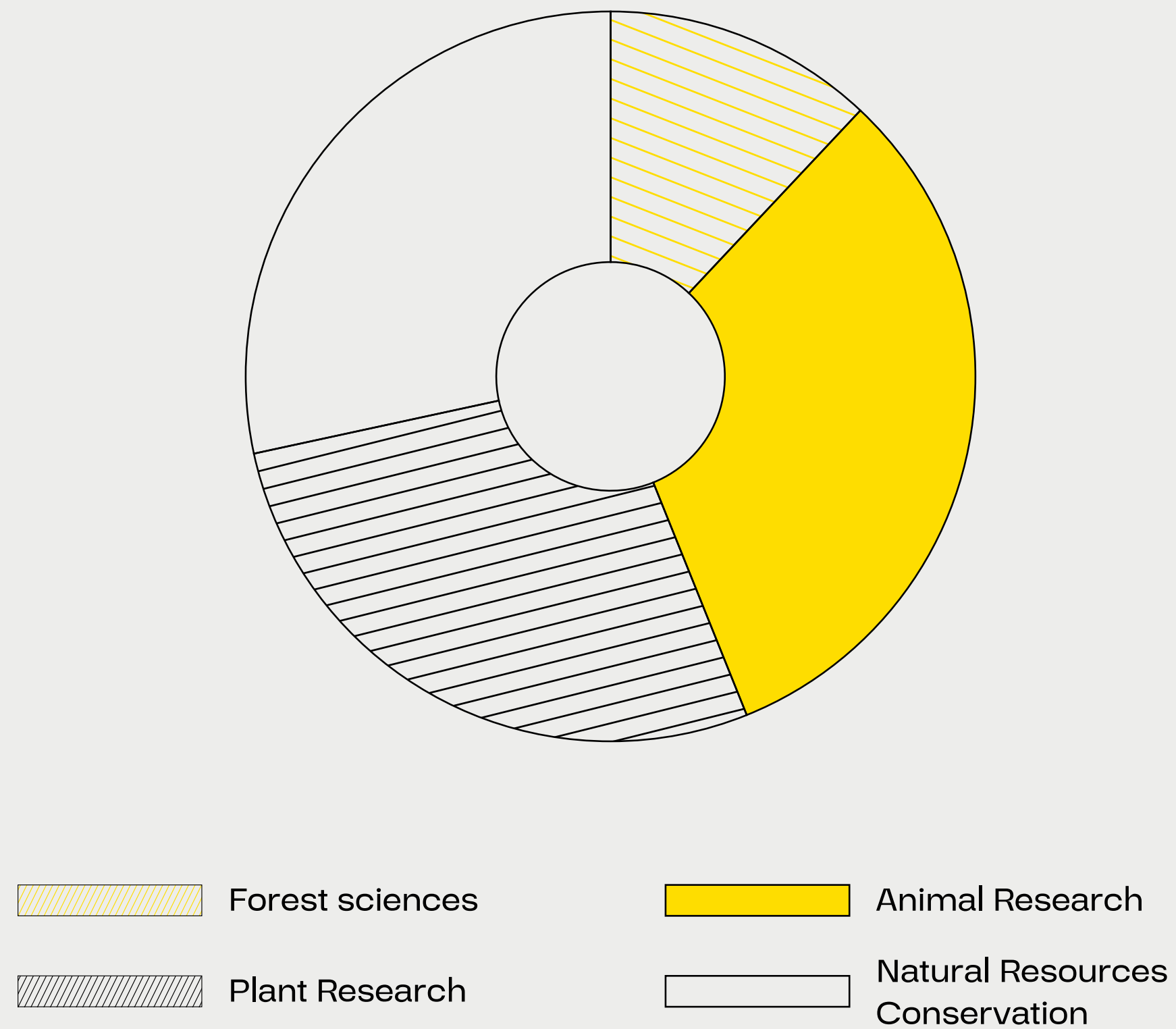
We research and generate objective scientific knowledge that helps promote and consolidate this type of agriculture, making it compatible with the sector's competitiveness.

CIRCULAR BIOECONOMY

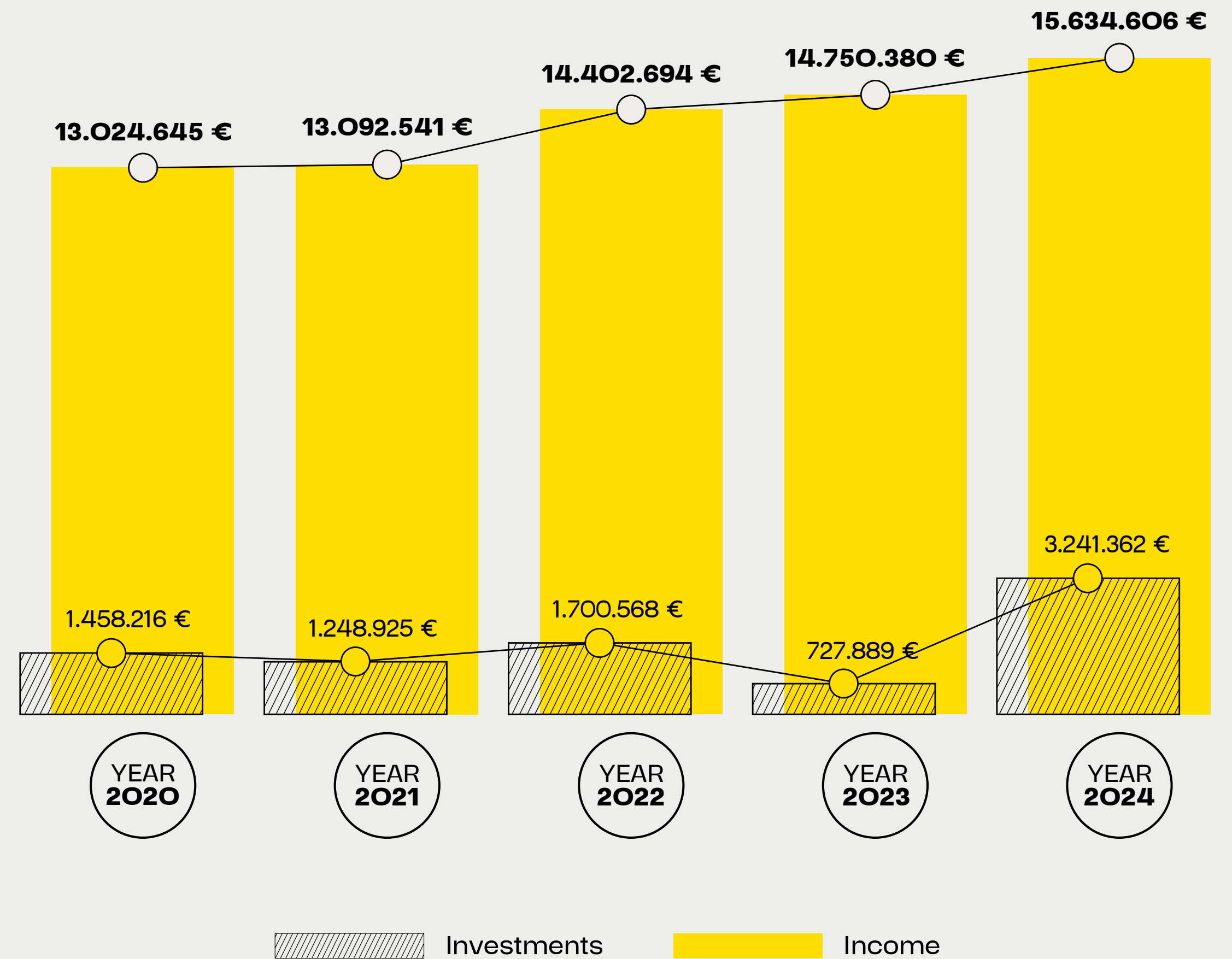
Production processes should not generate waste. Minimising and converting this waste into raw materials for new products allows us to combat climate change, reduce dependence on raw materials, and create new business activities.

ABOUT NEIKER

PROJECTS BY RESEARCH LINE IN 2024



FINANCIAL INFORMATION



SUSTAINABILITY



We have set the following objectives in **NEIKER's Energy Sustainability Plan**:

- Reduce our energy consumption by 35% by 2035.
- Make 32% of our total consumption be sustainable by 2030.

To achieve this, we promote energy efficiency measures in our buildings and facilities, the replacement of fossil fuels and non-renewable energy sources with renewable ones, the increased use of sustainable mobility, and we make efforts to train and raise awareness among NEIKER employees.

How are things going?

- Between 2015 and 2023, we reduced our energy consumption by 14%.
- 31% of our energy consumption was from renewable sources in 2024.

GOVERNANCE AND COMPLIANCE

- We have revised **NEIKER's Code of Ethics**, including references to the use of **Artificial Intelligence**.
- We are adhered to the **Basque Government's Information System (BIS)** in compliance with the provisions of Law 2/2023, dated 20 February.
- We have joined the **CoFFEE platform**, which provides services for processing European Funds to manage, among other things, *Next Generation projects*.

QUALITY

- External audits recognise the robustness of our **goal-oriented management system which promotes continuous improvement**. This system is based on the R&D&I Management System (UNE 16002:2021), the Quality Management System (ISO 9001:2015), and ENAC Accreditation No. 615/LE 1321.
- We collaborate to improve the competitiveness of Basque entities through participation in the Euskalit Evaluation Club.



COMMITMENT TO THE BASQUE LANGUAGE

Since the Basque Language Commission proposed and accepted our first Basque language plan in 2008, we have been working towards the standardisation and equal use of our two official languages, both inside and outside of NEIKER. This is reflected in NEIKER's Language Policy, which has been adopted by the General Management.

Our main challenges are outlined in the 2023-2027 **Basque Language Strategic Plan** for planning period VII (VII plangintzaldia), which includes guaranteeing citizens' linguistic rights and standardising, training, and promoting the use of Basque through the activities outlined in the annual Action Plans.

In 2024, we worked on disseminating and implementing our **Language Criteria** across the entire NEIKER team.

In addition to promoting training activities in Basque and encouraging its use, we have supported (through participation) initiatives with broad social acceptance (KORRIKA, International Basque Language Day). In cooperation with other organisations such as Elhuyar, NEIKER has been a leader in terms of scientific dissemination of primary sector research in Basque. Thus, the IKUSGELA project (in which NEIKER participated) won the Rikardo Arregi Award, and a project carried out at NEIKER won the Elhuyar Award for the best scientific dissemination project in the primary sector.



NEIKER is a part of AriGara and XEDERA, networks promoted by the Vice-Ministry of Language Policy. As an active member of these networks, NEIKER has shared its best practices in managing the Basque language. In addition, these best practices are published in the EUSKALIT Language Management Practices Search Engine. During the IV Meeting on Best Practices in Language Management, NEIKER shared its experience through the work entitled "Management and promotion of Basque in agricultural research: linguistic criteria for different communication situations and linguistic models for social networks".

PEOPLE

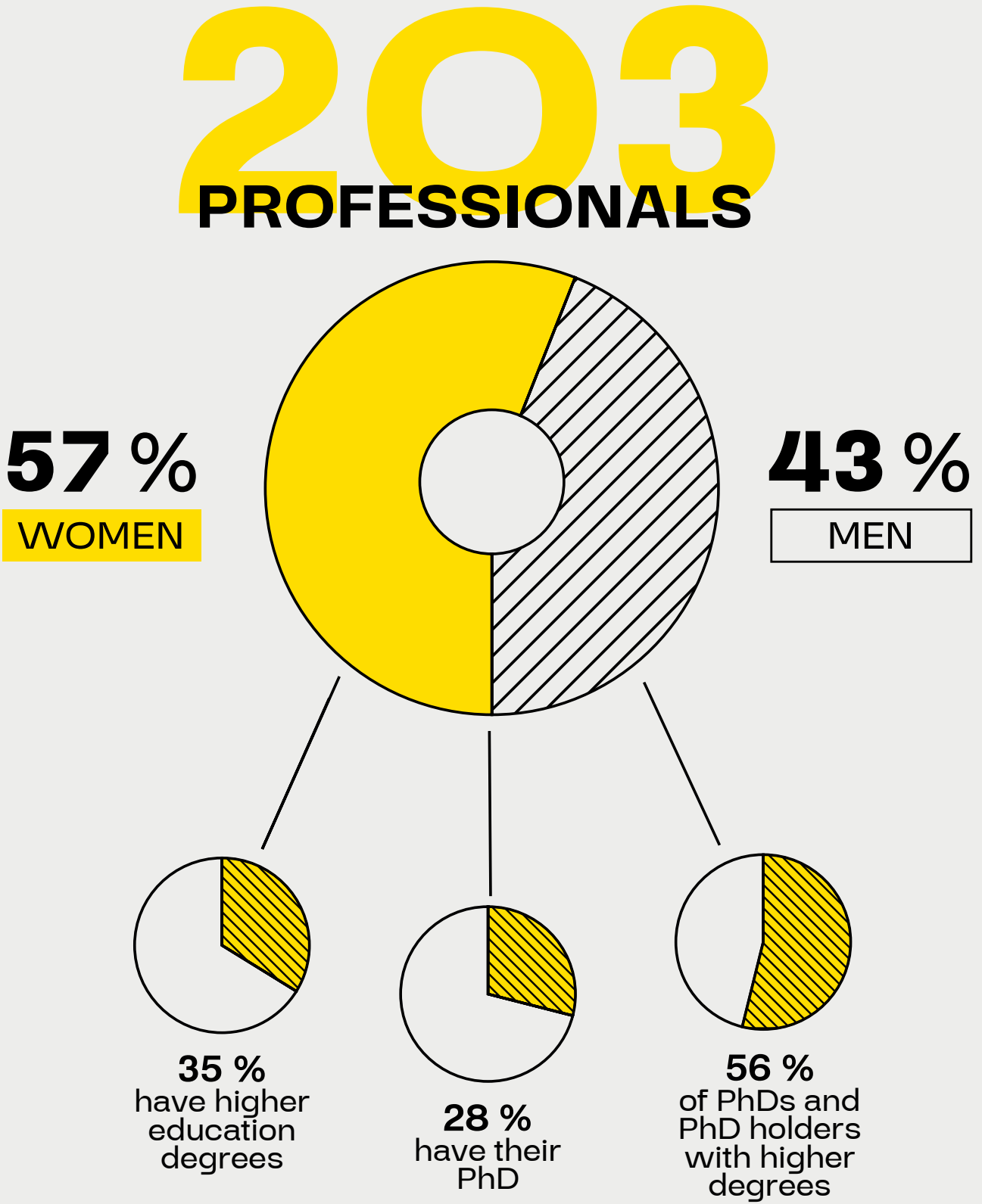


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People are the driving force behind our technology centre. At NEIKER, we foster a work environment based on commitment, professional development, and personal well-being. We invest in talent, offering growth and training opportunities so that each professional can build a solid and satisfying career within the organisation.

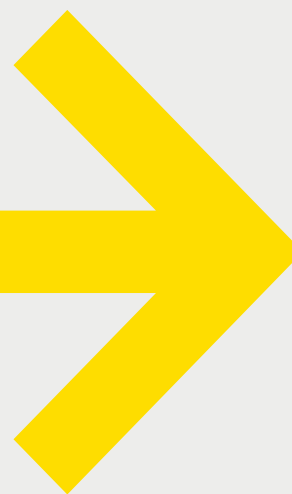
NEIKER’S TEAM

We are defined by commitment, scientific excellence, a focus on results, and the satisfaction of our members and clients.



PEOPLE

WHAT
MOVES
US...



A FOCUS ON OUR CLIENTS, BOTH INTERNALLY AND EXTERNALLY, AND SOLUTIONS BASED ON SCIENTIFIC KNOWLEDGE

We seek solutions both internally and externally, generating value.

EFFICIENCY AND EXCELLENCE

We generate knowledge and advanced solutions efficiently.

SUSTAINABILITY AND INNOVATION

In all areas of work thanks to an advanced process-based management model that fosters continuous improvement.

PERSONAL WELL-BEING AND DEVELOPMENT

We create development opportunities for all people in safe environments that promote their well-being.

RESULTS-DRIVEN APPROACH

Encouraging knowledge transfer, outreach, and continuous improvement for business and society.

ETHICAL COMMITMENT

We act in accordance with the principles of neutrality, dedication to public service, impartiality, transparency, honesty, and equality.

PROFESSIONAL DEVELOPMENT AND TRAINING

At NEIKER we are firmly committed to people. This commitment involves not only taking care of their well-being, but also ensuring their ongoing training — an essential element for their professional development within the organisation.

We know that training is a fundamental factor in retaining talent and, therefore, we face the challenge of constantly adapting to the needs and expectations of our people. In addition to specific training directly related to their roles, we provide other training that motivates them and enables them to take on new challenges and responsibilities and fulfil their professional aspirations.



PEOPLE

IN TERMS OF TRAINING
FOR 2024, WE CAN
HIGHLIGHT:

5.622
hours of training

128
training activities

→

38%
more than in 2023

92.530
euros of total investment

→

55%
more than in 2023

17
Occupational Health
and Safety courses

→

89%
more than in 2023

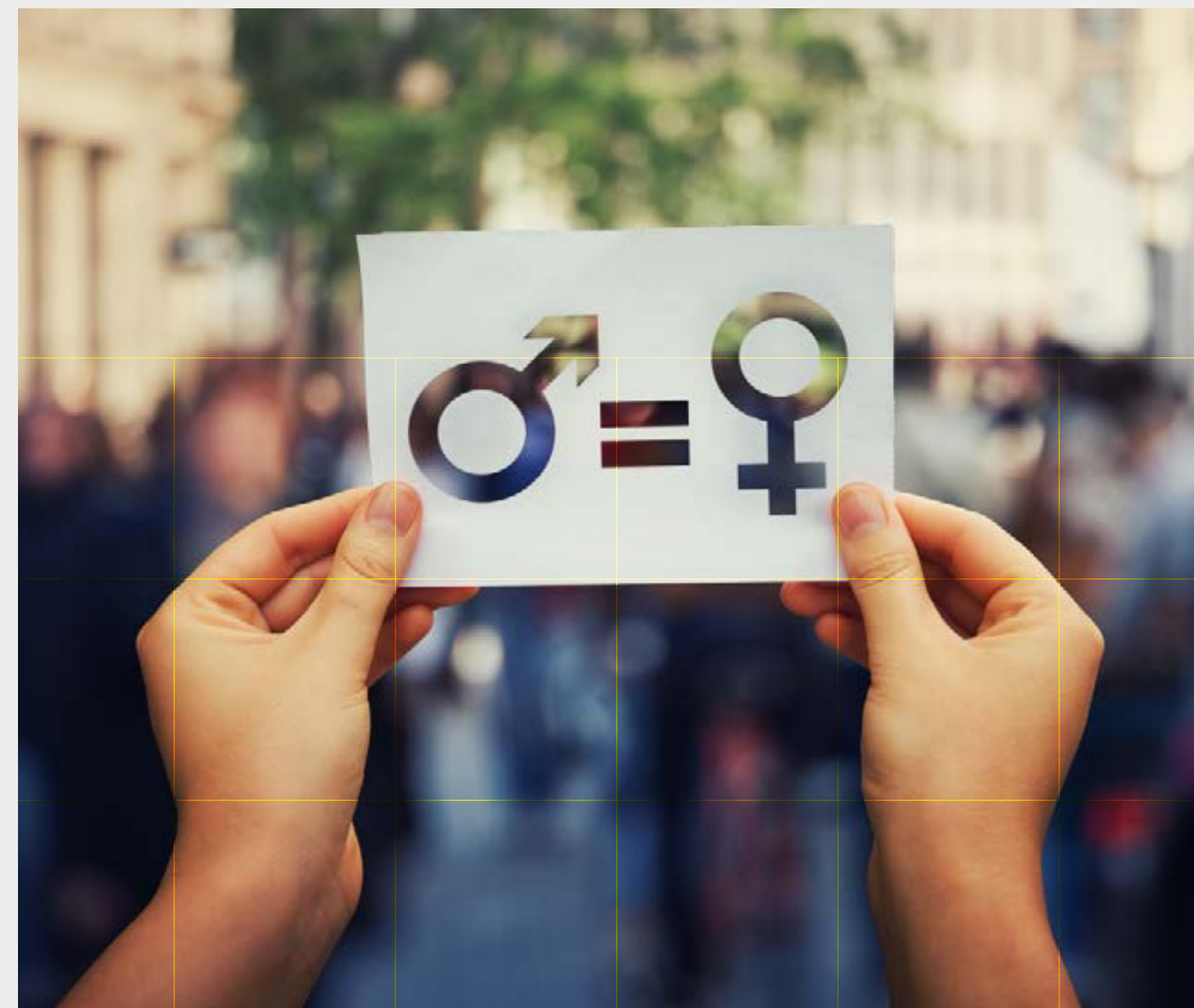
EQUALITY

PEOPLE

In 2024, we continued working on NEIKER's Third Equality Plan, led by the Equality Negotiating Committee and with the participation of the entire NEIKER team.

HIGHLIGHTS:

- The **study conducted on the “Wage Gap at NEIKER”**: 3,3% in favour of women.
- The **percentage of women in leadership positions**: it stands at 55%.
- The **participation of women in the knowledge transfer sessions organised by NEIKER**: 51% of the total are **men** and 49% are **women**. And, if we focus only on NEIKER speakers, 67% are **women** and 33% are **men**.



- **Our presence in BAI SAREA**, a network promoted by Emakunde (the Basque Women's Institute) and made up of collaborating entities for equality between women and men. As members of this organisation, we have participated in the “Women's Feminist Leadership, Key to Equality” and “Safe Places Assessment” activities.
- **Our continued support for notable events**: International Day of Women and Girls in Science (11 February), International Women's Day (8 March), International Day of Rural Women (15 October), and International Day for the Elimination of Violence against Women (25 November).
- The **environment free from violence against women that we guarantee** thanks to NEIKER's “Protocol for the prevention and response to sexual harassment, gender-based harassment, harassment based on sexual orientation, and harassment based on gender identity and expression”.

PEOPLE

HEALTH, SAFETY, AND EMOTIONAL WELL-BEING



At NEIKER, our commitment to the safety and well-being of our team is reflected in the progress we are making towards implementing an Occupational Health and Safety (OHS) Management System in accordance with the ISO 45001:2018 standard. This system, which aligns with our corporate values, guarantees safe working environments and promotes the well-being of all employees.

One of the main pillars of our management model is the leadership and high degree of involvement of directors, middle management, and the Health and Safety Committee in all OHS-related processes. Thanks to this approach, we have achieved very positive results in terms of our occupational health and safety indicators.

Our commitment to workplace safety and well-being includes initiatives related to both physical and emotional well-being.



INITIATIVES AND GOALS FOR THE FUTURE



Aware of the importance of emotional well-being in the workplace, we have identified the improvement of our staff's psychosocial well-being as one of our main lines of action. As a result of the psychosocial risk surveys conducted, we designed an action plan in 2024 to be implemented in 2025 which includes measures aimed at fostering a healthy and balanced work environment.

At NEIKER, we continue to advance in consolidating a culture of prevention, promoting initiatives that guarantee the health and safety of our team, thus strengthening our commitment to a safe and sustainable work environment.



We generate and transfer theoretical and practical knowledge to increase the competitiveness, sustainability, and recognition of the Basque agricultural sector.

We conduct research to provide valuable solutions to the problems facing the Basque agricultural sector, as well as to generate growth opportunities.

We work to incorporate new developments into Basque companies and, thus, positively impact their competitiveness and profitability.



MILES- TONES OF 2024

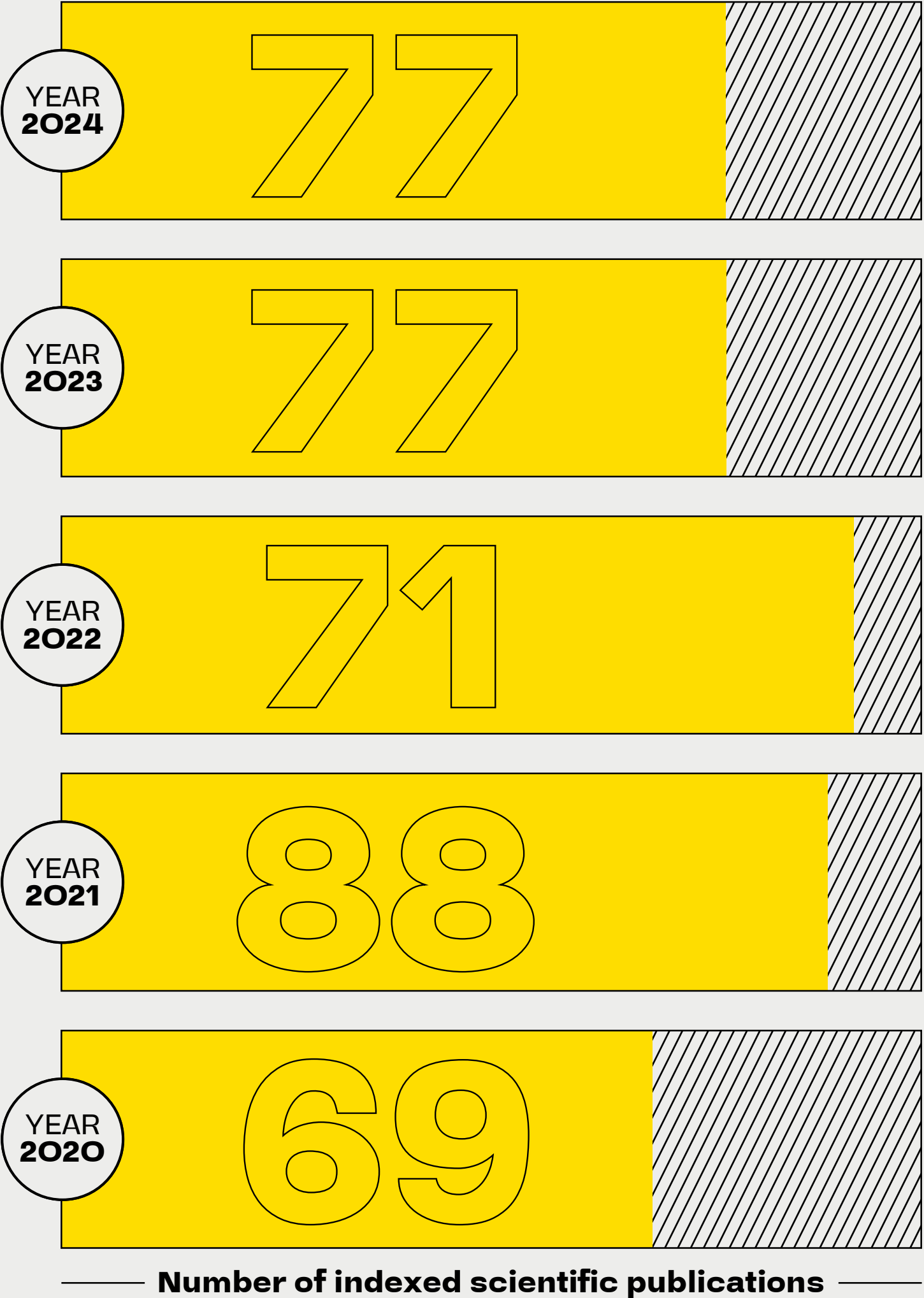
- We launched a **long-term agricultural trial network** (BALTSAN) consisting of five trials for grains, fruit trees, vineyards, and pastures. BALTSAN will allow us to generate and transmit knowledge to the various players in the agricultural sector and will contribute to positioning the Basque Country as a leading territory for agricultural R&D&I at the European level.
- We made progress in our understanding of **carbon sequestration in soils**. In 2024, we updated the soil carbon map and modelled the carbon sequestration potential of our soils — topics of great relevance today.
- We delved deeper into the area of **precision agriculture** to optimise agricultural inputs (fertilisers, pesticides, irrigation) and the modelling of greenhouse gas emissions.

PUBLICATIONS



SCIENTIFIC
EXCELLENCE

Scientific and technological excellence



More than **75** articles in prestigious international journals

Scopus database

80% in the first quartile

50% in the first decile

significant growth in the quality of our publications

More than **1.450** articles in the Scopus database

We increased our h-index from **90** → **95**

Two NEIKER researchers have an h-index **>50**

From 75 articles to > 85 articles, with more than **100** citations

From 235 articles to > 256 articles, with more than **50** citations

SCIENTIFIC EXCELLENCE

PATENT APPLICATIONS



- For the **in vitro** method that predicts whether cattle are susceptible or resistant to paratuberculosis based on the presence of genetic variants that predispose them to the development of the disease. Patent part of the PARA-RESILIENCIA project, co-financed by the EU and the State Research Agency (AEI).
- For the **INDARTSU pepper variety**, the result of the Chilli Pepper Improvement Plan for the incorporation of virus-resistant genes. Applied for from the Community Plant Variety Office.

AWARDS



Carlos Garbisu, Inma Estevez and Ramón Juste, NEIKER researchers, repeat in the Stanford ranking.

Ramon Juste, a NEIKER researcher, recognised at the III Animal's Health Awards for his research in animal health and veterinary medicine.

Amaia Ortiz, head of the Plant Production and Protection Department at NEIKER, joins the Royal Basque Society of Friends of the Country.

LIFE Oreka Mendian, a project in which NEIKER participates, receives the 2024 European Natura 2000 Award.

A NEIKER piece received an award at the International Congress of the National Association of Spanish Specialists in Bovine Medicine.



MEMBER OF...

PARTNERSHIPS

SCIENTIFIC
EXCELLENCE



Aclima



Fundación Vasca para la Seguridad Alimentaria



Agencia Vasca de Innovación



Asebio



Basque Research & Technology Alliance



Lekunberriko Instituto Laktologikoa



European Forest Institute



Innovative Community of EIT




Elhuyar




Basque Food Cluster




Bio-based Industries Consortium




AZTI




Bask Egur




BCC Basque Culinary Center




BC3 Basque Centre for Climate Change




BCAM Basque Center for Applied Mathematics




CICbioGune




CICbiomaGune




Cidetec




CIEFAP Centro de Investigación y Extensión Forestal Andino Patagónico (Argentina)




CTF Science for Forest Management, Biodiversity & Bioeconomy




Gaiker




HAZI




IRTA Instituto de investigación de la Generalitat de Cataluña




Tecnalia




Tekniker




UPV-EHU Universidad del País Vasco-Euskal Herriko Unibertsitatea



USSE



VICOMTECH



ihobe

MAIN
CLIENTS

				
Aberekin	ABRA	Agromillora	AEA Technology	Alavesa de patatas
				
Avanzabio	Barrenetxe	BASF	BaskEgur	BATURA MOBILE SOLUTIONS S.L
				
BIOBIZZ	Biolan	Boehringer	Bodegas Itsasmendi	Calidad Pascual
				
Econatur	ENKOA System S.L	Fertinagro	Garlan	GARAIA
				
Harakai-Urkaiko	Innogando	IRTA	Kaiku Coop.	MIBA S.COOP
				
Syngenta	Syva	UAGA (Unión Agro-ganadera de Álava)	Udapa	UPV/EHU
				
USSE				

COLLABORATIVE
EFFORTS

With **SEIPASA**, **ECONATUR**, **BASF** and **SYNGENTA**, to create and design new, more efficient, and sustainable pest and disease control programmes.

With **UAGA**, **AGA** and **ABERE**, to advance in terms of sustainable production systems.

With **GARLAN** y **UDAPA**, to promote the implementation of technification and digitalisation in the agricultural sector (*AGRITECH*).

With **IHOBE**, to establish lines of work for mitigating and adapting the agricultural sector to climate change, and for soil conservation.

With **BC3**, BC3 to define future lines of knowledge generation that will allow for a climate-resilient primary sector in the Basque Country.

With **INNOGANDO** and **BEHIALDE** to promote precision livestock farming in the dairy cattle sector..





In our commitment to the Basque agricultural and livestock sector, we work closely with professionals and organisations to offer solutions based on science and research.

Our proximity allows us to understand their challenges and concerns, promoting the transfer of knowledge and technology to strengthen their competitiveness and sustainability.



MILESTONES OF 2024

- **NEIKER was recognised as a Knowledge Transfer Office (OTC)** by the Ministry of Science, Innovation, and Universities, highlighting our role as a link between research and the agri-food and forestry sectors. Of the 111 recognised KTOs, eight are in the Basque Country, and NEIKER is the only centre dedicated entirely to agricultural research.
- **We transferred the “WELFAIR” Animal Welfare Certification Scheme** —created by the Institute of Agri-food Research and Technology (IRTA) and NEIKER— to the company INDUBIUS, which will be responsible for its operation and development.
- **We transferred to the Ugandan government the knowledge needed to produce an immunostimulant from inactivated tuberculosis bacteria**, which improves animals’ response to disease and facilitates control. This was patented jointly with SABIOTEC, which will be responsible for transferring it to the African country, while NEIKER will train Ugandan technicians on its production.



MAIN RESEARCH AND TRANSFER PROJECTS



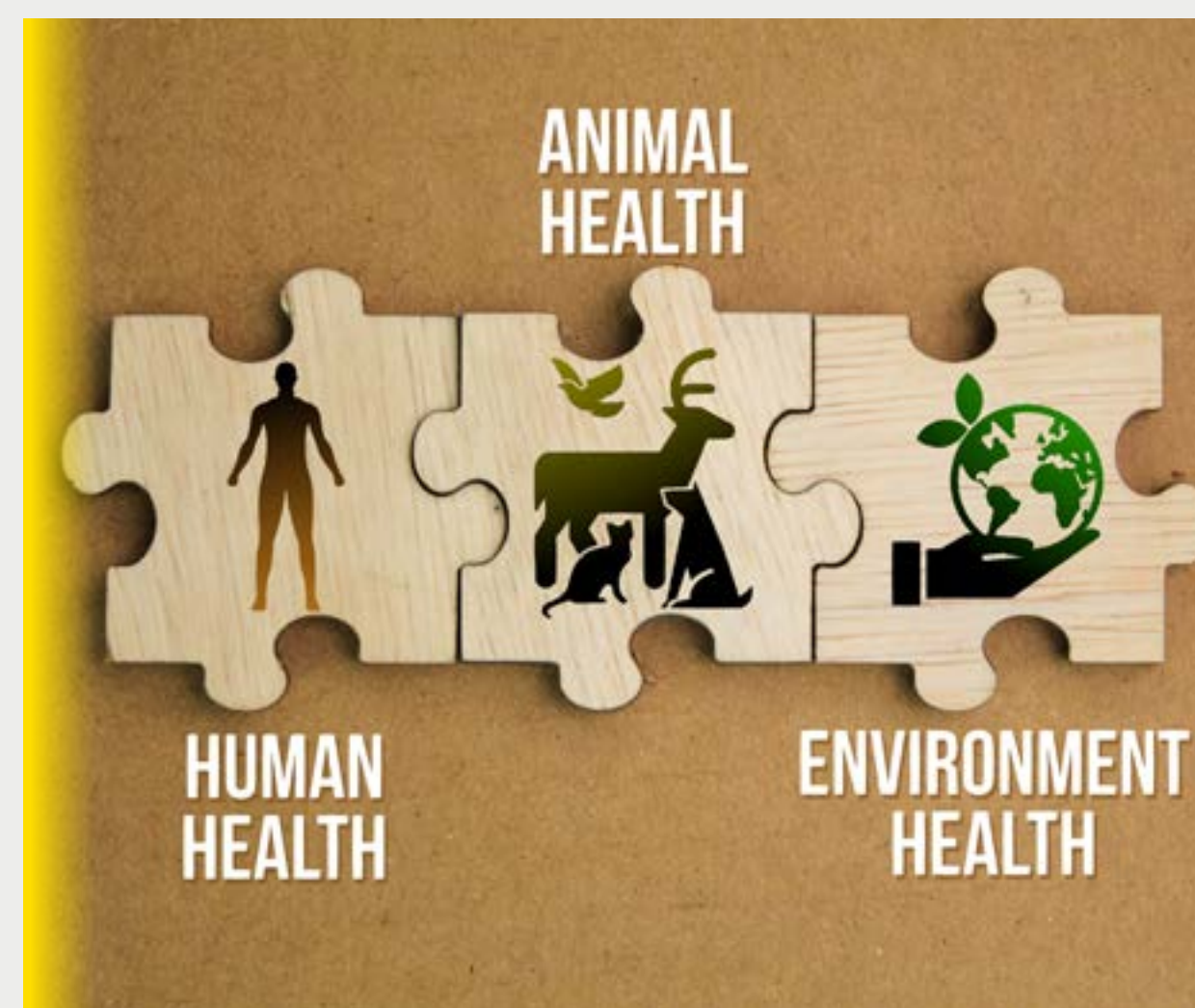
ONE HEALTH

The renovation of NEIKER's high biological safety (NCB 3) facilities, necessary for working with pathogens that require special biocontainment measures, has begun.

[\[link\]](#) NEIKER will analyse the distribution of ticks in the Basque Country and the risks associated with their bites.

NEIKER will develop new diagnostic protocols and new tools for the control of animal tuberculosis.

The AVEDILA Symposium, organised by NEIKER, presents the latest research in veterinary laboratory diagnosis in Bilbao.



AGRITECH

Real-time diagnostics and AI algorithms for detecting potato pests and diseases.

Indoor vertical farming: vertical crops to optimise sustainable food production.

Mathematical models to study root behaviour and obtain more resistant crops.



RESEARCH AND KNOWLEDGE TRANSFER

SUSTAINABILITY AND COMPETITIVENESS

[\[link\]](#) Vititransfer: strategies for developing more sustainable viticulture in the Basque Country.

Practices to promote more sustainable sheep farming by reducing greenhouse gas emissions.

Identifying the keys to establishing a carbon farming market.

LURZAIN: a citizen-friendly web application for sustainable soil assessment and management.

New legume-based foods for a more nutritious, sustainable, and healthy diet.

Strategies to improve the competitiveness and sustainability of the Latxa and Manech sheep breeds.

Food life cycle analysis to decarbonise the Basque agri-food sector.

Walnut cultivation, a business opportunity for Basque agriculture.



ANIMAL WELFARE

NEIKER explores the potential of AI-based data analysis tools for developing simple animal welfare self-assessment tools for producers.



CLIMATE CHANGE

[\[link\]](#) Plant cover and irrigation splitting to adapt vineyards to climate change.

Map of Pyrenean soils to help protect them and adapt them to climate change.



BIOECONOMY

Biological fertilisers from fishing waste: a sustainable alternative for agricultural soils.

NEIKER transforms agri-food waste into biofertilisers for more sustainable agriculture.

New, valuable resources thanks to microalgae: transforming agricultural waste.



ANIMAL WELFARE

[\[link\]](#) NEIKER explores the potential of AI-based data analysis tools for developing simple animal welfare self-assessment tools for producers.



KNOWLEDGE TRANSFER WORKSHOPS AND WEBINARS

We disseminated and transferred our knowledge, research, and solutions to the sector.

- Tools for measuring soil health with artificial intelligence (Bilbao, Bizkaia).
- First meeting of the AKIS Forum for knowledge transfer (Arkaute, Álava).
- Progress on EUSKOBASOA 2050, the Basque Country Forest Improvement Plan (Arkaute, Álava).
- Innovation in pepper and chilli production using resistant varieties and new field management protocols (Derio, Bizkaia).
- Experiences for a more sustainable wine sector (Bizkaia and Álava).
- Field workshop on 2023-2024 extensive grain variety trials (Gauna, Álava).
- Second AKIS Forum: modifications to the Common Agricultural Policy, progress made by farms in Álava to minimise their environmental footprint, and a visit to NEIKER's long-term field trials (Arkaute, Álava).

- Field workshop to learn about NEIKER's experimental organic crop trial plots (Gauna, Álava).
- Fieldwork workshop on diversification opportunities for nut trees (Zambrana and Ribavellosa, Álava).
- XXVII AVEDILA symposium: laboratory diagnosis in veterinary medicine (Bilbao, Bizkaia).
- Workshop on soil health for major national wineries (Samaniego, Álava).

- Technical visit of a number of delegations from New Zealand and Australia to learn about forest biosecurity in relation to *Pinus radiata* in the Basque Country (Álava).
- Technical visit to the REINFFORCE Project's arboretum (protection of Atlantic forests) as part of the 10th edition of Wood Week (Bizkaia).
- Third AKIS Forum: news and advances in the Basque Country's agritech strategy (Arkaute, Álava).



WE ATTENDED LEADING EVENTS

- **Food4Future**, the fourth edition of the leading food industry trade fair.
- **EIT Food Next Bite 2024**, where we championed the role of regenerative agriculture in reducing environmental impacts.
- **Bioeconomy Regions Summit 2024**, the first edition of the Bioeconomy Regions Summit, organised by the European Forest Institute (EFI) in Brussels, in which NEIKER presented the Basque Country's commitment to the forest bioeconomy.
- **Primer Fórum de Suelos de los Pirineos** held in Ax-les-Thermes, one of the aims of which is to unify information on soils and establish best practices for soil conservation.
- **Expo Agritech 2024**, a technology fair in Malaga that seeks to transform the agricultural sector.





In **2024** More than
100.000
Analyses

More than
25 years
providing specialised advising
services to the agricultural,
livestock, and forestry sectors

We have a team of more than

20 professional staff members

Our analytical laboratory services:

- Animal health: reproductive and viral diseases of ruminants, mycobacteriosis, microbiology of feed and its raw materials, detection of pathogens in milk, antibiotic resistance, etc.
- Natural resource conservation: soil fertility and water properties, physiological and biological soil parameters, advising on the transition to agroecology, advising on climate change mitigation, etc.
- Plant health: certification of seed and edible potatoes, botanical seed purity and germination testing, quarantine organism detection, disease diagnosis, varietal identification of plant species, issuance of plant health passports for proprietary propagation, etc.

ANALYTICAL SERVICES AND LEADING FACILITIES

12 ACCREDITATIONS

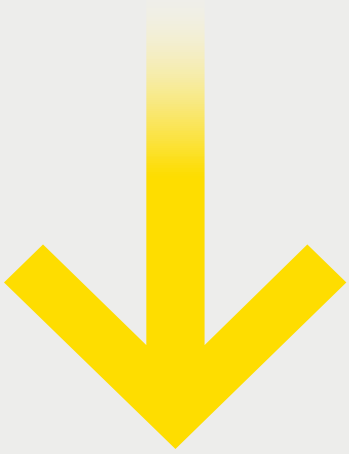
We have 12 accredited techniques in the following areas:

- Microbiology-immunology.
- Molecular biology.
- Biotechnology (plant health).

Laboratory and greenhouse infrastructure:

- Microbiology, immunology and molecular biology laboratory.
- Pathological anatomy, clinical biopathology, and parasitology areas.
- Laboratory with a biosafety level of 3 (NCB 3).

- Animal testing facilities with biosafety levels of 2 and 3.
- Soil and plant material analytical laboratory.
- Plant analytical laboratory.
- Greenhouse with a biosafety level of 2 for tests with quarantine pathogens.
- Greenhouses for the hydroponic and aeroponic handling of vegetables and microalgae.
- Chromatography area.
- Biotechnology areas.
- Analytical chemistry area.



More than
3.000
clients
from all the links
of the value chain

MEMBER OF THE BIOLOGICAL
ALERT LABORATORY NETWORK
(RE-LAB)

LEADING
FACILITIES

High-security facilities	1.520 m²
NCB-3 laboratory	673 m²
NCB-2 and SL-3 greenhouses	845 m²
Laboratories	3.305 m²
Laboratories for Conservation of Natural Resources	705 m²
Animal Health laboratories	1.100 m²
Plant Health laboratories	1.500 m²
Greenhouses and tunnels	7.138 m²
Glass, plastic and rigid plate-covered greenhouses	3.500 m²
Test culture surface	2.000 m²
NBC-1 and aeroponics greenhouses	1.638 m²

Livestock facilities	2.765 m²
Experimental farms for arable and fruit crops	100 ha
Other facilities	1.810 m²
Warehouses, selection rooms and characterisation and services	900 m²
Agriculture warehouse	500 m²
Field workshops	340 m²
Refrigeration chambers	70 m²



DISSEMINATION OF SCIENCE



NEIKER is part of **STEAM Sare**, the network of educational centres and socioeconomic players that promote scientific and technological vocations. In 2024, we brought science into the classroom with workshops to explain how plant varieties that are currently present in our lives (such as the potato, for example) are obtained.

We enjoy participating in initiatives to spread science informally and in other settings, such as the ***Pint of Science*** festival. In 2024, we were in Vitoria for yet another year to chat, beer in hand. This time, it was about the role of pollinators and the contribution of PCRs (which became so famous during the pandemic) to science.



WE CARE FOR THE ENVIRONMENT

SUPPORT FOR THE BASQUE LANGUAGE

With the help of **NEIKER Saria**, we have been praising the dissemination of research in Basque related to the agricultural, livestock, and forestry sectors since 2016. In 2024, the award went to a scientific article on combating viruses that reduce pepper production in the Basque Country.

We also participated as a judge in **Elhuyar Zientzia Azoka**, a fair for projects

developed by young people that allows them to experience scientific research and development from the inside.

NEIKER has participated in these two initiatives since 2016 as part of our collaboration with the Elhuyar Foundation.

In addition, in 2024 we had a presence at **Korrika**, which passed by our Derio and Arkaute locations.



SOLIDARITY

Since 2011, we have been collaborating with **SALUGANDA Elkarte** to promote sustainable development in Uganda and, specifically, to provide participating schools with sustainable infrastructure that guarantees their self-sufficiency. One of the new features of 2024 has been the creation of small sewing workshops in schools, designed to offer personal development options to students who cannot

continue their studies for financial reasons.

Our business activity generates surpluses which we have been donating to the **Araba Food Bank** since 2015. Last year we donated 11,400 kilos of potatoes and 1,200 kilos of chickpeas. Something new this year is that the food was packaged in individual bags by the UDAPA and Garlan cooperatives for easier storage and distribution.



Report 2024

