



CORPORATE PLAN
2023-2027

Science with Impact - delivering research and services to support Northern Ireland



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Foreword

AFBI science is critical to Northern Ireland's long term economic and environmental sustainability, contributing to the protection of our terrestrial and marine environments, leading improvements in our agri-food systems, helping protect animal and plant health, and ensuring the safety of the food that we eat. By delivering essential statutory testing, monitoring and surveillance programmes, research and development work as well as emergency response capability and expert scientific advice, AFBI scientists enable the NI agri-food industry to market products nationally and internationally while ensuring long term environmental sustainability, from soil to sea. The science is critical to the work of our sponsoring department DAERA and contributes significantly to the overall achievement of the NI Executive's programme for government.

The period of AFBI's last Corporate Plan (2018-2022) has been one of substantial change in the Institute, with a number of key changes in organisational structures, and significant advancement of a number of key infrastructural and IT projects. These latter projects have included work to advance a new Animal Health Sciences building, a replacement Research Vessel and investment in new or improved IT systems. The balance of work undertaken by AFBI has also changed over that time with an increasing emphasis on environmental and marine sciences.

The world around us has changed substantially over the last four years with increased commitment locally and globally to reducing greenhouse gas emissions with the aim of avoiding the most extreme effects of climate change and the widespread recognition of the need to balance environmental and agricultural goals. The emergence of COVID-19 resulting in the largest global pandemic for a century has also been a stark reminder of the threat posed by new and emerging diseases, including the risk from those pathogens which acquire the capability to cross the animal to human barrier.

This new Corporate Plan 2023-2027 sets out an ambitious and forward-looking vision of what AFBI through our science programmes aims to deliver over the next four-year period along with the continued investment that is so necessary in our infrastructure and systems. The plan builds on the achievements of the last Corporate Plan but reflects a changing external environment, changes in governmental and societal priorities, and changes in the opportunities and challenges ahead for the organisation.

The plan reflects the multidisciplinary strength of the organisation to address some of society's largest challenges through scientific excellence and the impact this science aims to have on society, our economy and the environment.

Introduction

AFBI was established under the Agriculture (Northern Ireland) Order 2004 with the function of undertaking scientific work in the fields of agriculture, animal health and welfare, food, fisheries, forestry, the natural environment and rural development and enterprise.

The work which AFBI undertakes is critical to DAERA's overall vision of '*Sustainability at the heart of a living, working, active landscape, valued by everyone*'. AFBI science underpins a wide range of DAERA work programmes and policies by providing the underpinning statutory and analytical testing, monitoring and surveillance science, research and development work, emergency response capability and expert scientific advice. Our work also aligns to Ministerial and Departmental priorities.



In addition to our core assigned work programme for DAERA, AFBI also leverages additional income from a wide range of local, national and international research funders and other customers. This external work is complimentary and synergistic to the DAERA funded science programmes. The work typically involves extensive national and international collaborations which ensures that AFBI's science remains internationally relevant while adding benefit to the Northern Ireland industry and wider society.

As articulated in our organisational vision, scientific excellence and the delivery of impactful and sustainable outcomes are at the core of the work that AFBI undertakes. Communication of our science to achieve impact either directly or in collaboration with CAFRE and other bodies is a critical component of our work and a key focus of the Corporate Plan for the next four years.



Strategic Framework – Context

As custodians of the environment, land, fresh water and the oceans, society is faced with a set of global challenges and responsibilities at levels not experienced in the past. The world's population has now exceeded 8 billion and is expected to grow to 9 billion by 2050. In a resource constrained environment, the global challenges of climate change, loss of biodiversity, energy insecurity, and the need to provide enough food to meet demand in 2050, presents real and significant challenges for the management of our natural resources.

Policy Drivers

For these reasons policy development at a local, national and international level is focused on Climate Action, Biodiversity, Green and Blue Growth and Food Security. At an international level, commitments agreed through the COP process, on climate change, and biodiversity, set out commitments that inform policy at the national level. At a national level, these then inform a range of targets and policies which drive decision making, investment and actions.

In Northern Ireland, the integration of environment and marine management alongside food and farming policy underpin DAERA's responsibility and demonstrates the interconnectedness between the land, soil, air, water and ocean. This interconnectedness is evident through the Executive's Green Growth Strategy, which DAERA leads on, and within which Climate Action Plans and environmental action plans, future Agricultural policy and Food Strategy and DAERA's Fishing and Seafood Development Programme represent underpinning policies.

Furthermore, the Department for Economy (DfE) 10x strategy recognises agri-tech as a key economic driver for growth in Northern Ireland and DAERA's Innovation Strategy recognises the power of data, the bioeconomy and next generation analytics including machine learning and artificial intelligence as important drivers of transformation in Northern Ireland.

Societal Importance to Northern Ireland

Locally, agriculture and food processing in Northern Ireland supports over 50,000 people and is worth £5.4 bn to the local economy. Furthermore, the seafood industry is worth £135m to the local economy. However, the scale and intensity of the agri-food sector in NI, which is predominantly meat and milk based, is putting significant pressure on the quality and health of our air, water and biodiversity and within the marine environment, our seas are getting warmer due to climate change.

Alongside the challenge of climate change and its associated effects, the potential for further human pandemics due to new, previously unrecognised or emerging variants of pathogens, many of which have an animal source, is a serious global threat. Increasing globalisation and climate change similarly presents major challenges in relation to the introduction of new and changing patterns of existing, animal and plant diseases. Antimicrobial resistance in pathogens affecting humans and animals is similarly recognised as a global threat and which requires improved methods of disease detection, disease control and the development of

¹ Size and Performance of the NI Food and Drinks Processing Sector 2019/20



strategies to minimise antimicrobial usage.

Considering the above, science is becoming increasingly multi-, inter- and trans-disciplinary. Planning and delivering on such an approach is necessary for a future of land and aquatic management which maximises the potential to provide quality food in a sustainable way.

Overall, the holistic management of ecosystems and farming practices should enable the harmonisation between food production and environmental protection while optimising societal health.

Science Policy Drivers

The Climate Crisis and the need to protect the environment and the health of ecosystems, globalisation, changes in subsidy support, and a new generation of consumers presents the agri-food and marine based industries in Northern Ireland with both opportunities and challenges. AFBI is ideally placed and committed to delivering applied and impactful science to provide evidence, drive innovation and ultimately improve the sustainability and competitiveness of our local agri-food and marine based industries and support government, especially DAERA, in the development of their policies and strategies to address the challenges ahead.



The importance of scientific evidence to underpin the future of Northern Ireland's agri-food and marine industries and ecosystem health is recognised through DAERA's commitment to science. DAERA's Science Transformation programme is shaping DAERA's future investment in Northern Ireland's Scientific Capacity and Capability. As the Department's main scientific provider, AFBI will work in partnership with DAERA to deliver their scientific and evidential needs and scientific aspirations emerging from their Scientific Transformation Programme. Such close partnership working will be essential to deliver these aspirations in what is likely to be a period of significant funding pressures. We recognise that progress on AFBI's strategic priorities over the period of this plan will be subject to the need to live within the challenging public sector funding environment. We are fully committed to working closely with DAERA to prioritise work plans to ensure their affordability.

AFBI currently has substantial collaborations with other science institutes and partners across the world and leverages significant funding from a range of public and industry funding sources. Over the period of this Corporate Plan, AFBI will continue to enhance these collaborations especially across the UK and Ireland to maximise the value of DAERA's investment into science in Northern Ireland and build on our strong reputation, evidenced through almost 8000 citations from our publications across the world in the past 5 years.

DAERA's investment into transformational initiatives such as a new Animal Health Sciences Building, the Soil Nutrient Health Scheme, a new marine Research Vessel, a state-of-the-art ruminant emissions facility and Green Growth scientific capability and capacity will underpin AFBI's ability to deliver high impact science aligned with the Strategic Priorities set out in this Corporate Plan and beyond. We will continue to deliver animal, plant and food safety tests and other surveillance activities required to support the multi-billion pound trade from Northern Ireland's agri-food industry. Working in close partnership with CAFRE as DAERA's education and knowledge transfer arm and other levy funded industry organisations, AFBI will actively ensure this science drives transformational change across Northern Ireland.

AFBI Vision, Purpose and Strategic Priorities

AFBI's Corporate Strategy 2023-2027 sets out an ambitious plan that has been designed to capture our aims and ambitions for the period. It envisages a future for AFBI which maximises the potential of our multidisciplinary scientific expertise to address the key challenges of the next four years and beyond and deliver applied and impactful outcomes for society, the economy and the environment.

The strategy seeks to deliver an organisation that will provide inspiration to its staff and funders through demonstrable successes, an organisation built on scientific excellence, with the necessary supporting infrastructure and systems, and an organisation that instils pride amongst its staff and stakeholders.

The strategy is aligned with the key priorities and that of DAERA and the NI Executive's draft Programme for Government. It is therefore aligned to the Department's Strategy to 2050 and delivery of DAERA's Vision of *'Sustainability at the heart of a living, working, active landscape, valued by everyone.'*



The strategic direction of AFBI over the period 2023-2027 is focused on the delivery of 5 Strategic Priorities set out overleaf, underpinned by a new AFBI Vision and Purpose.

AFBI Vision, Purpose & Strategic Priorities 2023-2027

Vision:

Scientific excellence delivering impactful and sustainable outcomes for society, economy and the natural environment

Purpose:

To deliver trusted, independent research, statutory & surveillance science, and expert advice that addresses local and global challenges, informs government policy and industry decision making, and underpins a sustainable agri-food industry and the natural and marine environments

Strategic Priorities:

Our scientific outcomes and knowledge makes AFBI a national and global leader in agri-food science

1: Leading improvements in the agri-food industry to enhance its sustainability

2: Protecting animal, plant and human health

3: Enhancing the natural and marine environment

4: Delivering quality outcomes and impact

5: Enabling world class science through excellence in people, places & technology

Vision

Our new **Vision** reflects a number of key aspects including the importance of scientific excellence and delivering impact, principles which apply across all areas of AFBI's scientific work from statutory and surveillance activities to research and development. The new vision also emphasises the importance of sustainability and our aim of delivering outcomes with real and meaningful impact across society, economy and the natural environment.

Purpose

The new **Purpose** reflects the broad spectrum of work which AFBI undertakes addressing as it does the various local and global challenges which government, society and industry faces. It also embodies AFBI's founding legislation and the principle of an arm's length science organisation delivering trusted and independent science.

Our Strategic Priorities

The strategic direction of AFBI over the period 2023-2027 is focused on the delivery of 5 Strategic Priorities.

Three of the five strategic priorities are centred on our three core science themes across the areas of sustainable agri-food systems; animal, plant and human health; and environment and marine sciences. Within each of these priority areas we set out what our science aims to achieve and to meet our overall vision of '*Scientific excellence delivering impactful and sustainable outcomes for society, economy and the natural environment*'.

Strategic priority 4 further builds on the theme of scientific excellence and how we aim to enhance the quality and impact of AFBI's science outputs, including maximising its communication and impact through a series of cross-cutting strategic initiatives.

The delivery of excellent science can only be achieved with excellent staff and the necessary underpinning infrastructure, IT systems and corporate services. Strategic priority 5 sets out the aims over the corporate period to further invest in our infrastructure and systems under the strategic priority of enabling world leading science through excellence in people, places and technology.





Strategic
Priority 1

Leading improvements in the agri-food industry to enhance its sustainability

Strategic Intent

Through scientific innovation, investigation and development of novel strategies and tools AFBI will improve the economic performance, environmental sustainability and resilience of agri-food systems.

Background

The agri-food industry is a key economic driver in NI contributing >£4bn/year to the local economy. It significantly contributes to the food security of the UK which is important since the UK is 60% self-sufficient with regards to meat and milk and much less self-sufficient with regard to non-animal food stuffs. In recent times, the exposure this low self-sufficiency presents has once again raised concerns around food security across the UK. Furthermore, the global population is expected to continue to rise and with more affluent populations developing, the demand for meat and milk globally is also predicted to continue to rise, even though meat consumption per person may reduce.

Northern Ireland's climate is ideally suited for the production of meat and milk, especially from ruminants. That said, there is also significant opportunity to extract value from our land through alternative management strategies depending on future markets for energy and carbon trading. Furthermore, the size and scale of NI offers many opportunities to enhance the circulatory within the NI food systems, including through the adoption of new food and feed production methods.

Lastly NI's food industry has been highly effective at securing global markets for its products and there is much opportunity to expand these markets which are local, national and international.

However, to harness these opportunities, our local food system needs to transform and significantly decrease its environmental impact. It also needs to remain competitive and there is much room for improvement in productivity across a number of sectors.

Regarding livestock production, the productivity gap with our competitors needs to be reduced. Against the backdrop of a changing climate, increased productivity (production efficiency) is essential and will contribute significantly to reduced emissions of GHG's, ammonia as well as reduced release of N and P to water ways. However, many more interventions will be required to reduce these emissions and nutrients to levels deemed acceptable for long term sustainability. This all needs to be achieved while also enhancing the welfare of animals, in part to address the concerns of consumers but also to improve the lives and wellbeing of farmed animals.



Our changing climate will bring challenges but also opportunities such as diverse and alternative cropping and food production from our land, as well as from controlled environments.

Finally, the ability to measure and monitor using data and technology to drive innovation, understand problems and measure improvements as well as market those improvements will be at the core of food production going forward.

As such, much urgent work is needed to design and develop frameworks which drive economic benefits for society with the ultimate goal of a food system which works in harmony with our environment.

We will work in partnership with industry and government to achieve these goals as they are designed to contribute to industry plans as well as government strategies including 10x Strategy, Green Growth, the future Agricultural Policy and the Food Strategy.



Strategic Initiatives

Our strategic initiatives to deliver on this priority are:

We will develop holistic solutions, which decarbonise and reduce the overall environmental impact of livestock farming whilst optimising productivity, animal health and welfare.

Using data-driven analytics, economic and other modelling platforms as well as digitalised farm landscapes we will deliver research outcomes, which inform policy development and support industry decision-making to promote productivity, stimulate innovation and enhance agri-food competitiveness and sustainability.

We will identify and explore opportunities for new land management and alternative food production systems, which optimise the economic value of the NI food system and promote a circular bioeconomy within it.

We will explore and harness opportunities for industry aligned with climate change adaptation while managing the risks from climate change.



Strategic Priority 2

Protecting animal, plant and
human health.

Strategic Intent

To protect animal, plant and human health against current and future threats to animals, plant ecosystems and food safety by applying innovative scientific solutions for the detection, control and prevention of diseases and other threats and by doing so supporting and enabling agricultural trade for Northern Ireland.

Background

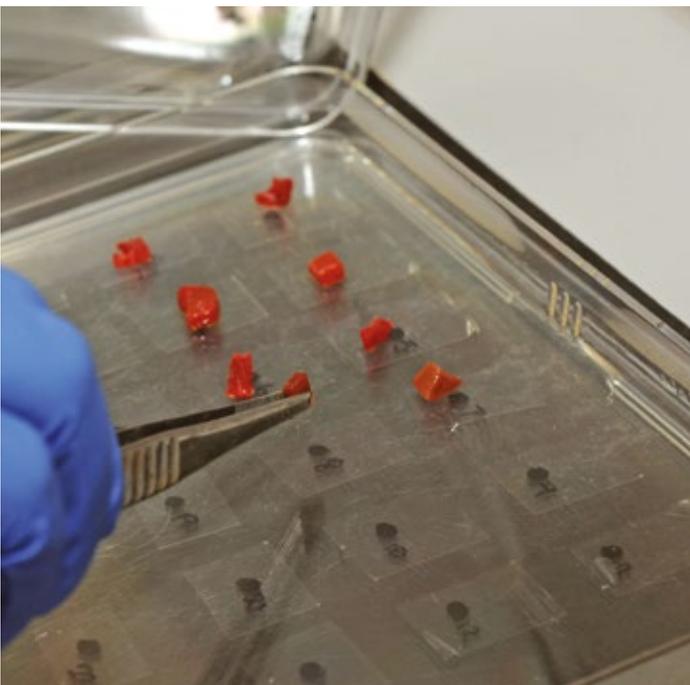
The work undertaken by AFBI under this strategic priority is directed towards protecting Northern Ireland society from the threats of animal and plant diseases as well as food contaminants, both chemical and microbiological. The work is fundamental to DAERA and the agri-food industry in order to meet national and international trade requirements in relation to food products, agricultural produce and livestock. AFBI's work in these spheres is critical to the economy, society and the environment of Northern Ireland.

Our ability to trade as a region is dependent on demonstrating freedom from transboundary and notifiable diseases and in this role AFBI plays a crucial part in active surveillance testing programmes providing evidence of regional disease status for DAERA animal health policy, supporting compliance with European legislation, supporting trade guarantees and protecting public health through detection of diseases transmissible to humans.

These surveillance programmes are coupled to capabilities for mounting an emergency response should a notifiable disease, such as avian influenza, occur in the province.

The risk of new and emerging diseases, including that risk from changing climate conditions will potentially bring new disease challenges to the province and it is important that AFBI has the capability and capacity to respond to these challenges.

Endemic diseases in animals have a negative effect on productivity, competitiveness and greenhouse gas emissions. AFBI's contribution in this area is a robust passive surveillance programme, monitoring animal diseases and changing patterns of disease, as well as supporting disease control and eradication programmes such as BVD and bovine tuberculosis. We have an ongoing major programme of work around bovine tuberculosis spanning both diagnosis and R&D directed at understanding the disease and the factors influencing its transmission and spread.



Our food safety work provides surveillance and emergency response to chemical or microbiological contaminants in products of animal origin. AFBI work closely with both DAERA and our agri-food industry to provide scientific evidence that our food products are safe to eat and meet the stringent requirements for trade.

Protecting and enhancing our plant health is of fundamental importance to deliver healthy environments which promote biodiversity, carbon sequestration and wider societal wellbeing. Working closely with DAERA's plant health teams, AFBI's surveillance and emergency response capabilities will underpin the health of forests and plant based ecosystems and help DAERA achieve their goals aligned with Future Forests. A targeted research programme will also bring forward state of the art analytics and advances in knowledge to support efficient and effective surveillance and monitoring work and emergency response capabilities.

The following specific initiatives under Strategic Priority 2 support the vision of addressing current and future animal and plant health and food safety challenges through the provision of high-quality innovative science, delivered through analytical/diagnostic services, supporting R&D and science evidence-based advice.



Strategic Initiatives

Our strategic initiatives to deliver on this priority are:

ANIMAL HEALTH

We will anticipate and respond to emerging and transboundary (epizootic) animal diseases providing effective surveillance for trade compliance.

We will support DAERA in the control of statutory endemic diseases (such as bTB).

We will improve the control and reduce the impact of endemic non-statutory disease.

PLANT HEALTH

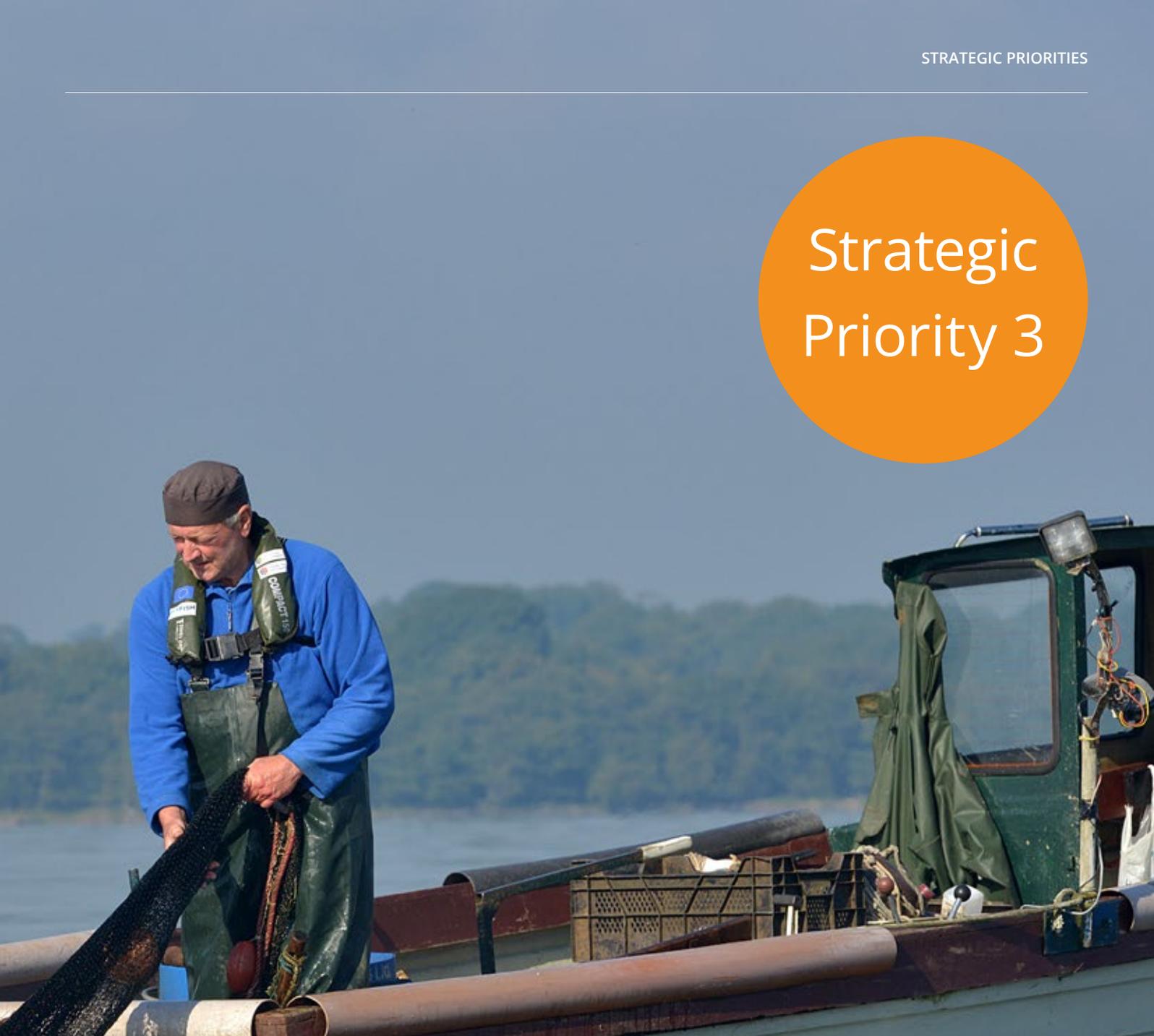
We will deliver effective surveillance, diagnostics and research to protect NI's plant health status. This will include anticipating and responding to emerging plant disease threats in support of trade.

HUMAN HEALTH – SAFE FOOD

We will ensure the chemical and microbiological safety of food in line with government and trade requirements.



Strategic Priority 3

A man wearing a blue long-sleeved shirt, green waders, and a brown cap is on a boat. He is handling a large, dark, cylindrical net or filter. The boat is on a body of water with a forested shoreline in the background. The boat has a green cabin and various equipment on board.

Enhancing the natural and
marine environment

Strategic Intent

To deliver a holistic approach toward sustainable management, protection and enhancement of terrestrial, freshwater and marine ecosystems through innovative science and a sound evidence base, underpinning the prosperity and growth of the NI economy and societal wellbeing.

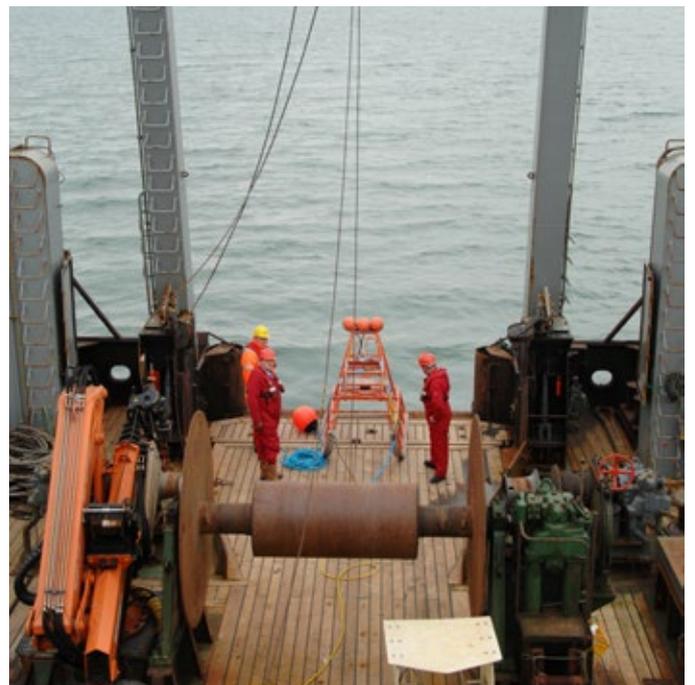
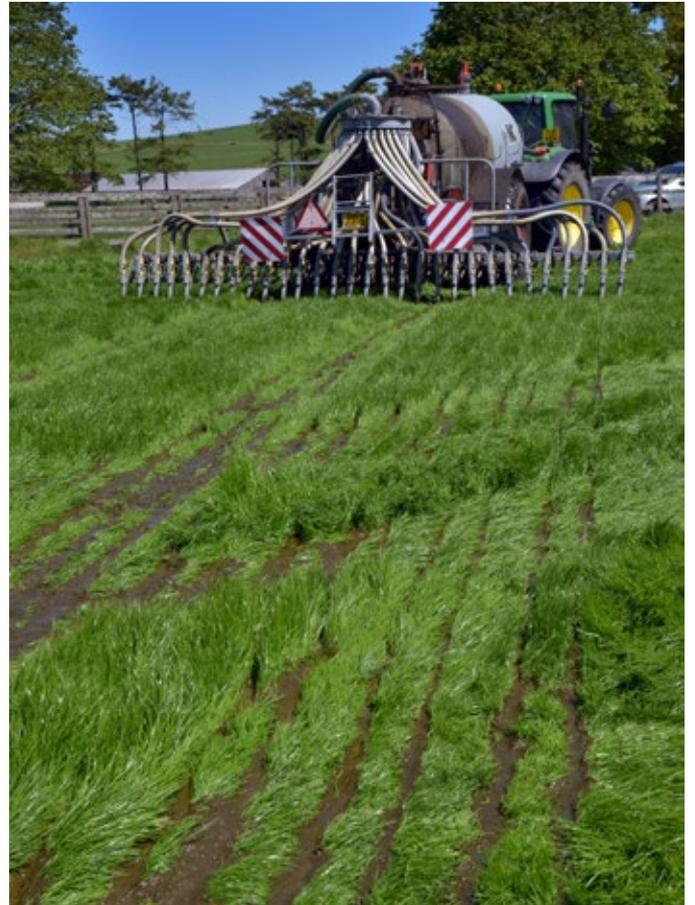
Background

The relationship between the environment and humans is one of interdependence, where a healthy environment is directly tied to human health, wellbeing, quality of life and welfare. We are dependent on clean air, water, plants, food supply and natural resources. Unsurprisingly the three pillars of sustainability – environmental, economic, social – capture this interdependent relationship, with long-term sustainability only achievable when the pillars are in balance.

Northern Ireland is facing major environmental challenges, particularly in terms of air and water quality. The Northern Ireland assembly also declared a climate change emergency in 2020. The current multiple pressures from intensive human activities, demands placed on natural resources and from a changing climate are not sustainable. If we are serious about long-term sustainable agriculture, fisheries, and land and water use, a fundamental change in the way ecosystems are valued and managed is required.

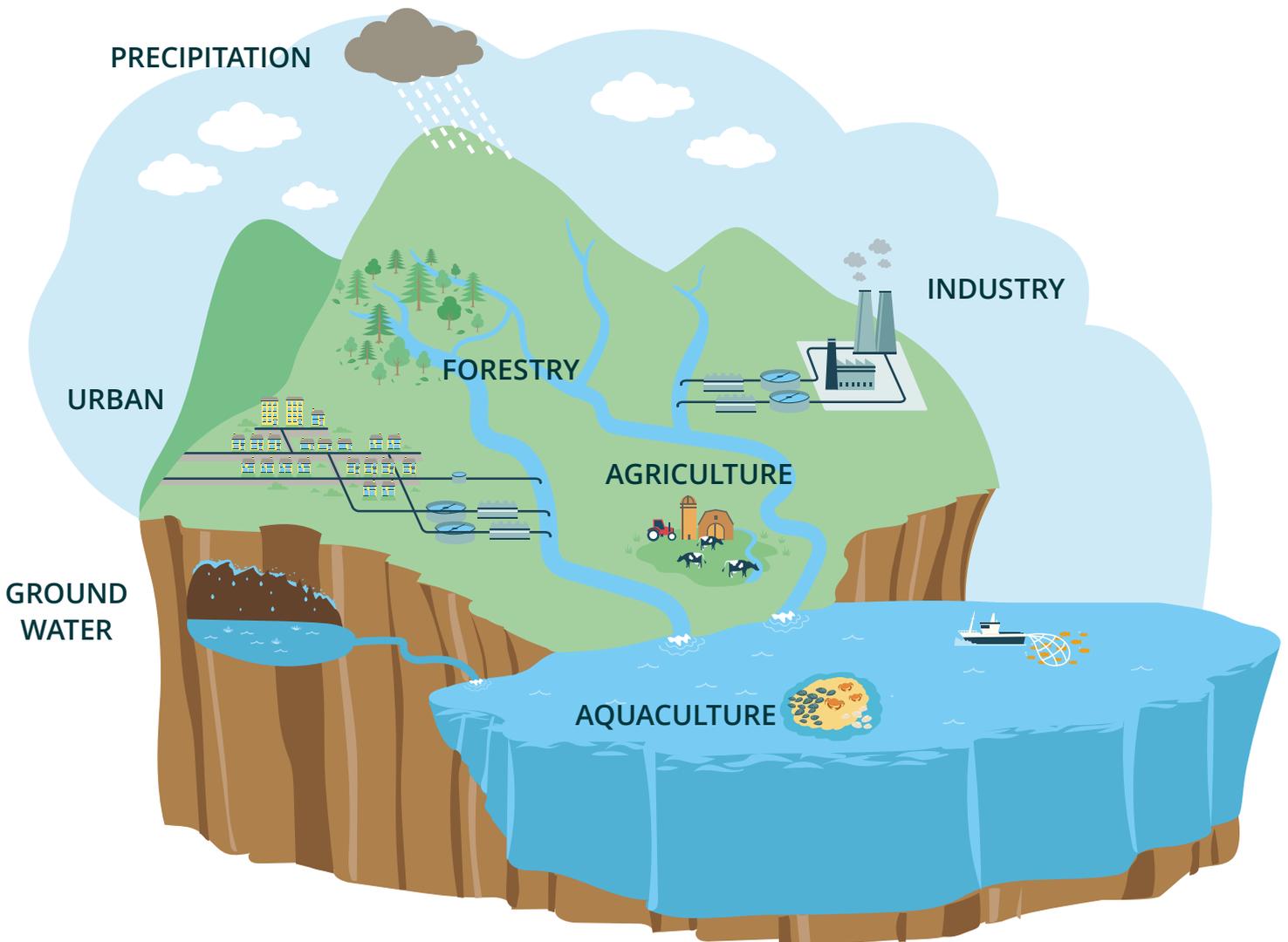
The environment, the functional units of ecosystems (interaction between the environment and living organisms) and the services they provide needs to become part of the economic model and placed at the heart of the decision-making process. Navigating through the complex socio-economic landscape of often conflicting priorities between the management and protection of ecosystems and economic objectives will require the consideration and evaluation of trade-off, risks and consequences to support evidence-based decision making.

Solutions to achieve sustainability can only be achieved through a holistic ecosystem-based approach. Science is vital to understand the underlying ecosystem function and processes, and to provide the evidence upon which informed choices can be made about how we wish to balance the costs and benefits associated with the ecosystem services provided by our land, rivers, lakes and seas.



Optimising ecosystem services, through the protection and sound management of our ecosystems, offers benefits linked to the sustainable use of our natural resources, such as soil and water, but it also enables societal adaptation to climate change and is a cost effective way to mitigate against climate change by enhancing carbon sequestration. The key to many of the solutions in terms of practical application is, however, through behavioural change.

AFBI is in a unique position to deliver on a holistic ecosystem-based approach and we aim to capitalise on our strengths by continuing to focus a work programme of activities to deliver on the following strategic initiatives:



Strategic Initiatives

Our strategic initiatives to deliver on this priority are:

We will develop holistic solutions to underpin sustainable, healthy and productive environments to support food systems, including the transition toward a circular bioeconomy in NI.

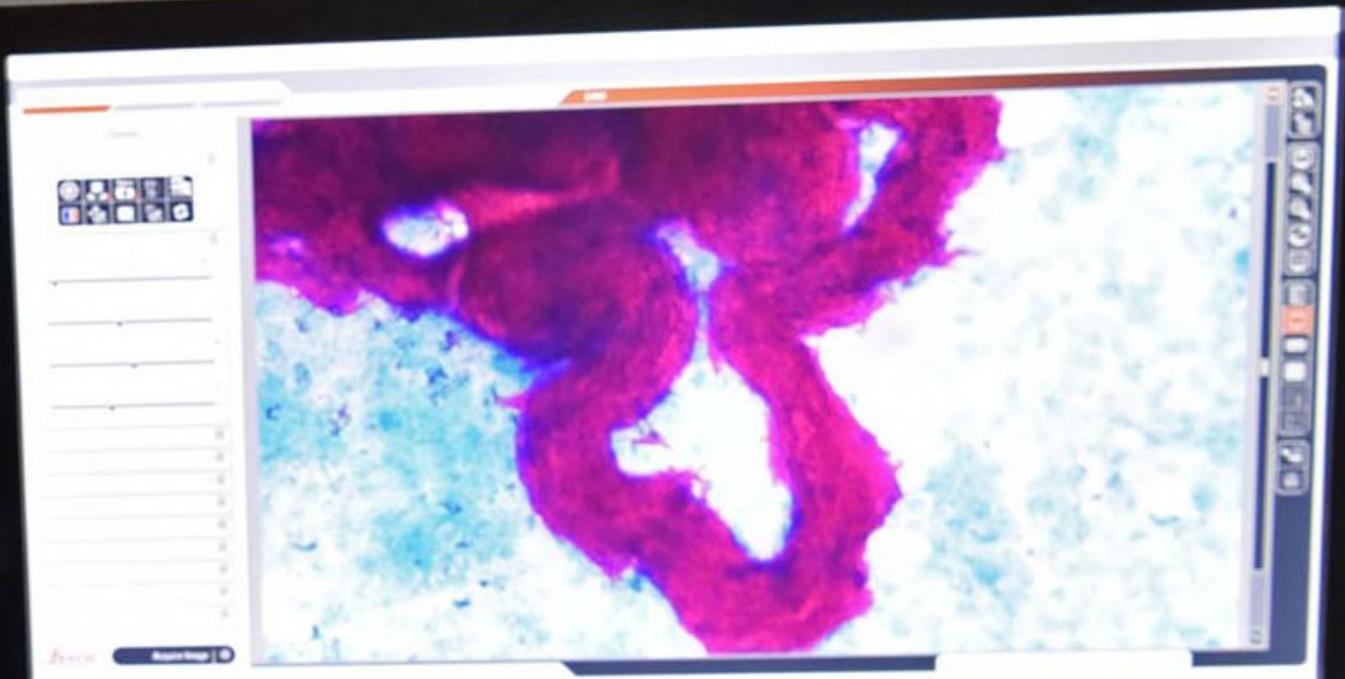
We will develop solutions in support of long-term resilient terrestrial, freshwater and marine ecosystems and sustainable natural resource management (green/blue growth).

We will develop and model solutions towards an integrated approach to nutrient and carbon management to optimise aquatic systems and land use and delivery of multiple ecosystem services from field to national scale.

We will monitor and demonstrate the impact of the agriculture and fisheries sector on the environment to drive behavioural change and adaptation.



Strategic Priority 4



Delivering quality outcomes
and impact

Strategic Intent

The quality and impact of our science will enhance AFBI's position as a leader in sustainable agri-food, marine, environmental and animal and plant health sciences.

Background

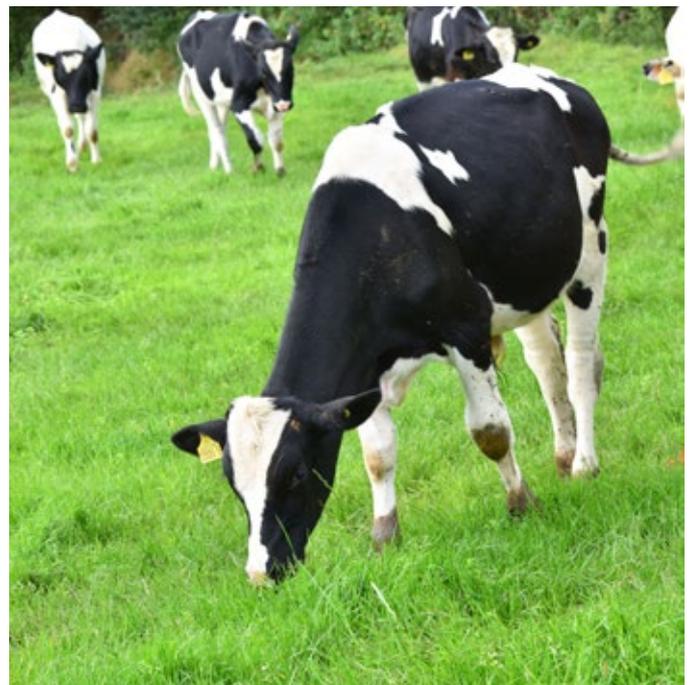
The quality and impact of the science that AFBI undertakes are core to our vision and purpose. The publication of peer review papers in international journals, as well as the publication of technical reports, seminars, presentations to actors working across local, national and international businesses, governments and wider stakeholders represent important pathways to drive impact from the science we conduct.

The science undertaken under the various statutory programmes has direct impact on DAERA and the NI government delivering on their legislation and regulatory frameworks and commitments and as such enabling trade of NI produce.

AFBI's statutory work programmes and much of the non-statutory testing work is undertaken and accredited to the ISO 17025 international standard. AFBI also has ISO 9001 certification and research and development work is undertaken under this standard.

In the last Corporate Plan period, an AFBI Science Strategy to 2030 was drafted and will be finalised early within this Corporate Plan period. This strategy has impact at its core and complements this Corporate Plan in that it expands on 'what' science AFBI will focus on in the coming years as well as 'how' we will act to deliver and monitor the outcomes and impact of that science. Our overall goal is to ensure our resources are effectively invested and the science completed has impact for society, the economy and our natural environments.

AFBI recognises that collaborating with partners locally, nationally and internationally is a key part of delivering quality outcomes and impact. These partnerships are important to enhance the interdisciplinary research environment and nurture the translation of science into wider societal benefits through public-private partnerships.

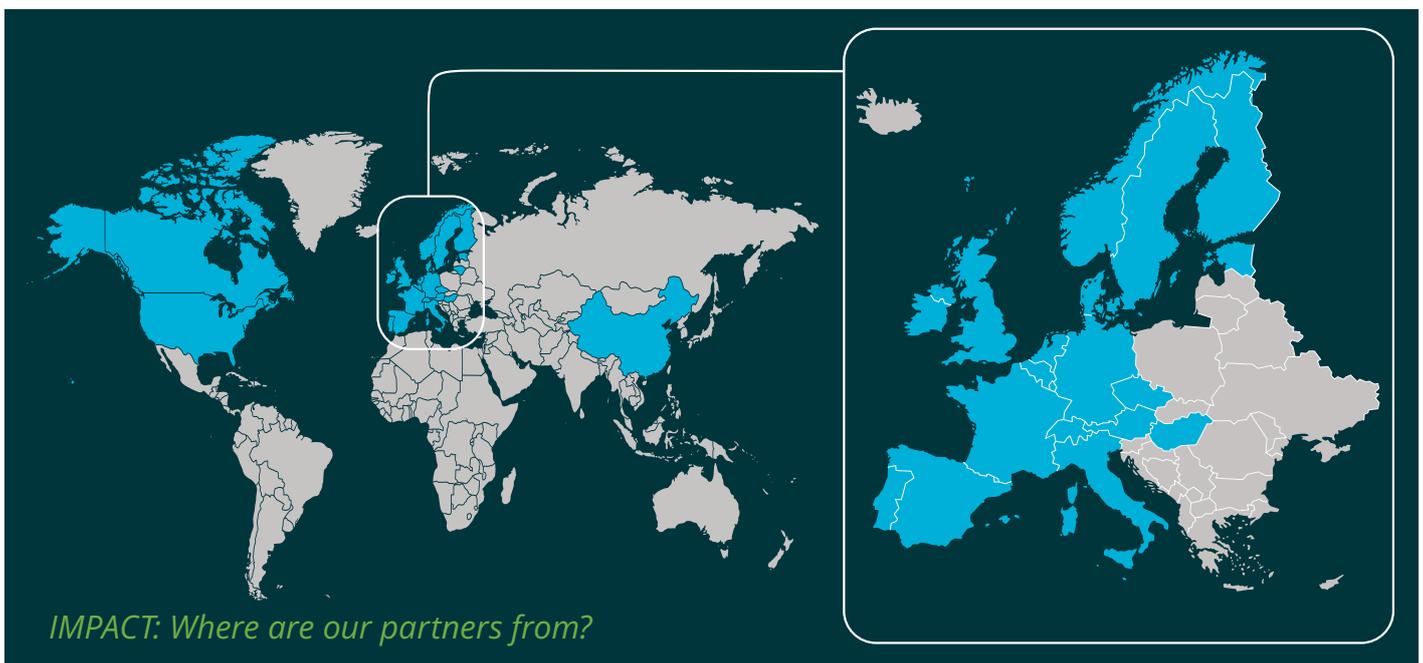


As such AFBI will also continue to develop and enhance collaborations and partnerships with international universities, other research organisations and commercial partners in the design and delivery of research projects of importance to DAERA and the local agri-food sector. This will be reflected in applications for European Union (EU) funding through the Horizon Europe programme and other EU sources such as Peace Plus to grow income and add value to DAERA's and local industry's R&D expenditure in AFBI.

Furthermore, working with our university partners, and especially QUB with whom we have a strategic alliance, we can ensure the fundamental research from these partners is tested in an applied manner to enable market implementation.

Working with key dissemination and education partners such as CAFRE, further enhances our ability to drive impact across the wider farming industry.

Furthermore, AFBI has a strong history of delivering quality services to local and international companies of all sizes and has a proven ability to develop products in collaboration with industry which have transformed businesses and industry outcomes. Many of these innovations have significant impact due to the adoption of industry partners into their wider networks. Through collaborative funding AFBI will continue to work with industry to drive impact through the development of transformative solutions.



Strategic Initiatives

Our strategic initiatives to deliver on this priority are:

An external peer review of AFBI science to provide assurances that AFBI's science is effective, of high quality, forward looking and impactful.

We will continue to enhance the quality and impact of AFBI Science outputs.

We will work to maximise the effective communication of our science to our stakeholders.

We will further develop our local, national and international collaborations and strategic alliances to maximise the impact of NI science on the local and global challenges.

*ACCREDITATION:
AFBI labs and processes
are accredited to
International Standards*



2632







Strategic
Priority 5

Enabling world class science through
excellence in people, places &
technology

Background

The delivery of AFBI's science objectives are entirely dependent upon our staff and our underpinning corporate services, estates and IT provision. The period of the last Corporate Plan has been one of substantial change with significant progress made on a number of key infrastructural and IT projects. These include DAERA-led projects such as the Animal Health Sciences building, replacement Beef Facilities at AFBI Hillsborough, and the Information System for Laboratories in AFBI, NIEA and DAERA (ISLAND) project which will provide a new laboratory information management system for AFBI, NIEA and DAERA. AFBI work has included the roll out of an electronic quality management system, onboarding onto an electronic document and records management system, and the project to replace the current marine Research Vessel.

To deliver the outcomes of the 2023-2027 Corporate Strategy, outlined previously in this document, will require continued time and investment in our corporate systems and infrastructure combined with a series of initiatives to attract, develop and retain excellent staff.

Over the period of this Corporate Plan AFBI will also continue to strengthen programme support capacity for our scientists and maximise their ability to concentrate on the delivery of excellence in science and growth for AFBI.

Taken together these initiatives represent the main instruments to further develop AFBI into a modern, forward-looking organisation with the required capability to proactively address the local and global challenges facing DAERA, the agri-food industry, the environment and wider society.





PEOPLE

Strategic Intent

We will attract, empower and develop our staff to pursue excellence, embrace technology, innovation and change, ultimately supporting excellent science:

The quality, dedication and expertise of staff are pivotal to AFBI's future success. Promoting a culture of excellence, commitment, and responsibility within a considerate environment is fundamental to delivering AFBI's objectives. AFBI's continued success is dependent on attracting and retaining the best scientists and supporting staff in an increasingly competitive environment.

We will continue to invest in our staff to meet the challenges of an ever-changing scientific working environment. This aspiration is fostered by developing individuals' careers through the provision of development opportunities, regular appraisal, and a range of work-life balance practices.



Strategic Initiatives

Staff Health & Wellbeing, Diversity and Inclusion

We will ensure that AFBI is valued by our people as a great place to work by further promoting our people's health and wellbeing, diversity, equality and flexible career paths.

Staff Engagement, Talent Management and Staff Development

We will continue to enhance staff engagement to foster a shared understanding of roles and responsibilities across the organisation and investing in their ongoing professional development.

Capacity and Capability

We will continue to evolve our workforce and succession planning processes, to ensure we possess the appropriate capacity (i.e. the right people, in the right place, at the right time within the budgetary envelope).

PLACES

Strategic Intent

We will, with the support of DAERA, work towards ensuring that AFBI has modern, fit-for-purpose accommodation, laboratory, field and farm research facilities to fulfil our overall Vision and Purpose.

As indicated above, there has been substantial work undertaken over the period of the previous Corporate Plan in relation to a new Animal Health Sciences building at Stormont, replacement Beef Facilities at AFBI Hillsborough and a replacement marine Research Vessel. Completion of these projects and planning for the next phase of estates development combined with work to optimise current estate utilisation are a central strand of AFBI's development.

These proposed large-scale capital investments will provide a fit-for-purpose estate and an ancillary research and administrative platform to enhance AFBI's competitiveness.



Strategic Initiatives

Working in partnership with DAERA (as owner of the AFBI estate)

Estate Development

We will progress agreed investments in our estate and infrastructure and business approvals for future estate priorities.

Estate Optimisation

We will work to optimise the nature and size of our estate to meet the evolving needs of our work programmes and improve its energy efficiency in line with NI's sustainability targets.



TECHNOLOGY

Strategic Intent

We will continue to invest in IT systems and infrastructure to support the changing needs of our science, support the delivery of objectives and to maximise the value of our data and information.

The previously developed AFBI Data Strategy reflects the increasing volume, complexity and importance of data and the key role that data and data sciences play in the achievement of our corporate objectives. The ability to maximise data will be a primary contributor to the achievement of the AFBI Vision for scientific excellence. The AFBI Data Strategy has been developed to document strategic drivers and required strategic outcomes AFBI must achieve. It also includes the need to ensure we have the infrastructure, data architecture and governance in place to enable the outcomes of each layer of the Strategy to be achieved.

We also face significant digital challenges in ensuring that we provide a technology platform that supports the scientific and corporate functions efficiently and effectively. It is essential that AFBI has an effective and fit for purpose IT platform and management information system in place to support corporate and project management. We will continue to review our IT Strategy to ensure it aligns to the overall corporate goals set out within this plan. A key part of this will be the delivery of a new Finance and Business Management system which is critical in helping to support science delivery.



Strategic Initiatives

Scientific Data

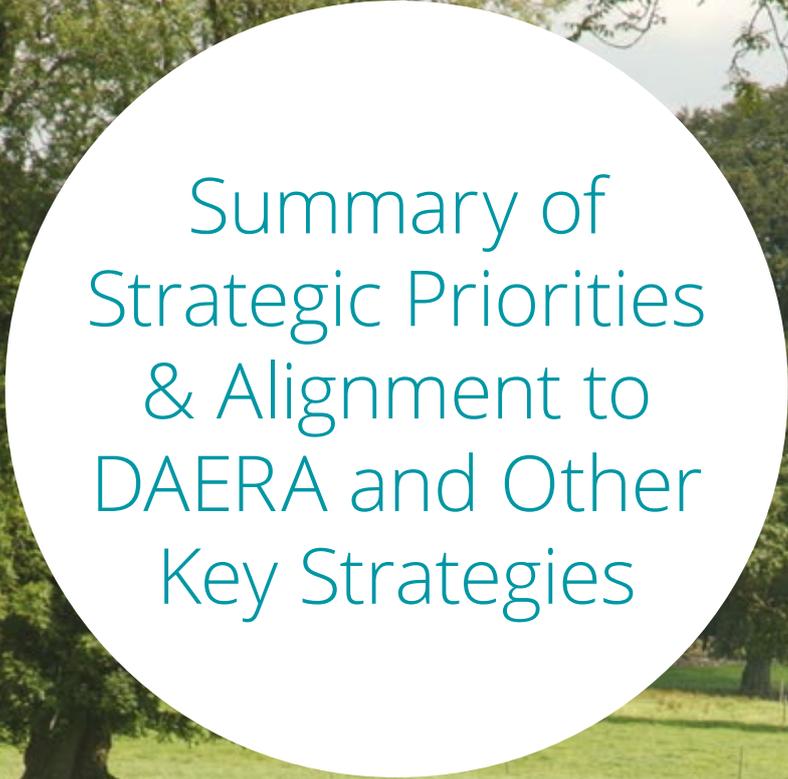
We will develop opportunities through data technologies and data integration. We aim to build data architecture to match the potential of increasing data and science opportunities and provide a platform to exploit datasets and enable new discoveries.

Corporate Systems & Infrastructure

We will continue to invest in IT platforms and systems to support and improve the management and delivery of AFBI work programmes more efficiently.

Business & Financial Systems

We will continue to invest in finance and business systems and through implementation, improve the efficiency and effectiveness of management reporting and inform strategic decision making.



Summary of Strategic Priorities & Alignment to DAERA and Other Key Strategies

Strategic Priority 1 - Leading improvements in the agri-food industry to enhance its sustainability

Strategic Intent	Strategic Initiatives /Goals	Alignment to DAERA Outcome	Alignment to draft PfG
<p>Through scientific innovation, investigation and development of novel strategies and tools AFBI will improve the economic performance, environmental sustainability and resilience of agri-food systems.</p>	<p>We will develop holistic solutions, which decarbonise and reduce the overall environmental impact of livestock farming whilst optimising productivity, animal health and welfare.</p> <p>Using data-driven analytics, economic and other modelling platforms, as well as a digitalised farm landscapes we will deliver research outcomes, which inform policy development and support industry decision-making to promote productivity, stimulate innovation and enhance agri-food competitiveness and sustainability.</p> <p>We will identify and explore opportunities for new land management and alternative food production systems, which optimise the economic value of the NI food system and promote a circular bioeconomy within it.</p> <p>We will explore and harness opportunities for industry aligned with climate change adaptation while managing the risks from climate change.</p>	<p>DAERA Priority - Economic Growth</p> <p>To enhance our food, forestry, fishery and farming sectors using efficient and environmentally sustainable models which support economic growth.</p>	<p>Sustainable Economic Development.</p> <p>Green Growth and Sustainability.</p> <p>10X Strategy.</p> <p>Future NI Agriculture Policy.</p>

Strategic Priority 2 - Protecting animal, plant and human health			
Strategic Intent	Strategic Initiatives /Goals	Alignment to DAERA Outcome	Alignment to draft PfG
<p>To protect animal, plant and human health against current and future threats to animals, plant ecosystems and food safety by applying innovative scientific solutions for the detection, control and prevention of diseases and other threats and by doing so supporting and enabling agricultural trade for Northern Ireland.</p>	<p>Animal Health</p> <p>We will anticipate and respond to emerging and transboundary (epizootic) animal diseases providing effective surveillance for trade compliance.</p> <p>We will support DAERA in the control of statutory endemic diseases (such as bTB).</p> <p>We will improve the control and reduce the impact of endemic non-statutory disease.</p> <p>Plant Health</p> <p>We will deliver effective surveillance, diagnostics and research to protect NI's plant health status. This will include anticipating and responding to emerging plant disease threats in support of trade.</p> <p>Human Health – Safe Food</p> <p>We will ensure the chemical and microbiological safety of food in line with government and trade requirements.</p>	<p>DAERA Priority - Economic Growth</p> <p>To enhance our food, forestry, fishery and farming sectors using efficient and environmentally sustainable models which support economic growth.</p>	<p>Sustainable Economic Development.</p> <p>Green Growth and Sustainability / programme for Government.</p>

Strategic Priority 3 - Enhancing the natural and marine environment

Strategic Intent	Strategic Initiatives /Goals	Alignment to DAERA Outcome	Alignment to draft PfG
<p>To deliver a holistic approach toward sustainable management, protection and enhancement of terrestrial, freshwater and marine ecosystems through innovative science and a sound evidence base, underpinning the prosperity and growth of the NI economy and societal wellbeing.</p>	<p>We will develop holistic solutions to underpin sustainable, healthy and productive environments to support food systems, including the transition toward a circular bioeconomy in NI.</p> <p>We will develop solutions in support of long-term resilient terrestrial, freshwater and marine ecosystems and sustainable natural resource management (green/blue growth).</p> <p>We will develop and model solutions towards an integrated approach to nutrient and carbon management to optimise aquatic systems and land use and delivery of multiple ecosystem services from field to national scale.</p> <p>We will monitor and demonstrate the impact of the agriculture and fisheries sector on the environment to drive behavioural change and adaptation.</p>	<p>DAERA Priority - Economic Growth</p> <p>To enhance our food, forestry, fishery and farming sectors using efficient and environmentally sustainable models which support economic growth.</p> <p>DAERA Priority - Natural Environment</p> <p>To protect and enhance our natural environment now and for future generations whilst advocating its value and wellbeing for all.</p>	<p>Sustainable Economic Development.</p> <p>Green Growth and Sustainability.</p>

Strategic Priority 4 – Delivering Outcomes and Impact

The quality and impact of our science will enhance AFBI’s position as a leader in sustainable agri-food, marine, environmental and animal and plant health sciences.

Strategic Intent	Strategic Initiatives /Goals	Alignment to DAERA Outcome	Alignment to draft PFG
<p>The quality and impact of our science will enhance AFBI’s position as a leader in sustainable agri-food, marine, environmental and animal and plant health sciences.</p>	<p>We will commission an external peer review of AFBI science to provide assurances that AFBI’s science is effective, of high quality, forward looking and impactful.</p> <p>We will continue to enhance the quality and impact of AFBI Science outputs.</p> <p>We will work to maximise the effective communication of our science to our stakeholders.</p> <p>We will further develop our local, national and international collaborations and strategic alliances to maximise the impact of NI science on the local and global challenges.</p>	<p>DAERA Priority - Economic Growth</p> <p>To enhance our food, forestry, fishery and farming sectors using efficient and environmentally sustainable models which support economic growth.</p> <p>DAERA Priority – Natural Environment</p> <p>To protect and enhance our natural environment now and for future generations whilst advocating its value to and wellbeing for all.</p>	<p>Sustainable Economic Development.</p> <p>Green Growth and Sustainability.</p>

Strategic Priority 5 – Enabling world leading science through excellence in people, places and technology			
Strategic Intent	Strategic Initiatives/Goals	Alignment to DAERA Outcome	Alignment to draft PfG
Strategic Enabler: People			
<p>We will attract, empower and develop our staff to pursue excellence, embrace technology, innovation and change, ultimately supporting excellent science.</p>	<p>Staff Health & Wellbeing, Diversity and Inclusion</p> <p>We will ensure that AFBI is valued by our people as a great place to work by further promoting our people’s health and wellbeing, diversity, equality and flexible career paths.</p> <p>Staff Engagement, Talent Management and staff development</p> <p>We will continue to enhance staff engagement to foster a shared understanding of roles and responsibilities across the organisation and investing in their ongoing professional development.</p> <p>Capacity and Capability</p> <p>We will continue to evolve our workforce and succession planning processes, to ensure we possess the appropriate capacity (i.e. the right people, in the right place, at the right time within the budgetary envelope).</p>	<p>DAERA Strategic Outcome – Exemplar Organisation</p> <p>To be an exemplar, people focused organisation, committed to making a difference for the people we serve.</p>	<p>Sustainable Economic Development.</p> <p>Green Growth and Sustainability.</p>

Strategic Priority 5 – Enabling world leading science through excellence in people, places and technology			
Strategic Intent	Strategic Initiatives/Goals	Alignment to DAERA Outcome	Alignment to draft PfG
Strategic Enabler: Places			
<p>We will ensure that we have fit for purpose, efficient, sustainable infrastructure and estate as critical enablers to deliver our science.</p>	<p>Working in partnership with DAERA (as owner of the AFBI estate).</p> <p>Estate Development</p> <p>We will progress agreed investments in our estate and infrastructure and business approvals for future estate priorities.</p> <p>Estate Optimisation</p> <p>We will work to optimise the nature and size of our estate to meet the evolving needs of our work programmes and improve its energy efficiency in line with NI’s sustainability targets.</p>	<p>DAERA Strategic Outcome – Exemplar Organisation</p> <p>To be an exemplar, people focused organisation, committed to making a difference for the people we serve.</p>	<p>Alignment to COVID Recovery Plan / PfG</p> <p>Sustainable Economic Development.</p> <p>Green Growth and Sustainability.</p>

Strategic Priority 5 – Enabling world leading science through excellence in people, places and technology

Strategic Intent	Strategic Initiatives/Goals	Alignment to DAERA Outcome	Alignment to draft PfG
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Strategic Enabler: Technology

<p>We will maximise the value of our data and information to support our outcomes aligned to our data strategy. We will continue to invest in efficient systems processes and infrastructure.</p>	<p>Scientific Data</p> <p>We will develop opportunities through data technologies and data integration. We aim to build data architecture to match the potential of increasing data and science opportunities and provide a platform to exploit datasets and enable new discoveries.</p> <p>Corporate Systems & Infrastructure</p> <p>We will continue to invest in IT platforms and systems to more efficiently support and improve the management and delivery of AFBI work programmes.</p> <p>Business & Financial Systems</p> <p>We will continue to invest in finance and business systems and through implementation improve the efficiency and effectiveness of management reporting and strategic decision making.</p>	<p>DAERA Strategic Outcome – Exemplar Organisation</p> <p>To be an exemplar, people focused organisation, committed to making a difference for the people we serve.</p>	<p>Alignment to COVID Recovery Plan / PfG</p> <p>Sustainable Economic Development.</p> <p>Green Growth and Sustainability.</p>
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AFBI Values



EXCELLENCE

We always do our best and strive to demonstrate excellence in everything we do. Our quality of work is driven from our passion for what we do and how we do it, nurturing creativity, fostering innovation and continuing to improve as we go.



IMPACTFUL

We deliver positive impact through our science and services, making a real difference to others, with tangible effects experienced on a local, national and international scale.



INTEGRITY

We act honestly, ethically, and transparently and expect the highest standards of professionalism and fairness, always leading by example. We share information – the good and the bad – so we can continuously learn, improve and make the right decisions.



PEOPLE CENTRIC

We promote personal and team growth. We invest in, encourage and inspire one another, seeing the importance in offering our time and attention, for our own development and that of our peers.



RESPECT

We value and empower each other, celebrating our diversity, respecting our differences, and ensuring a safe and inclusive environment, where we can bring our full and true selves to work.



COLLABORATIVE

We are active collaborators, with partners and peers alike and by embracing teamwork we recognise that we can achieve more together. We grow stronger through sharing knowledge, resources, and common goals, which enhances the quality of what we do and our experience, skills and mindset.

Glossary

AFBI	Agri-Food and Biosciences Institute
AWP	Assigned Work Programme
BREXIT	Name given for the UK withdrawal process from the EU
bTB	Bovine Tuberculosis
BVD	Bovine Viral Diarrhoea
Competent authority	A competent authority is any person or organization that has the legally delegated or invested authority, capacity, or power to perform a designated function.
CAFRE	College of Agriculture, Food and Rural Enterprise
COP	Conference of the Parties
COVID-19	Corona Virus Disease 2019
CPD	Central Procurement Directorate
DAERA	Department of Agriculture, Environment and Rural Affairs
DfE	Department for Economy
DOF	Department of Finance
EDRMS	Electronic Document and Records Management System
EU	European Union
GHG	Green House Gases
HR	Human Resources
ISO/IEC 17025	International Standards Organisation standard for competence of testing and calibration laboratories.
IT	Information Technology
KPI	Key Performance Indicators
LIMS	Laboratory Information Management System
ISO 27000	International Standards Organisation standard for Information Security
N	Nitrogen
NDPB	Non Departmental Public Body
NI	Northern Ireland
NIAO	Northern Ireland Audit Office
NICS	Northern Ireland Civil Service
NIEA	Northern Ireland Environment Agency
OBC	Outline Business Case
P	Phosphorous
PMO	Project Management Office
PfG	Programme for Government
QUB	Queen's University Belfast
R&D	Research & Development
SRO	Senior Responsible Officer
SNHS	Soil Nutrient Health Scheme

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*Science with Impact -
delivering research and services
to support Northern Ireland*
