



afbi

AGRI-FOOD
& BIOSCIENCES
INSTITUTE

BUSINESS PLAN

2023-2024

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



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Introduction from the Chief Executive

I am pleased to present AFBI's Business Plan for 2023-2024, which sets out our key work priorities.

Dr Stanley McDowell, AFBI Chief Executive



The Agri-Food and Biosciences Institute (AFBI) is Northern Ireland's largest agri-food science organisation. As a non-departmental public body (NDPB) sponsored by the Department of Agriculture, Environment and Rural Affairs (DAERA), AFBI science plays a crucial role in providing the underpinning statutory and surveillance science, research and development work, emergency response capability and expert scientific advice required to support the various work programmes of our sponsoring department and the wider requirements of the agri-food industry.

AFBI has a broad remit of work including providing vital support to an industry which is a key economic driver within Northern Ireland while delivering wider societal benefit in areas such as the environment and food safety.

Against a backdrop of global and local challenges, including the threats posed by climate change, new and emerging animal and plant diseases, and the increasing requirement to balance environmental and economic sustainability, the need for science to provide the evidence base, inform policy making and develop solutions has never been greater.

AFBI aims to meet these challenges through our work which centres on our three key themes of:

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

Protecting animal, plant and human health;

Enhancing the natural and marine environments;

AFBI commences 2023/2024 focused on delivering highly impactful science to address the many current local and global challenges facing the agri-food and marine sectors.

During 2022/23 we updated our Vision and Purpose statements to reflect the broad spectrum of work which AFBI undertakes and a number of key aspects including the importance of scientific excellence and delivering impact. We have drafted a new Corporate Plan for 2023-2027 and will shortly recommence work to update our Science Strategy to 2030.

The Corporate Plan 2023-2027 outlines the high-level objectives which our science aims to achieve across our three core themes alongside our ambition to continually increase the quality and relevance of our science and the enabling investments needed in our systems, estate and people. The new Corporate Plan provides AFBI with a strong strategic direction in the coming years which will be further strengthened by our Science Strategy to 2030.

A key part of the previous and the 2023-2027 corporate plans is the investment in and renewal of key estate and infrastructural assets by our sponsoring department, DAERA.

Our Vision

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

Our 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.



Taken together these investments represent a major change programme for the organisation and are essential to provide the necessary facilities to enable scientific excellence and the delivery of the science needed to meet current and future challenges.

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. This year's business plan includes specific objectives on staff engagement, recruitment and retention reflecting that our continued success is overwhelmingly dependent on attracting and retaining the best scientists and supporting staff in an increasingly competitive environment.

It is important to recognise the current public sector funding pressures. This Business Plan sets out AFBI's key priorities and targets for the year. However, delivery of these may have to flex to meet the available funding.

I look forward to delivering our 2023/24 Business Plan in partnership with colleagues across AFBI and to seeing AFBI continuing to develop through the on-going investments in our systems, infrastructure and staff.



Dr Stanley McDowell CEO





About AFBI

AFBI is Northern Ireland's largest provider of agri-food and environmental sciences. It provides vital and unrivalled support to both the agri-food and marine industries, which are important economic drivers, as well as at the main custodians of nature within Northern Ireland and its shores.

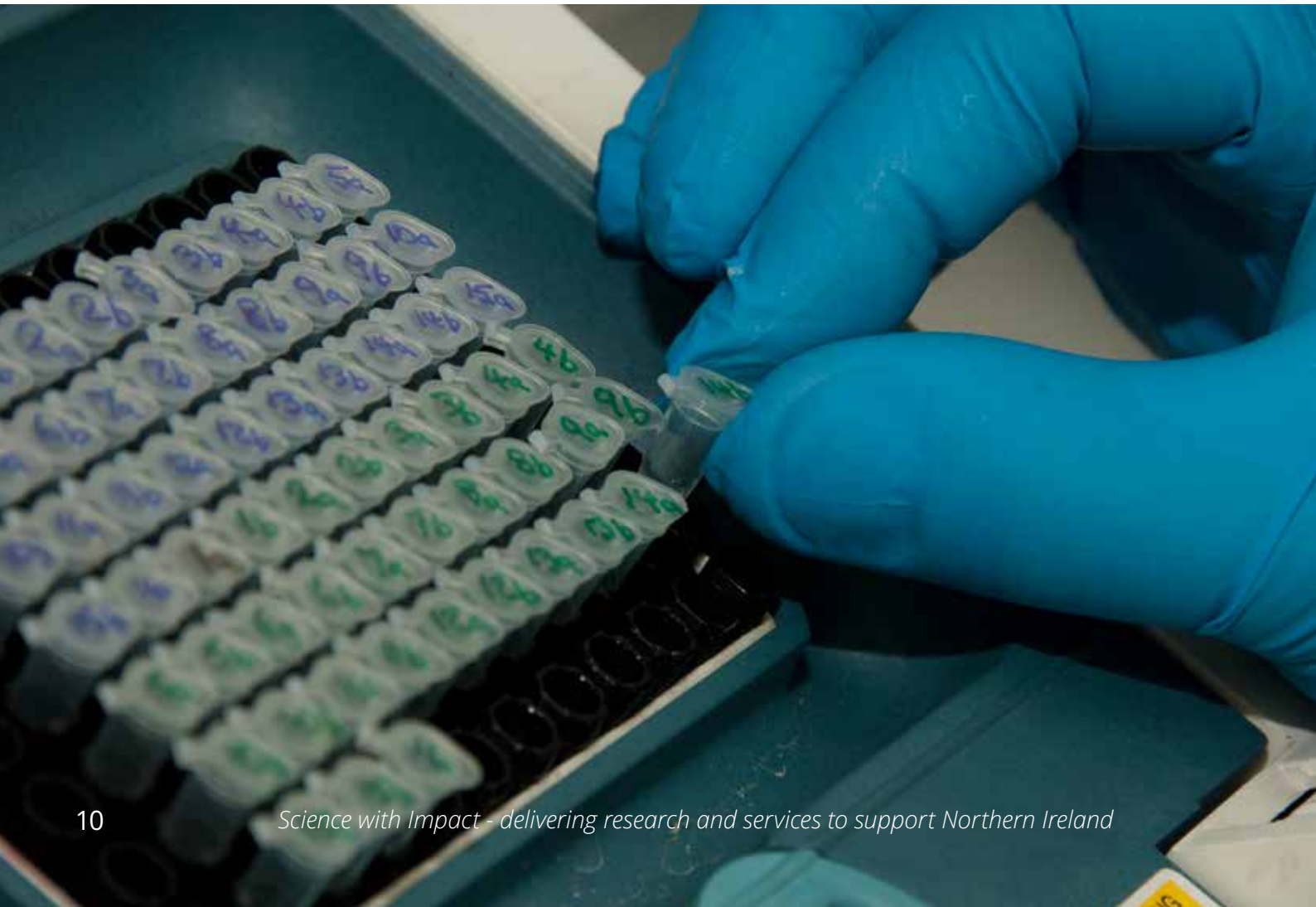
AFBI contributes to the achievement of the Northern Ireland Executive's Ministerial and Departmental Priorities by delivering a programme of research, statutory and surveillance science, emergency response capability and expert advice for DAERA.

AFBI's science is based on three key themes of leading improvements in the agri-food industry, protecting animal, plant and human health, and enhancing the natural and marine environment. Our work enables the agri-food industry to trade nationally and internationally while also bringing forward innovations to improve production efficiency and environmental sustainability.

In line with our updated Corporate Vision "Scientific excellence delivering impactful and sustainable outcomes for society, economy and the natural environment", AFBI collaborates extensively with other scientific institutes nationally and internationally to ensure that our science remains visionary while seeking to meet the many local and global challenges that the agri-food sector faces. These include the major challenge of simultaneously halting climate change, while enhancing the health of society, animals and the environment and positively impacting the economy, against a backdrop of the United Kingdom's emergence from a major pandemic.

AFBI's science is outcome- driven and aimed at solving important practical problems for a wide range of local, national and international funders in the public and private sectors. Our staff carry out world class research, surveillance, and analytic and diagnostic testing for DAERA and other funders in the fields of animal health and welfare, sustainable agricultural systems, plant science, food innovation and safety, environmental protection, fisheries and aquatic ecosystems, and agricultural and rural economics.

AFBI's Corporate Plan for 2023-2027 sets out our Strategic Priorities and outlines how we, with the support of our sponsoring Department, plan to invest in our people and infrastructure to provide innovative, efficient and effective service delivery.







Delivering AFBI's Vision, Purpose and Strategic Priorities

AFBI's draft Corporate Plan for 2023-27 sets out a future which builds on and maximises the potential of AFBI's scientific expertise to deliver key outcomes for DAERA and the local agri-food and marine sectors.

It is focused on addressing shared future challenges across our three key themes of work alongside our ambition to continually increase the quality and relevance of our science and to continue the program of investment in our systems, infrastructure and people.

AFBI's vision, purpose and strategic priorities for the period 2023-27 are set out in Figure 1 overleaf.



Figure 1. AFBI's vision, purpose, and strategic priorities for the period 2023-27

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

This annual Business Plan sets out the targets and activities that will be undertaken in 2023/2024, to move AFBI towards the achievement of these strategic priorities.

This Plan also sets out how performance and progress against these targets will be measured and reported through a series of key performance indicators. AFBI's strategic direction is aligned with the NI Executive's overall Ministerial Priorities, DAERA's four draft Strategic Priorities and delivery of DAERA's Vision of 'Sustainability at the heart of a living, working, active landscape, valued by everyone.'

Through its scientific work, AFBI will support the delivery of DAERA's outcomes and the wider needs of industry. AFBI will in turn assist in progress towards the Northern Ireland Economic Strategy, the Northern Ireland Executive's Ministerial and Departmental Priorities, and Executive's 'Green Growth' strategic direction.

Supporting Green Growth

Green Growth is an ambitious cross departmental programme which will be delivered through a multi-actor approach. AFBI is well positioned to support DAERA in realising its ambitions under the Green Growth agenda and the multibillion-pound value that results from the NI agri-food sector and the ecosystem services it delivers. The Green Growth Framework provides a focus on Climate Action, Green Jobs and a Clean Environment. A large portfolio of policies and strategies are in place or under development within DAERA to deliver against these three areas of focus which have underpinning goals to address climate change, improve resource use efficiency and decarbonise Northern Ireland.

Subject to the approval of the business case and affordability, AFBI is taking forward a series of strategic infrastructure Green Growth capital investments. This will enable AFBI to take forward state of the art research on reducing emissions, understanding carbon fluxes and precision equipment to enable the development of evidence and innovation aligned with sustainability

Soil Nutrient Health Scheme

The SNHS is one of the most comprehensive regional soil nutrient sampling schemes to be undertaken anywhere in the world. It will enable Northern Ireland farmers to optimise crop nutrient applications, assess on-farm carbon stocks and build farm resilience. In 2023-24, AFBI will be taking forward delivery of year 2 of the phased roll-out of this critically important project.

The information provided by the Scheme will allow farmers to target the application of crop nutrients to their soils, reduce nutrient waste and help increase farm profitability. Reductions in excess and better placement of nutrients should, in turn, lead to a decrease in losses to waterbodies and thereby contribute to achieving the targets of the Nutrient Action programme.



Investing in & Engaging with our People

There are many factors that come together to make AFBI the organisation that it is – the buildings that we occupy, the IT and other systems that we use on a day-to-day basis, our equipment and facilities, the work that we undertake, but beyond all of these, our staff, are the most important.

In 2023-24 AFBI will implement key actions to improve staff engagement and review recruitment and retention in what is an increasing competitive employment market. This will include the development of a new AFBI People Strategy designed to attract, empower and grow purpose-driven staff with passion and capability to pursue excellence, to embrace technology, innovation and change, ultimately supporting great science.



Investing in our Systems & Infrastructure

Investment by DAERA and AFBI in new and replacement estate and IT infrastructure is critical to enable and support current and future science needs.

On the estate side, this includes a number of major DAERA-led projects including a new Animal Health Sciences Building at Stormont; new beef research, education and knowledge transfer facilities at Hillsborough; and a ruminant emissions facility at Hillsborough.

Design work for an AFBI replacement research vessel has also been largely completed and subject to Final Business Case approval, we anticipate the award of build contract to take place in the 2023/24 financial year.

Project and Portfolio Management System

Following substantial work over the last year, a new project and portfolio management system will be implemented in 2023/24 within AFBI to support our scientists in the efficient and effective delivery of projects. This will be a critical enabler to underpin the governance of projects and the efficiency of the corporate platform.

ISLAND Project

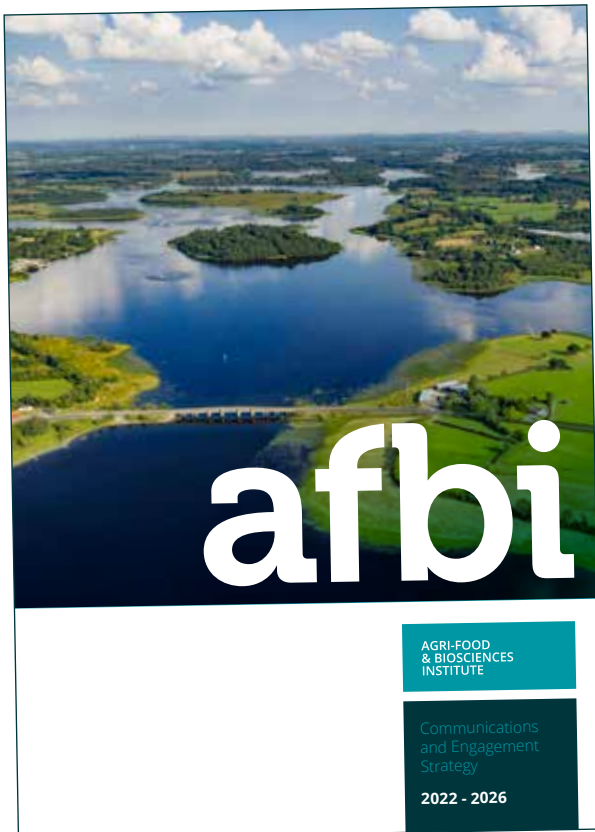
Replacement of AFBI's laboratory information management systems (LIMS) is being taken forward through a DAERA-led project (the ISLAND project) which will provide a single LIMS solution across DAERA, AFBI and NIEA. The project is designed to deliver a specialised software solution to improve the operational environment and the management of laboratory science data across the DAERA science environment.

Electronic Document and Records Management System (EDRMS) Project

The volume of electronic records held since the creation of AFBI has increased exponentially. In response to this AFBI has implemented an electronic document and records management system (EDRMS) provided by IT Assist to help in the effective management and governance around AFBI's corporate documents and records. This year will see the project move on to ensuring that the system is effectively embedded and its benefits fully realised.

Communicating AFBI's Impact

AFBI is also updating its Communications and Engagement Strategy to ensure continuous improvement in our engagement and communicating the impact of AFBI's Science. As we invest in science it is important that the impact and opportunities identified are communicated to help drive positive behavioural change. This year will also see the commissioning of a Peer Review of AFBI's Science which is also a critical mechanism for ensuring the quality and relevance of AFBI's science.



Alliances & Partnerships

Over the past number of years AFBI has also built strong partnerships with a range of stakeholders in order to maximise our impact, expertise and overall value to DAERA. This includes AFBI's strategic alliance with Queen's University Belfast (QUB) and the partnership with the College of Agriculture, Food and Rural Enterprise (CAFRE). These two initiatives represent important foundations to further develop with regard to key strategic alliances and partnerships in AFBI going forward.

The alliance with QUB will continue to focus on research to transform our food, environmental and agricultural systems. It will enable the development of solutions taken from fundamental design through to applied research. Our partnership with CAFRE will ensure these solutions have an impact across food and farming systems in NI.



AFBI Science Strategy Framework to 2030

As Northern Ireland's main provider of agri-food, veterinary, marine and environmental sciences AFBI must deliver for government, society and industry through acting locally but impacting globally. Our new Corporate Plan 2023-27 sets out the key aims which we hope to achieve from the science programs which AFBI undertakes. The new Corporate Plan sets out a clear strategic direction, which will be underpinned by new AFBI 2030 Science Strategy Framework, which will be finalised during 2023/2024.

AFBI is unique within the UK and Ireland and plays a key role in the EU as an organisation which can deliver holistic solutions within the agri-food- environmental-health nexus. AFBI's foundational platforms, expertise across a wide range of scientific disciplines and partnership working with its sponsor department DAERA as well as academics and industry locally, nationally and internationally, will be key to the delivery of this exciting Strategy.

AFBI's 2030 Science Strategy and its implementation plan will contribute to DAERA's Science Strategy Framework, as well as key policy agendas including Green Growth.



Looking to the Future

As we progress, AFBI will harness the opportunities presented, especially aligned with the development of major governmental policies and strategies, such as Green Growth and DAERA's Science Strategy and provide outcomes supporting Ministerial and Departmental priorities. We will also work closely with industry to bring forward novel innovations and support the wider farming industry adopt these innovations with confidence. AFBI will also continue to build on the progress made in establishing and embedding effective alliances with QUB and CAFRE and seek to widen strategic partnerships with others. Together these developments will ensure AFBI's science continues to be impactful, innovative, collaborative and transformative.

AFBI recognises the challenging public sector finance environment and is committed to being as efficient as possible and will seek to target resources on areas which deliver the most impact.





AFBI Business Targets for 2023/2024

Good business planning is at the heart of strong governance, effective management and financial viability and requires understanding and ownership by all staff across AFBI.

As such, AFBI's Strategic Outcomes and business targets are effectively cascaded down through the organisation. Cascading represents translating and aligning AFBI's Outcomes and key performance indicators (KPIs) from the corporate level down to divisional and branch level and finally, to the individual level through the performance management and appraisal Process.

Good plans in turn need to be supported by effective monitoring and reporting of performance at each level of the organisation

and this is assisting in the development of a strong performance culture where everyone understands where they fit into helping to achieve AFBI's objectives.

To deliver AFBI's strategic outcomes, annual business plans are produced setting out in detail the business targets for each year of the delivery period and in turn the key performance indicators to measure AFBI's progress towards these goals, as illustrated below:

Figure 2 – Linking Strategic Priorities in the Corporate Plan to Annual KPIs



The following sections set out the key business targets and KPIs for 2023/2024 and how these are aligned to DAERA's Strategic Outcomes. AFBI will continue to review delivery of the AWP in light of the available budget and prioritise if necessary in conjunction with DAERA.

Delivering AFBI's Strategic Priorities and Alignment to DAERA's Priorities:

KPI for 2023/24 What we plan to achieve this year	Aligned AFBI Strategic Priority	Aligned to DAERA Priority
KPI 1 – Delivery of the DAERA Evidence & Innovation Research Programme to defined standards.	Strategic Priority 1 – Leading Improvement in the Agri-Food Industry to drive sustainability.	DAERA Priority - Economic Growth
KPI 2 - Delivery of 90 % Non- AWP research projects and analytical testing to customer satisfaction as being on time and on budget.	Strategic Priority 2 Protecting Animal, Plant and Human Health.	To enhance our food, forestry, fishery and farming sectors using efficient and environmentally sustainable models which support economic growth.
KPI 3 – Delivery of Scientific Service programmes to DAERA to defined standards.	Strategic Priority 3 Enhancing the Natural and Marine Environment.	DAERA Priority - Natural Environment
KPI 4 - Delivery of agreed animal and plant health, food safety and fishery emergency response requirements to DAERA.	Strategic Priority 4 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.	To protect and enhance our natural environment now and for future generations whilst advocating its value to and wellbeing for all.
KPI 5 - Delivery of year 2 of the Soil Nutrient Health Scheme in line with project plan.		

KPI for 2023/24 What we plan to achieve this year	Aligned AFBI Strategic Priority	Aligned to DAERA Priority
<p>KPI 6 - By 31 March 2024 we will have achieved a score of 2500 with regard to AFBI's scientific outputs as pathways to impact.¹</p>	<p>Strategic Priority 4</p> <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>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>KPI 7 - Finalisation of the AFBI Science Strategy to 2030 and related action plan by 30 September 2023.</p>		
<p>KPI 8 – Take forward project to prepare for planned Peer Review of AFBI Science.</p>		

¹ AFBI's pathways to impact include the publication of peer-reviewed papers, presentations at conference, articles in the press and on social media, representation on local, national and international committees and the development of new patentable innovations, including grass varieties. Depending on the effort and potential impact of these outputs, a score is assigned to each type of output. The combination of these scores cumulates to the overall AFBI score of 2,500. This methodology has been adopted for a number of years now in AFBI, and as such, we are building a framework to monitor and measure our outputs as pathways to impact over a period of years. The core data within this score aligns with the number of the individual outputs and can be used to make comparisons with other organisations and their outputs.

KPI for 2023/24 What we plan to achieve this year	Aligned AFBI Strategic Priority	Aligned to DAERA Priority
<p>People</p> <p>KPI 9 – Delivery of staff engagement action plan for 2023-24.</p> <p>KPI 10 - To undertake a review of recruitment and retention and develop potential solutions.</p>	<p>Strategic Priority 5 Enabling world leading science through excellence in people, places and technology.</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>Systems & Data</p> <p>KPI 11 - Business case developed for a new Finance & Business Management System.</p>		
<p>Finance</p> <p>KPI 12 - Provisional Resource and Capital outturn to be between 99% and 100% of Final Budget for 2023/24.</p>		
<p>Estates</p> <p>KPI 13 - Progress Ship procurement subject to Business Case approval and funding.</p>		
<p>Infrastructure</p> <p>KPI 14 - Delivery of planned Green Growth capital expenditure for 2023- 24 subject to budget availability and Business Case approval.</p>		





AFBI Budget 2023/2024

Financial Context

AFBI provides the statutory and surveillance science, emergency response capability and expert scientific advice which underpins many of DAERA's programmes of work as well as providing the scientific evidence and innovation to shape policy direction for the agri-food and marine sectors. To that end, AFBI is primarily funded by a grant-in-aid budget from the Department.

Further funding is derived from a range of local, national and international science funders and commercial organisations. As well as providing a very necessary source of income, external income helps maintain critical scientific capacity and enables collaboration with the local and international scientific community.

This complimentary and synergistic arrangement is to the advantage of Northern Ireland. It strengthens AFBI's ability to provide expert scientific support to policy development and helps to ensure that any emergency response that is needed will be up to date and effective. It also provides innovation in the agri-food sector to improve production and efficiency, which has both environmental and economic benefits.

In recent years, AFBI has had success in growing external income sources, particularly in Europe, with significant successes in INTERREG VA, Horizon 2020 and the European Maritime & Fisheries Fund. These projects account for more than 60% of AFBI's external income. Along with the obvious financial benefits, these projects bring with them opportunities to further strengthen and nurture mutually beneficial partnerships with other public and private sector organisations.

We are committed to maintaining and where possible growing non-GIA income. This will be accomplished through targeted competitive applications that optimize value to AFBI in line with our strategic and scientific priorities. The organisation is exploring additional sources of research revenue including the forthcoming PEACE Plus initiative, and eligibility to the UKRI funding through Public Sector Research Establishment status. We will closely monitor the funding landscape and adjust our financial forecasts, accordingly, taking account any financial uncertainties at either local, national and European levels.

Budget 2023-2024

As is the case for many organisations the current global inflationary pressures present a significant challenge for AFBI with the organisation experiencing major increases in the cost of a number of our inputs. The increased cost of gas, electric and other utilities in particular, represent a significant cost pressure given the scale and nature of the AFBI estate.

AFBI is conscious of its responsibilities towards the taxpayer in the current difficult financial climate and is committed to continuing to seek to become ever more efficient. The scale of the inflationary pressures currently being experienced however are such that impacts on service delivery and the full achievement of the objectives set out in this business plan are unlikely in the absence of additional funding provision.

The following table details AFBI's 2023-2024 Indicative Opening Allocation against the 2022-23 Closing Budget Allocation.

	CLOSING BUDGET ALLOCATION 2022-23	INDICITIVE OPENING ALLOCATION 2023-24
	£'000	£'000
Income	(28,336)	(20,036)
Staff Costs	34,000	34,086
Overheads (GAE)	14,234	14,547
Programme	23,742	15,511
Operating Costs	43,640	44,108
Lease	2,665	2,488
EU Exit – Staff Costs	625	148
EU Exit- Programme	23	-
EU Exit- Overheads (GAE)	438	-
Other Operating Costs	3,751	2,636
Recurrent Capital	2,000	900
Capital-RV Replacement	125	5,395
Capital-Systems	1,200	-
Capital – Green Growth	-	11,500
EU Horizon Replacement Funding	-	500
Depreciation	6,581	6,581
Non-Operating Costs	9,906	24,876
DEL Position	57,297	71,620
AME	400	1,400
Total Overall	57,697	73,020

Non-Grant In Aid (GIA) revenue streams

During 2022/2023 AFBI will continue to seek R&D funding from a variety of local, national and international research funding bodies and commercial organisations. This will include maximising drawdown of EU Horizon Europe funding through the submission of innovative scientific research proposals.



Glossary

AFBI	Agri-Food and Biosciences Institute
AWP	Assigned Work Programme
BREXIT	Name given for the UK withdrawal process from the EU
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
COVID-19	Corona Virus Disease 2019
CPD	Central Procurement Directorate
DAERA	Department of Agriculture, Environment and Rural Affairs
DOF	Department of Finance
EDRMS	Electronic Document and Records Management System
EU	European Union
HR	Human Resources
ISO/IEC 17025	International Standards Organisation standard for competence of testing and calibration laboratories.
KPI	Key Performance Indicators
LIMS	Laboratory Information Management System
ISO 27000	International Standards Organisation standard for Information Security
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
PMO	Project Management Office
PfG	Programme for Government
QUB	Queen's University Belfast
SRO	Senior Responsible Officer

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