



Transformative Science 2016 - 2021

From Scotland to the world, and back again

Our New Corporate Plan Explained

The **James Hutton Institute** is a well-respected and globally recognised research organisation delivering fundamental and applied science to drive the sustainable use of land and natural resources.

The new James Hutton Institute Corporate Plan 2016-2021 sets out our goals for the next five years set within the context of much longer-term horizon scanning. It describes how we will tackle the scientific challenges needed to help the world, achieve our corporate goals, deliver for our customers and stakeholders and grow the financial stability of the James Hutton Group.



The **James Hutton Institute** has a long history through its legacy organisations in providing independent, world-class scientific research tackling some of the world's biggest challenges relating to food and environmental security and sustainable development. These are set in the context of significant global changes in population, increased demand for natural resources, a changing climate and economic and geopolitical policy drivers.

Our scientists follow the inspiration of James Hutton, after whom we are named, and deliver global impact through excellent science, collaboration and innovation. He was willing to challenge accepted wisdom to create a new vision of how the world was formed and how it is constantly evolving. The observations he made on Scotland's rocks, soils and landscapes forever changed the way we think about the world.

Our Vision

To be at the forefront of innovative and transformative science for sustainable management of land, crop and natural resources that supports thriving communities.

Our Mission

To conduct excellent science and engage in new ways of working across disciplines, with business, policy and society, that guide contemporary thought and challenge conventional wisdom, ensure trust and deliver the best outcomes for all.

Our Group Objective

To deliver greater food and environmental security through science connecting land and people.

Values & Ethos

To bring about our Vision and achieve our Mission we will be guided by our Values in everything we do:

- We respect and value our people and the people we engage with
- We want to make a difference
- We strive to be excellent in everything we do
- We lead by example
- We foster creativity and innovation

We strive for excellence and want to make a difference whilst respecting others by working in partnership, seeking and valuing the opinions of all of our stakeholders, customers and the public and taking responsibility for the public understanding of our science.

We understand that to make a difference, creativity and innovation must be relevant to the needs and aspirations of society and people and respect all scientific disciplines and approaches.

Our scientific ethos is one of the "advancement of knowledge" and we aspire to achieve this through excellence with objectivity, independence and transparency, and minimisation of any conflict of interest.

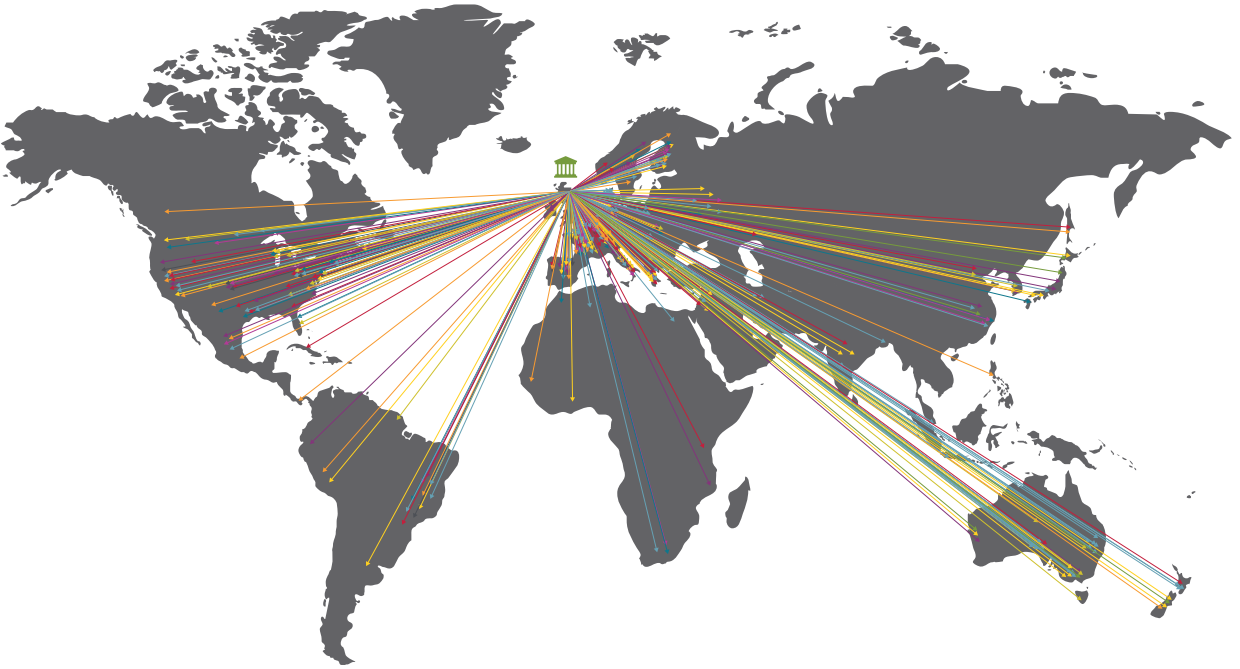
Above all, the Institute will lead by example through its activities, outputs and engagement with others.

Our accompanying Plan On A Page summarises our Vision, Mission, Values, ways of working and our priorities shared across the organisation and beyond.

Our global collaboration

from Scotland to the world, and back again

The James Hutton Institute collaborates and works in numerous global locations, exporting and importing knowledge, impact, innovation, skills, learning and experience.



Our Impact

We are confident our plan for the next five years will benefit Scotland, the UK and the world by:

- Underpinning a **wealthier, smarter, greener** world with tangible benefits for more sustainable land use, jobs, high value skills and knowledge, adding value to growing economic sectors such as Food and Drink and sustaining our important primary production industries that grow, feed, fibre, feedstock and support the bioeconomy
- Protecting and growing our Natural Capital
- Projecting ourselves internationally as a place where excellent science delivers real world solutions.

Our Strategic Priorities

We have outlined nine key strategic objectives set within the following four priority areas:

► One

Meeting and exceeding stakeholder needs and expectations

► Two

Delivering solutions to our scientific challenges

► Three

Financial sustainability and internal processes

► Four

Adapting, learning and growing to be a renowned scientific community

Our Corporate Strategic Objectives

Objective 1

Stakeholders

Actively engage with stakeholders to achieve the Institute strategy, and collaboratively maximise impact and advocate the Institute as an international leader.

We have identified three fundamental **Scientific Challenges** aimed at framing our proposition to both the domestic and international agenda. They are:

Objective 2

Scientific Challenge 1

Develop new crops and production methods that help deliver food security while better protecting the environment.

Objective 3

Scientific Challenge 2

Protect and enhance the resilience of ecosystems for multiple benefits.

Objective 4

Scientific Challenge 3

Deliver technical and social innovations that support sustainable and resilient communities.

Objective 5

Financial Sustainability & Internal Processes

Secure sufficient funding to effectively pursue research and have fit for purpose infrastructure.

Objective 6

Financial Sustainability & Internal Processes

Maximise James Hutton Ltd commercial impact and synergies with the James Hutton Institute.

Objective 7

Financial Sustainability & Internal Processes

Effectively manage projects and prioritise and allocate funds to operational and capital projects.

Objective 8

Adapt, Learn & Grow

Attract and develop high quality staff.

Objective 9

Adapt, Learn & Grow

Pursue research objectives with high quality and rigour and adapt and grow to meet new challenges.

Supporting Shared International Aims

Our globally shared challenges have recently been articulated in the UN's 17 Sustainable Development Goals, identified as requirements for 'Transforming our world: the 2030 agenda for Sustainable Development'. The James Hutton Institute's present and future activities have resonance across much of this extensive strategy.

These goals are having a great public resonance and are relevant in Scotland, the UK, Europe and globally and provide a seamless framework to explain how we make difference to stakeholders and customers everywhere. We will use them to frame and communicate the benefits of our research.



Zero Hunger

Hutton research continues to contribute to securing food provision at home and overseas by translating our science to deliver plant and crop varieties and management practices that are

- more adapted to prevailing and future growing conditions
- higher yielding
- more resilient to threats
- higher quality for users
- able to be farmed sustainably.



Quality Education

The international PhD school at the Institute allows the next generation of researchers and innovators to

- work and learn alongside our internationally-regarded scientists
- work in an interdisciplinary environment
- deliver world leading science.



Industry, Innovation and Infrastructure

The Institute is increasingly working in partnership with industry to deliver science-based

- solutions
- tools
- knowledge

that can be applied rapidly with maximum benefit. Our position as a key collaborator with both producers and users shortens the time taken for knowledge and innovation to be exploited.



Responsible Consumption and Production

By looking at agriculture, land-based production systems and their interactions with the environment and also the way people use and value the natural environment, our work contributes to the sustainable management and use of natural resources.

Examples include

- developing integrated pest management (IPM) in agriculture
- researching new ways to create value from waste material
- developing sustainable approaches to farming
- reducing adverse impacts of people's use of nature.



Clean Water and Sanitation

Population increases will massively increase demand for water, and climate change will drive the need to manage water more actively. In Scotland and elsewhere, Hutton research and expertise helps communities, land managers and governments to

- reduce flood risk, working with natural processes not against them
- manage catchment areas - putting water issues first
- improve and protect water quality- for people, ecosystems and businesses
- reduce contamination of water from managed land.



Affordable and Clean Energy

Within its research on low carbon communities that the Institute is at the forefront scoping and testing novel means of generating energy from

- agricultural and other waste
- novel geothermal sources like old mineworks

We also work with communities, companies and authorities to help them define and assess the impact of local energy use and energy generation.



Decent Work and Economic Growth

The Institute's focus on whole systems of agriculture, environment, social actors and institutions exemplifies our commitment to sustainable economic growth. We are committed to diversity in our workforce, staff development, equitable and flexible working arrangements; consistent with a healthy work-life balance.



Climate Action

From agriculture to the psychology behind lifestyle choices, every aspect of the Institutes' work has adaptation to or mitigation of climate change woven into it

- reducing inputs, to crop production
- promoting management that conserves peatlands for carbon storage
- providing key information for protecting our natural resources under a changing climate
- developing crops and varieties adapted to the environment they are grown and used in.



Life On Land

Our integrated approach helps us tackle issues holistically and develop cultivation and land management techniques that

- prioritise soil health
- protect ecosystems and biodiversity
- promote the role of forests and other habitats in a healthy landscape
- prevent the introduction and spread of new pests and pathogens.

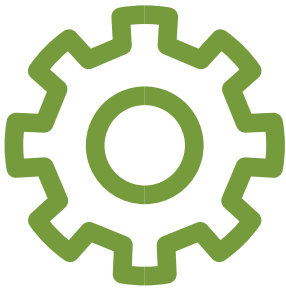


Partnerships for the Goals

We have productive partnerships on every continent and actively seek to work with producers, policy-makers, communities, consumers and fellow researchers to ensure our work is optimally focussed on

- meeting needs
- building on existing knowledge
- creating solutions.

Economic Engine



- ✓ Turning science into new solutions and strategies for people, communities, government and businesses
- ✓ We are not-for-profit so invest our income in our science and underpinning infrastructures and build investment reserves to meet our corporate and social responsibilities

Virtuous Cycle

Our corporate strategy is built upon an objective to deliver greater food and environmental security through science, creating value for all of our stakeholders through a virtuous cycle.





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