



















## **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 internationallyregarded scientists
- · work in an interdisciplinary environment
- deliver world leading science.

### Clear 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.

## 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, landbased 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.

#### **Climate Action**



From agriculture to the psychology behind lifestyle choices, every aspect of the Institutes's 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

#### 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.