CAMERAS

A COORDINATED AGENDA FOR MARINE, ENVIRONMENT AND RURAL AFFAIRS SCIENCE, 2011-2016.

This paper sets out the background to, and aspirations for, an agenda in which the partner organisations contributing to this initiative will work together to align and co-ordinate their scientific activities. Although the major outcomes from the co-ordination approach will be realised during the period of 2011-2016, work is already underway to bring about effective joint working. In addition, the agenda is expected to address policy needs and drivers which will be challenging Scotland well beyond 2016.

The Scottish Government Economic Strategy

The single purpose of the Scottish Government is 'To focus Government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth'.

In November 2007, the **Government's Economic Strategy (GES)** set out its approach to ensure that all of the Government's resources and policies are focused on the achievement of this purpose. The GES is delivered through the five Strategic Objectives: Wealthier and Fairer, Healthier, Safer and Stronger, Smarter and Greener. **The National Performance Framework** sets out the Government's targets and outcomes which underpins delivery against the Government's agenda.

The GES places a particular policy focus on a number of key sectors identified as having high-growth potential, the capacity to boost productivity and to make a significant contribution towards the purpose:

- Creative Industries (including digital content and technologies)
- Energy (with a particular focus on Renewables)
- Financial and Business Services
- Food and Drink (including agriculture & fisheries)
- Life Sciences (including biotechnology and translational medicine)
- Tourism

The GES seeks to expand these areas of Scotland's international comparative advantage by giving particular attention to building a critical mass of activity in these key sectors. The role of government is to help create an environment that facilitates an increase in the competitiveness and growth of these sectors in particular.

Across Government, resources are being aligned behind the purpose. In the scientific context initiatives of particular relevance include:

- "*Science for Scotland"* which was published on 27 November 2008. It sets out a strategic framework to build on Scotland's scientific strengths and exploit major opportunities through developing individuals, scientific research, economic and business demand, raising our international profile and connections in Scotland and in Government;
- A strategic framework addressing "Innovation for Scotland" was published in June 2009. This has a broad focus on innovation in policies and systems including, but not exclusive to, science and technology, and highlights how the Scottish Government and its agencies are supporting business growth and innovation;
- The relationship between the Higher Education Institutions (HEI) sector and Government in Scotland has also been the subject of recent consideration and the report of the *Joint Future Thinking Taskforce on Universities* suggests a more streamlined model for funding.

All of these initiatives seek to achieve important outcomes for the Scottish Government in support of the key sectors identified above and will be relevant across all areas of Scottish Government policy.

The coordinated agenda for Marine, Environment and Rural Affairs science (CAMERAS) embraces the same philosophy as that underlying the initiatives highlighted above and strategically aligns with "Science for Scotland" (see Annex 2).

The scientific work that will be covered by CAMERAS relates particularly to those policies (current and future) that require information, expertise and understanding from the natural and related social science knowledge base. Areas where recent policies have been published and which are highly relevant to the CAMERAS partners are:

- The Scottish Climate Change Act (http://www.scottish.parliament.uk/s3/bills/17-ClimateChange/index.htm)
- Scotland's First Marine Bill (http://www.scottish.parliament.uk/s3/bills/25-MarineScot/index.htm)
- Recipe for success – Scotland's National Food and Drink policy (http://www.scotland.gov.uk/Publications/2009/06/25133322/0)
- The Scottish Soil Framework (http://www.scotland.gov.uk/Publications/2009/05/20145602/0)

Earlier strategies and policies for **Agriculture, Common Agriculture Policy (CAP) reform, Forestry, Food and Health, Fisheries and Aquaculture, Animal Health and Welfare** resonate with these new policy developments and remain central to the Scottish Government's objectives. Policy makers draw heavily on the existing evidence base for developing new policy or implementing established policy, but the maintenance of an effective and responsive evidence base is increasingly essential for future policy initiatives in these areas of dynamic change.

The Vision for CAMERAS

Our vision for the science[1] supported through CAMERAS is that it will be targeted in support of Scotland's sustainable economic growth and will contribute to the delivery of the national outcomes and national indicators and targets as set out in the **National Performance Framework *and to meet the five strategic objectives for Government*[2].** The science is expected to make a particular, but not exclusive, contribution to:

- The policy environment to enhance the **economic performance** of Scotland's agriculture, aquaculture, fishing, food and forestry sectors within the wider context of sustainable management of our land, sea and freshwater resources, provision of ecosystem services and rural development, while safeguarding the interests of consumers and the people of Scotland.

[1] In this paper 'science' includes the physical and natural sciences, statistics, social science, economics etc.

[2] http://www.scotland.gov.uk/About/scotPerforms

- Support the Scottish Government in helping the people of Scotland secure a **high quality of life** through sensitive stewardship and sustainable development of the natural resources of Scotland; in particular by securing a clean, healthy and safe environment and improving people's enjoyment of the environment.

Science into Policy

Public bodies who commission science relevant to the Scottish Government Marine, Environment, Rural Affairs and related policies, and who participate in this initiative, will use CAMERAS as a vehicle to align their scientific activities.

The Coordinated Agenda (CAMERAS) relates specifically to the science budgets for which Directorates within the Rural Affairs and Environment (RAE) portfolio of the Scottish Government are responsible. CAMERAS will provide a coordinated agenda for the delivery of all the scientific activities supported through the RAE portfolio.

The development of CAMERAS reflects the cross cutting approach adopted by the Scottish Government to joining up the various policy strands in support of the single purpose of sustainable economic growth.

The crosscutting approach to Government in Scotland provides a strong driver and exciting opportunity for the scientific Non-Departmental Public Bodies (NDPBs) and agencies to work more closely with Government to co-ordinate their scientific activities in support of the purpose. This includes:

- Science Advice for Scottish Agriculture (SASA)
- Marine Scotland Science (MSS; formerly Fisheries Research Services, FRS)
- Scottish Natural Heritage (SNH)
- Scottish Environment Protection Agency (SEPA)
- Deer Commission for Scotland (DCS)
- Quality Meat Scotland (QMS)

The CAMERAS agenda will also build close working links with other public bodies which commission science in support of rural, environment, marine and related policies of the Scottish Government. The CAMERAS partners recognise that their scientific activities are also very relevant to the work of many regulatory and delivery authorities across the UK and will look to developing systems for knowledge exchange that ensure effective and efficient coordination with such organisations.

Aims and Objectives

The aim of CAMERAS is to enhance 2-way knowledge exchange between the communities (Figure 1) involved along the pathway linking the strategic research required to generate new knowledge and understanding and the delivery of policy.

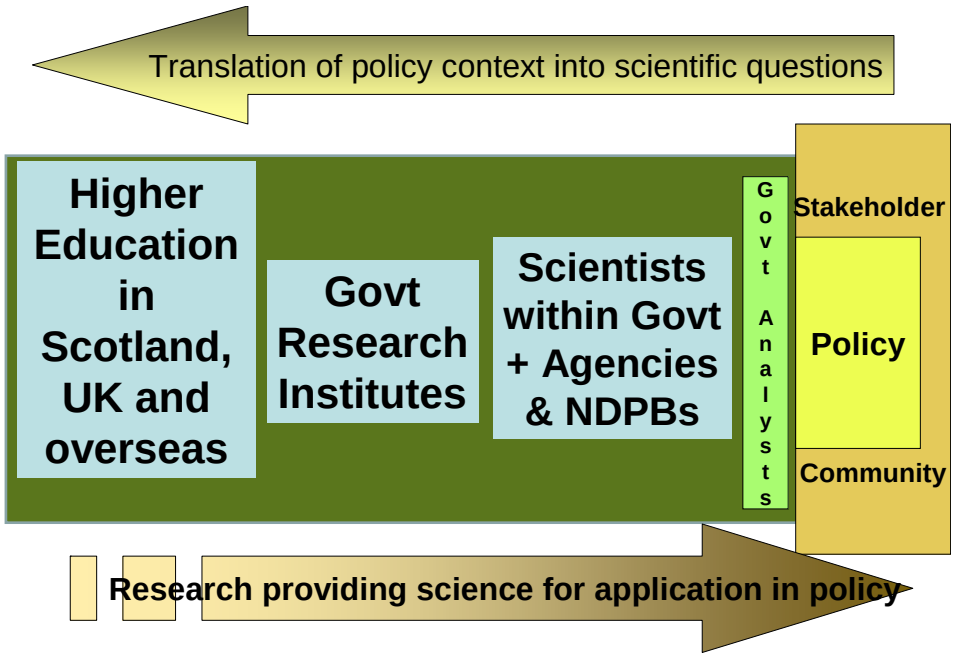


Fig. 1 *Main communities involved in the pathway linking the academic community with the delivery of policy*

A key objective for CAMERAS is therefore to enable the organisations involved to progressively align and integrate their individual activities in support of high level priorities linked through to the National Performance Framework and the overarching Science and Innovation Strategic Frameworks (Annex 1).

In addition, it should facilitate opportunities to strengthen the linkages between organisations that undertake activities ranging from the provision of scientific advice and monitoring to applied and strategic research[3].

The fulfilment of regulatory, surveillance or monitoring functions must be informed by research and the direction of strategic and applied research should, in turn, be shaped by the needs of those delivering statutory functions. Building effective interfaces between these activities and between the organisations that undertake them will help ensure that Scotland derives maximum benefit from all the separate science budgets in the Rural Affairs and Environment portfolio.

The contribution of CAMERAS to the wider Science community

The science and research that will be supported through CAMERAS could not possibly provide all the Scottish Government's evidence needs. Much of the knowledge and understanding needed to support Marine, Environment, Rural Affairs and related policies flows from the much wider UK and international scientific community. CAMERAS is therefore complementary to other sources of funding in

[3] Research is defined as the generation of new knowledge and understanding; the term 'science' includes also the provision of scientific advice and the application of science and technology in monitoring, surveillance and regulatory activities.

Scotland, e.g. to the university sector from the Scottish Funding Council or from the UK Research Councils.

Development of the specific programmes of science and research funded by CAMERAS partners will take into account the needs of Scotland in the context of strategies and programmes supported by other funders of science with the objective of ensuring it contributes to the wider body of knowledge at the Scottish, UK and European levels.

Such links are already active in the UK, e.g. the Scottish Government is working with other UK agencies, Departments and Research Councils in the major interdisciplinary and policy partnership to tackle environmental change 'Living with Environmental Change' (LWEC). At the European level, a number of 'ERAnet' initiatives have developed involving a very wide range of partner countries. Such partnership working acknowledges that individual funders cannot cover everything and that resources need to be targeted carefully to maximise synergy and achieve critical mass. The CAMERAS partnership can simplify interactions between the Scottish Government and such UK and EU coordinated initiatives by taking a 'collegiate' approach to communication activity where individual partners could take a lead role for specific initiatives.

The CAMERAS AGENDA

There is a clear recognition among the partners that the Scottish Government's cross cutting approach to policy development, and the Government's Purpose, Strategic Objectives and National Performance Framework provide the context for the development of CAMERAS.

Many parts of the Scottish Government recognise the need to develop policies that take into account the competing demands for the use of Scotland's natural assets, while ensuring that social development, primary production, commercial potential, trading activities and the like are able to thrive and develop. Policy makers are therefore keen to ensure that any remaining barriers between policy areas are broken down, and feel that the scientific evidence could encourage and support 'joined up' thinking and working across the Scottish Government. CAMERAS is therefore not limited to a narrow description such as 'rural', 'environment' or 'greener'.

The discussions that led to CAMERAS identified that policy questions are becoming increasingly complex and cross cutting and that a coherent evidence framework and interdisciplinary approach is needed to inform policy decisions. There was a clear recognition that science – including social science – can provide practical and realistic options for addressing some of the challenges Scotland will face in the future. The following sections of this document outline the high level issues that represent the common issues and challenges which the partners will address.

GENERIC SCIENTIFIC CHALLENGES

There are a number of issues of a generic nature that need to be inherent in the scientific activity undertaken to support the contribution of the Scottish Government's

Marine, Environment, Rural Affairs and related policies to its economic strategy. These fall into two areas, issues about the science and issues about how the science is delivered.

The generic issues of a scientific nature are:

- focussing on the single purpose of creating a successful Scotland through improving sustainable economic growth in Scotland means that natural science research needs to be undertaken in the context of the relevant economic and social issues
- policy makers need to have easier access to an integrated evidence base for the development of policies pertinent to the use of resources where there are potentially competing demands - including recognition that intellectual development of the methodologies and systems to address such questions may be needed
- the need for scientific evidence to be integrated better across relevant disciplines and recognition of the potential benefits that interdisciplinary approaches can bring to addressing the complex issues underlying policy development
- the need to be able to interpret information and understanding in a way that is appropriate and relevant to Scottish conditions and situations

The delivery of scientific evidence into policy and related areas of activity presents a number of challenges common across policy and scientific areas. These are:

- Flexibility within the evidence base. Issues which affect policy development can change rapidly and a science base able to respond flexibly to sudden or unexpected changes is necessary
- The desirability of ‘centres of excellence/one stop shops’ dealing with scientific evidence underpinning policy development, implementation and evaluation. Policy areas with broad remits such as planning, sustainable development and climate change recognise the significant benefit of this type of approach
- Integration across the wider ‘evidence base’ as shown in Figure 2. Both dimensions also need to be aware of how their work fits alongside the political processes that contribute to effective, efficient and acceptable policy delivery options.

CAMERAS LANDSCAPE

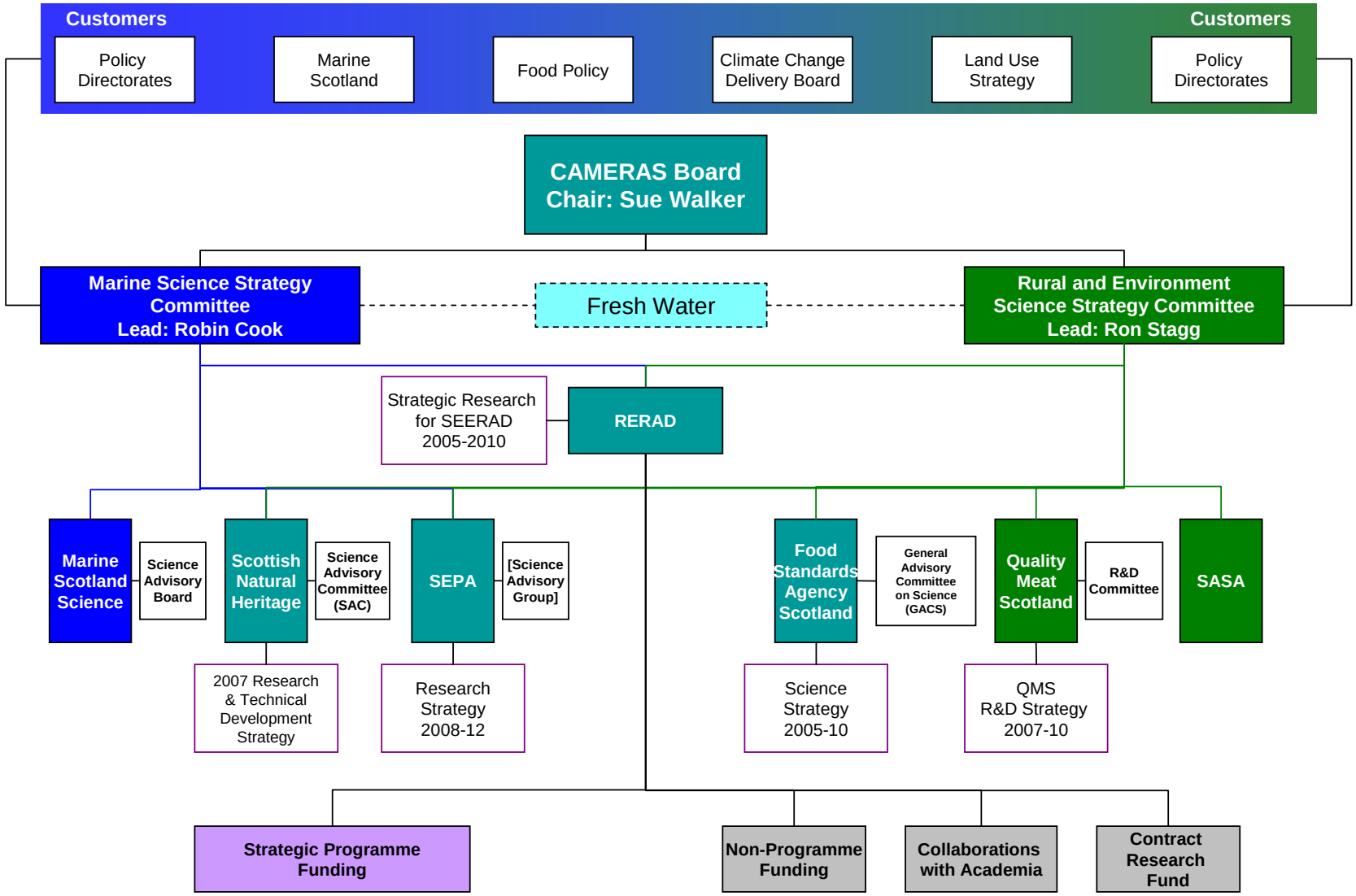


Fig. 2 – *The CAMERAS Landscape*

HEADLINE THEMES

The CAMERAS partners recognise that they have common high level drivers which will set the context for their scientific work over the next 5 – 30 years. These drivers are set out within the 3 high level themes below. Themes 1 and 2 encompass the major long-term policy challenges which the Scottish Government is likely to face in Marine, the Environment, Rural Affairs and related areas. As high level drivers for the Agenda, with a long 'shelf life' they are necessarily set at a broad level and encompass a wide range of complex and interacting issues. Theme 3 addresses the need to maintain resources including expertise, facilities and datasets that support and underpin the delivery of scientific evidence. Many of these resources need to be supported into the long term in a cost effective and efficient way.

Theme 1: Local Responses to Global Change

This theme reflects the external pressures and the need to respond to changes and impacts that are largely out with our control. Global events such as climate change, fluctuations in demand for globally traded commodities and demographic shifts can have a range of significant and differing impacts on societies and the environments surrounding them. Scotland will not escape from these challenges and policy-makers need to be able to understand the local impacts of events occurring at a global level to be able to take appropriate action to respond to them. Policy-makers and their stakeholders also need to be empowered to take advantage of opportunities that global change will present for Scotland and the Scottish people, communities and industries.

The interactions between climate, trade and demographic changes and the potentially conflicting pressures presented by these can lead to complexities that are particularly challenging for policy makers to address. The science relating to this theme will build an evidence base of biological, ecological, social and economic processes and how they interact at a local level to respond to, and benefit from, such external pressures.

The main policy challenges within this theme relate to Climate Change and Global Trade and related changes. Science needs to address the question of how Scotland can identify the major risks/opportunities and develop and adopt strategies to manage/exploit them. Associated with all of the examples identified above is a requirement to generate policy options that utilise an understanding of societal attitudes and awareness and, wherever possible, capitalise on these to achieve successful and positive outcomes.

Environmental Change: The wider environment in which we live undergoes a continual process of change and evolution. However it is recognised that the rate of potentially damaging change is increasing mainly due to greater pressure from a wide range of human activities. Our global environmental assets provide the world's population with very many essential products and services including food, minerals and other primary products, water, clean air, energy. Ensuring that irreversible loss of such assets is avoided is an important context for policy development, implementation and regulation. Scotland contains a number of fragile yet important environmental landscapes and habitats and science has a major role to play in

providing the knowledge and understanding that will protect these assets from external and far reaching effects while allowing effective and efficient use of them. Scotland also can play a role in demonstrating to others the importance of careful stewardship of environmental assets for the greater good.

It is now widely acknowledged that man-made climate change is a reality and that some potentially harmful impacts are inevitable. It is within this context that Scotland is seeking to be a world leader in facing up to the challenge of mitigating climate change through setting ambitious emissions reduction targets. Scotland also wants to embrace exciting new opportunities to create wealth and economic growth through opportunities to develop new technologies such as renewable energy.

Coupled with strategies to reduce emissions, the Government is adopting a suite of mitigation and adaptation measures to combat what are perceived to be the greatest risks for Scotland (for more detail see: http://www.scotland.gov.uk/Publications/2009/06/18103720/0; http://www.scotland.gov.uk/Publications/2009/03/06084507/0)

Science has a major role in contributing to the evidence that can help shape and refine these responses. Beyond simply measuring and observing changes this requires the development of tools that enable us to identify the greatest risks and where priority action should be targeted for maximum impact. Theories and methodologies from 'futures' thinking should inform our research as we apply science to our long term policy scenarios. A deeper understanding of the issues will be required if we are to ensure that we do not take actions that either exacerbate problems or generate new ones.

Improved confidence that science can forecast the impacts and provide the tools and technologies to cope with these will strengthen the ability of government to constructively engage with the public and private sectors to promote joint working and ultimately deliver outcomes of individual and collective benefit. One example of Scotland's ability to meet the challenge of climate change is through the potential for marine renewable energy technologies to be of significant benefit to Scotland (see report at http://www.scotland.gov.uk/News/Releases/2009/08/26102551).

Globalisation, Trade & Demographics: Scotland has to be in a position to respond to economic, financial, social and scientific challenges generated beyond its borders. Trade issues, for example, can generate plant or animal disease threats which threaten Scotland's economic development or present opportunities to enhance exports of our produce. The availability of tools that enable Scotland to quickly identify these and to understand how such external challenges will impact on our communities and industries and to allow them to react proportionately are essential. Issues are likely to be complex and multi-faceted, consequently the tools required are likely to draw on and integrate expertise from a wide and diverse knowledge base.

Scotland also needs to position itself to take advantages of opportunities arising from new boundaries and demands associated with changes in global trade, international regulation and marketing, travel and demographic movement. Scotland's knowledge and expertise base in many areas including agriculture, aquaculture, fishing, forestry,

tourism and the like has much to contribute to challenges across the world, and an outward looking approach to providing products and processes could return many benefits to Scotland.

There will also be a need to maintain a watching brief on technologies that do not currently contribute to policy choices in Scotland but may be making significant contributions at a global level, e.g. nuclear energy generation, genetic modification of plants and animals and cloning.

Theme 2: Optimising the Potential of Scotland's Natural Assets

This theme reflects the need for Scotland to build a sustainable future in which economic and social activity is balanced with protecting and nurturing all of Scotland's valuable assets (its people, its land and its seas). Scotland's land, freshwater and marine resources have the potential to contribute to a range of objectives varying from carbon storage to food production. Developments and planning for capturing this potential through changing the balance of uses of our resources has consequences both foreseen and unforeseen.

The science in this theme will provide the data and 'tools' to enable decision makers to make choices which are better informed about the consequences of their actions. Knowledge and understanding both of the physical elements and structures and of the social and economic behaviours and interactions that exist within economic, social and environmental communities is needed to enable them all to develop in a sustainable way.

Assigning economic and societal value to our natural assets to inform policy and planning decisions*:* Valuing Scotland's landscape and other natural assets represent an integral part of our nation's identity. They provide the basis of the livelihoods of our farmers and fishermen, provide the habitat for our biodiversity, underpin some of our most iconic industries, e.g. whisky, and contribute to the ongoing success of tourism. Yet it is often difficult to assign value to such assets with the attendant risk that they may be undervalued or taken for granted.

Science can help by both identifying the potential threats to our unique and irreplaceable assets and by providing advice on the practical measures, e.g. through planning, that will reduce these risks.

Protecting Scotland's natural assets (e.g. land, water, biodiversity etc.) for future generations in the face of competing pressures and threats: It is important to ensure that our natural assets are not irreversibly compromised by the pressures we place upon them. An improved understanding of the capacity and resilience of land, marine and freshwater to provide services (e.g. support for ecosystems) can increase our confidence that they are sustainable. The identification of options, including efficiency gains, that relieve pressures currently placed on these finite assets, e.g. water usage, waste minimisation, reduction and recycling are particularly important.

Issues surrounding the sustainable use of our natural assets are particularly complex. If policy decisions are to be made with greater awareness and more transparent acknowledgement of the trade offs they represent between competing demands, e.g. agriculture, forestry and recreational access for land use, then information will need to be drawn from a diversity of sources and from a range of scientific disciplines. Opportunities that deliver 'win win' outcomes for multiple sectors are particularly highly prized.

Improving Scotland's economic and environmental performance: Science is rooted in innovation and it routinely generates new ideas and opportunities for commercial development. It can also make a much broader 'public good' contribution to reducing wasteful consumption, improving the efficiency of production and reducing costly or harmful emissions. Science that delivers commercial opportunities while at the same time delivering these wider economical, environmental and social benefits is highly valued (e.g. in the areas of agricultural production, energy generation, waste reduction and recycling and land use).

Understanding the mechanisms which successfully deliver sustainable growth for Scotland from its rich land, sea and human resources is a key challenge for integrated and applied science.

Ensuring that Scottish based food production contributes positively to the health and wellbeing of Scotland's people: Science has the ability to generate the hard facts and evidence that can shed light on many of the specific questions embedded within this broad policy issue. At the individual and household level, contributions could include a better understanding of the connections between food, diet and affordability, encouraging healthy eating choices, wellbeing, and reducing food waste.

At the broader level there is potential to inform policy on how food production can be more successful in delivering healthy products, promote wellbeing, meet societal expectations for animal welfare and make further contributions to reducing risks to public health.

Making a contribution towards reducing the levels of inequality and disadvantage amongst Scotland's people: Reducing the social inequalities between and within urban and rural communities represents a long term challenge for Government, where good physical environment is understood to contribute to reducing health inequalities in Scotland, we need to understand the 'value' of 'good places' and the full societal 'costs' of places of poor environmental quality. Changing societal attitudes and expectations generate a requirement to assess levels of deprivation, assign value to the contribution of greenspace and provide information to inform aspects of infrastructure planning including water, waste and transport.

Stimulating innovation to find novel solutions for uniquely Scottish challenges: Science and technology have the potential to provide technical solutions that are both socially and environmentally acceptable. For example, Scotland is well placed and committed to meet a greater proportion of its energy requirements from renewable sources. However, bottlenecks and environmental

trade offs associated with delivering this objective need to be addressed and overcome.

Waste reduction is also of high priority. Productive uses for waste and by products need to be developed and pursued, e.g. anaerobic digestion of agricultural waste to generate energy for local communities. This is especially the case where it can be done in partnership with the private sector and make a contribution to sustainable economic growth.

Theme 3: Support for Nationally Important Rural, Environmental and Marine Capability and Resource

This arises from an increasing awareness across the UK of the need for facilities, intellectual expertise and long-term data-sets to be available to support current and future strategic needs and enable governments to respond to new threats and challenges such as climate or environmental change, epidemics of infectious diseases in plants and animals and environmental disasters.

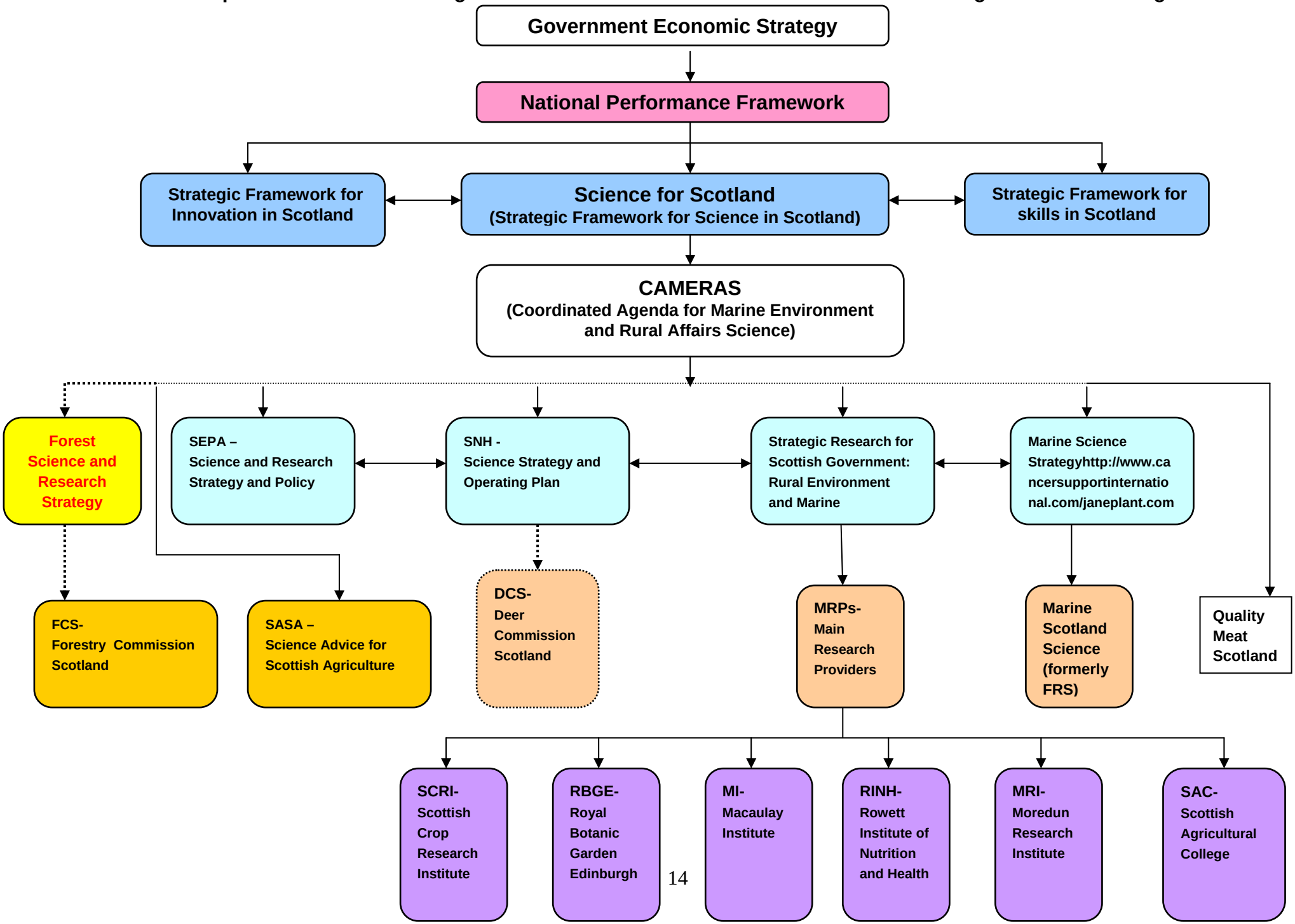
The Scottish Government provides significant funding to its statutory and regulatory delivery partners to carry out scientific research, monitoring and surveillance activities to meet Marine, Environmental and Rural needs. The Government also funds additional national capability activities in Marine, Environmental and Rural areas (e.g. living collections, databases) through research programmes commissioned from its Main Research Providers (MRPs)[4], Marine Scotland Science, through its Contract Research Fund and other funding streams for specific services. There is recognition in both the academic and policy communities that a clear funding model to maintain (and where necessary enhance) these national capability resources (physical and intellectual) would be beneficial to the Scottish Government's ability to be resilient in the face of external challenges.

As each of the CAMERAS partners maintains and supports different capabilities and resources, there is a need for effective dialogue and coordination between them. The partners will take forward ongoing reviews of capabilities and resources, identifying where there are synergies and mutual interests in such facilities and expertise. Protection of valuable resources for long term use and developing them to meet changing needs will be an important aspect of the review process.

I think we need to replace fig 2 with the new CAMERAS diagram while still including the top bit about Science for Scotland etc

[4] Main Research Providers (MRPs) are: Moredun Research Institute; Macaulay Institute; Scottish Agricultural College; Scottish Crop Research Institute; University of Aberdeen Rowett Institute of Nutrition and Health; Royal Botanic Garden Edinburgh

ANNEX 1 Relationship of this Co-ordinated Agenda to other Scottish Government initiatives and organisational strategies



ANNEX 2

National Performance Framework – areas where Marine, Environment, Rural, and related policies are relevant.

(for further details see: http://www.scotland.gov.uk/About/scotPerforms)**.**

<table>
<tr><th colspan="6">NATIONAL PERFORMANCE FRAMEWORK</th></tr>
<tr><th></th><th>Wealthier & Fairer</th><th>Smarter</th><th>Healthier</th><th>Safer & Stronger</th><th>Greener</th></tr>
<tr><td>National Outcomes (relevant examples)</td><td colspan="5">• We are better educated, more skilled and more successful, renowned for our research and innovation
• We have strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others
• We value and enjoy our built and natural environment and protect it and enhance it for future generations
• We reduce the local and global environmental impact of our consumption and production</td></tr>
<tr><td>National Indicators and Targets (relevant examples)</td><td colspan="5">o Reduce overall ecological footprint
o Increase to 70% key commercial fish stocks at full reproductive capacity and harvested sustainably by 2015
o Increase to 95% the proportion of protected nature sites in favourable condition
o Biodiversity: Increase the index of abundance of terrestrial breeding birds
o Reduce the rate of increase in the proportion of children with their Body Mass Index outwith a healthy range by 2018
o Increase healthy life expectancy at birth in the most deprived areas
o Reduce mortality from coronary heart disease among the under 75s in deprived areas
o Increase the proportion of adults making one or more visits to the outdoors per week
o Reduce the number of Scottish public bodies by 25% by 2011
o 50% of electricity generated in Scotland to come from renewable resources by 2020 (interim target of 31% by 2011)
o Reduce to 1.32 million tonnes of waste sent to landfill by 2010
o Improve knowledge transfer from research activity in universities
o Improve people’s perceptions, attitudes and awareness of Scotland’s reputation</td></tr>
</table>

ANNEX 3

WEB REFERENCES

1. Government Economic Strategy (GES)
   http://www.scotland.gov.uk/Topics/Economy
2. National Performance Framework
   http://www.scotland.gov.uk/About/scotPerforms
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    http://www.scotland.gov.uk/Publications/2008/01/17154036/0

ANNEX 4

LIST OF ACRONYMS

CAMERAS	Co-ordinated Agenda for Marine, Environment and Rural Affairs Science
DCS	Deer Commission for Scotland
EBRC	Edinburgh Bioscience Research Centre
FRS	Fisheries Research Services
GES	Government Economic Strategy
LWEC	Living With Environmental Change
NDPB	Non-Departmental Public Bodies
MSS	Marine Scotland Science
MRPs	Main Research Providers
MRI	Moredun Research Institute
MLURI	Macaulay Land Use Research Institute
RAE	Rural Affairs and Environment
RBGE	Royal Botanic Garden Edinburgh
RINH	Rowett Institute of Nutrition and Health
SASA	Science Advice for Scottish Agriculture
SAC	Scottish Agriculture College
SCRI	Scottish Crop Research Institute
SEARS	Scotland's Environment and Rural Services
SEERAD	Scottish Executive Environment and Rural Affairs Department
SNH	Scottish Natural Heritage
SEPA	Scottish Environment Protection Agency
SSAP	Scottish Science Advisory Panel