

Collaborative Waste, Resources & Sustainable Consumption Evidence Programme

Programme Description
June 2011

Foreword

"We are delighted to introduce this new programme as a collaborative initiative between Defra, the Environment Agency, Waste & Resources Action Programme (WRAP), the Welsh Government and the Department of Energy & Climate Change.

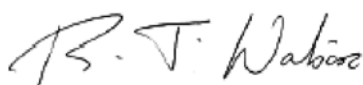
This new collaboration responds to the challenge of examining our priorities and making best use of existing knowledge, as well as being flexible, efficient and creative in how we address new evidence needs now emerging across our collective programmes. The big challenges we collectively face on improving resource use, addressing sustainable consumption and managing our waste efficiently, can best be addressed with sound and up to date evidence meeting all our needs across the delivery network.

Working with fewer resources will require evidence specialists not only in Defra but amongst the partner organisations of this new programme to work together to ensure that the best evidence is made available to underpin policy development and implementation. This will take into account a shared responsibility for procuring the most appropriate studies, delivering value for money and utilising shared knowledge and expertise where appropriate.

We believe the new joint programme will uncover fresh and improved ways of exploiting our combined analytical resources and skills to meet the many challenges across the waste, resource efficiency and sustainable consumption activities of the Departments and partner organisations."



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1. Vision & Scope

This programme provides a platform for evidence-based policy-making, and for selecting and implementing the most appropriate interventions for use in the delivery of policies, on **waste, resource management and sustainable consumption** in England and Wales. It provides evidence to support the needs of the Government Departments for Environment, Food and Rural Affairs (Defra) and Energy & Climate Change (DECC); the Welsh Government; and associated delivery bodies, the Environment Agency for England and Wales, and WRAP (Waste & Resources Action Programme).

This programme formalises and enhances the current collaborative working arrangements across

organisations by creating a new programme management framework to allow coordination and partnership-working. This will help us achieve efficiencies in the planning, commissioning and use of evidence.

Evidence includes reliable and accurate information that we can use to inform sound decisions in developing and implementing policy¹. It includes economics, statistics, natural science information, social research, operational research, engineering, analysis, advice, monitoring and surveillance. Close alignment of evidence development and provision for policy requirements will continue to be central to the success of the programme.

2. Objectives

Through this programme, we will:

- Better align policy and delivery objectives with requirements for evidence needs and evidence provision, responding to changing requirements arising as policy develops e.g. following the Governments Review of Waste Policies.
- Co-ordinate the development of evidence needs and the process of evidence gathering on waste, resource management and sustainable consumption across Defra, DECC, the Welsh Government, the Environment Agency and WRAP.
- Use programme management processes to identify synergies and opportunities for collaborative funding of evidence.
- Ensure that evidence-gathering is carried out through the provision of leading-edge science and the development of good practice; making use of external advice as appropriate via Evidence Advisory Panels & Defra's Science Advisory Council.
- Maximise value for money when commissioning new evidence, through reduced duplication of effort, identifying critical gaps, improving communication between the main evidence funders, and making best use of skills and existing knowledge.
- Improve the sharing of data and information generated as a consequence of our regulatory and evidence activities.

¹ Defra 'Evidence Investment Strategy (EIS): 2010-2013 and beyond' <http://www.defra.gov.uk/publications/files/pb13471-eis-110427.pdf>

3. Programme Partners

The programme brings together evidence activities for the waste, resource management and sustainable consumption functions funded by Defra, the Welsh Government, the Environment Agency and WRAP. It also provides a line of sight to relevant evidence developed by DECC and cross-cutting areas of Defra (for example, statistics, social research, economics and food), to ensure adequate coordination.

3.1 Department for Environment Food and Rural Affairs (Defra)

Defra is responsible for developing policy and legislation, working with others to deliver three key priorities laid out in the Structural Reform Plan²:

1. Support and develop British farming and encourage sustainable food production
2. Help to enhance the environment and biodiversity to improve quality of life
3. Support a strong and sustainable green economy, resilient to climate change

Defra's policy on waste, resource management and sustainable consumption in priority 3 applies to England only but the department works closely with the devolved administrations in Wales, Scotland and Northern Ireland. Defra is responsible for negotiating and implementing EU legislation on behalf of the UK, including: the Waste Framework Directive (2008/98/EC), Directive on Packaging and Packaging waste (94/62/EC), and the Landfill Directive (1999/31/EC).

The future policy agenda for waste is set by the Government's Review of Waste Policies (published in June 2011). This will support our aim to move towards a zero waste economy, and improve our resilience to climate change. The Green Economy policy agenda will also be influenced by the Government's Review of Waste Policies through consideration of initiatives such as reuse & recycling, which fulfill the joint priorities of waste prevention and resource efficiency. The Natural Environment White Paper and EU initiatives such as the Resource Efficiency Flagship will also be key in guiding Green Economy policies.

Defra's 'Evidence Investment Strategy (EIS): 2010-2013 and beyond'³ sets out the department's plans and approaches to evidence gathering in the context of increasingly complex and interlinked issues, in a world where public expenditure is under pressure and value for money increasingly scrutinised. The EIS emphasises the evidence-based policy making principles embraced by the Department, *"to ensure that decisions are based on sound science and evidence"*.

The EIS highlighted the need to increase the level of partnership working across our evidence programmes, in order to share investments, knowledge and expertise. To inform sound, evidence-based, policy-making, Defra needs access to the right information and to have confidence in its quality and robustness. The evidence base must be both broad enough to develop a wide range of policy options; and detailed enough for those options to stand up to intense scrutiny. Understanding existing information and using targeted investment to fill critical gaps, with an obvious policy-focus, is therefore key.

² <http://engage.defra.gov.uk/reform-plan/>

³ <http://www.defra.gov.uk/publications/2011/04/27/pb13471-evidence-investment-strategy/>

Defra's evidence-based approach aims to demonstrate a clear line of sight between horizon scanning, strategy, policy development, and implementation/delivery. To achieve this, the department uses a range of disciplines which include: scientific, economic and social research, statistical studies, and data gathering and monitoring activities.

3.2 Welsh Government

The Welsh Government is the devolved government for Wales. It is one of only a few governments in the world to have a legal duty to promote sustainable development. It has responsibility for making policy and laws on many day-to-day issues including health, education and environment.

Responsibility for waste, resources, and sustainable consumption and production policy lies with the Department for Environment and Sustainable Development. The department is responsible for delivering on the commitment outlined in the sustainable development scheme, One Wales, One Planet⁴, to make sustainable development the 'central organising principle' for the Welsh Government.

Towards Zero Waste⁵, the overarching Waste Strategy for Wales, describes the following outcomes that the Welsh Government, in conjunction with its partners, is aiming to achieve:

- A sustainable environment, where the impact of waste in Wales is reduced to within our environmental limits by 2050. This means that waste production and management will be at 'One Planet' levels.
- A prosperous society, with a sustainable, resource efficient economy.
- A fair and just society, in which all citizens can achieve their full human potential and contribute to the wellbeing of Wales through actions on waste prevention, reuse and recycling.

The department has strong links with relevant UK Government departments and the other devolved administrations in areas of joint interest, and aims to work collaboratively where it is advantageous to do so.

The statutory duty for Sustainable Development requires social, economic and environmental evidence to be considered in the round. Timely, reliable evidence is therefore needed so that policies can stand up to scrutiny. This evidence may come in a variety of forms and from a range of different sources, but it must be of good quality and without bias. The department calls on the same range of evidence sources and disciplines as Defra, but its needs may focus on different policy areas.

As the Defra evidence budget covers England and Wales, this programme will strengthen existing governance arrangements between the Welsh Government and Defra on both a strategic and operational level to ensure that Welsh needs are reflected in research programmes.

3.3 Environment Agency

The Environment Agency for England and Wales is an Executive Non-departmental Public Body responsible to the Secretary of State for Environment, Food and Rural Affairs (main sponsor) and a Welsh Government Sponsored Body responsible to the Welsh Government. Its principal aims are to protect and improve the environment, and to promote sustainable development. It plays a central role in delivering the environmental priorities of central government and the Welsh Government, ensuring that all its actions are underpinned by sound evidence.

The Environment Agency regulates waste related activities to prevent damage to the environment and harm to public health. It does this by working with a wide range of organisations that use resources and produce or manage waste, as well

⁴ <http://wales.gov.uk/topics/sustainabledevelopment/publications/onewalesoneplanet/?lang=en>

⁵ http://wales.gov.uk/topics/environmentcountryside/epq/waste_recycling/publication/towardszero/?lang=en

as by tackling waste crime.

The Environment Agency also has a specific remit around water resources and reducing the carbon impacts of business; the latter through its role in administering the European Union (EU) Emissions Trading Scheme and the Carbon Reduction Commitment (CRC).

The Agency has a role in:

- advising Government on environmental issues, based on their experience as an environmental regulator and operator;
- providing advice to businesses - the Environment Agency helps businesses meet their legal obligations on waste; and
- dealing proportionately with waste crime.

In summary, the Environment Agency is concerned with regulatory intervention to drive the better use of resources and more effective management of waste. The Agency relies upon a sound evidence base in order to support interventions. This evidence base consists of applied research (including social science), economic analysis and data gathering from permits and monitoring programmes.

3.4 WRAP (Waste & Resources Action Programme)

WRAP's vision is a world without waste, where resources are used sustainably. To help achieve this vision, WRAP's mission is to help individuals and businesses reap the benefits of reducing waste, developing sustainable products and using resources in an efficient way. Established as a not-for-profit company in 2000, WRAP is backed by government funding from England, Northern Ireland, Scotland, Wales and the European Union.

WRAP has two priorities:

- minimising resource use in products and buildings; and
- diverting priority materials from landfill.

WRAP's ambitions are that:

- Better design and more informed consumption

will help us all waste as little as possible in the first place.

- We recycle, repair and reuse as much of our waste as possible, wherever we are.
- We recover as much value as we can from the waste we collect.
- The less we waste, and the longer we can keep resources moving round the economy, the more money we save and the less the demand on ever-scarcer natural resources.

Find out more about WRAP's work, priorities and areas for action at www.wrap.org.uk/businessplan

3.5 Department of Energy & Climate Change (DECC)

The four priorities of the Department of Energy and Climate Change (DECC) are:

- Save energy with the Green Deal and support vulnerable consumers.
- Deliver secure energy on the way to a low carbon energy future.
- Drive ambitious action on climate change at home and abroad.
- Manage our energy legacy responsibly and cost-effectively.

Waste, resource management and sustainable consumption are critical factors in all four of these priorities. Using resources in a more sustainable manner will enable us to waste less energy. Resource-use impacts on emissions of GHGs in both the UK, and overseas and we need to tackle unsustainable consumption patterns, both in the UK, and globally, if we are to achieve our climate goals. Energy from renewable resources, including anaerobic digestion, biomass and biofuels, will help us deliver secure, low-carbon energy.

DECC cannot deliver these priorities without working with others, particularly Defra, to ensure that a systems approach to energy and climate change issues is pursued. This means recognising the individual elements of the energy system (e.g. electricity supply, grids, energy consumption, oil

and gas production etc.) are interlinked and that to deliver climate mitigation policy we need to understand not only links between the different parts of the energy system but also the drivers for, and mitigation of, emissions from waste, agriculture and transport.

To understand all these links, and develop cross-governmental policy that effectively tackles emissions a detailed, consistent and

comprehensive evidence base is needed. An Evidence Team has been established in DECC to ensure that Policy Programmes are underpinned by appropriate evidence, and that the evidence base is 'joined up', using consistent assumptions, minimising overlaps and maximising synergies between different Programmes.

4. Evidence Programme Thematic Structure

This evidence programme will be managed on a thematic basis to ensure that evidence from the different partner organisations is brought together around topics. Evidence will be provided to meet policy and delivery requirements under the following broadly defined themes:

4.1 Data and Indicators Theme

The aim of this theme is to understand what data are available and how to make better use of them. It cuts across other themes in the programme in that it can support and be supported by them. The theme includes surveys (except where collected specifically in support of other themes), operational data, Environment Agency data derived from its regulatory and other responsibilities, the development and use of indicators, corporate reporting, and data-mining, as well as other mechanisms that generate data.

This should include information on impacts on the environment of legitimate waste management activity and waste crime; and will also include the collection and analysis of national and global data detailing the impacts of UK consumption. This theme will develop the means to apply consistency in data recording to enable more applications of high level data; and will connect to existing data-sharing and cataloguing initiatives (e.g. UK Environmental Observatory Framework⁶ etc.). This theme includes methodological work to develop new indicators and valuation of impacts and interventions, including social impacts⁷. Research will conform to the relevant codes of practice and guidance (e.g. Code of Practice for Official Statistics⁸, HMT Guidance for Evaluation⁹) as appropriate, and where applicable be published as Official Statistics. Synthesis of data and information from different sources will provide new intelligence on waste and consumption.

⁶ <http://www.ukeof.org.uk/>

⁷ Social Impacts Taskforce's framework <http://www.defra.gov.uk/publications/files/pb13467-social-impacts-wellbeing-110403.pdf>

⁸ <http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html>

⁹ http://www.hm-treasury.gov.uk/data_magentabook_index.htm

4.2 Products Theme

The purpose of this theme is to meet evidence requirements related to product policy, for example in establishing minimum standards for products such as energy efficiency or recycled content, end-of-waste criteria (i.e. when waste becomes a product) and interventions to improve the impacts of products such as the Eco-design Directive. It also covers evidence on identifying and improving the overall life-cycle impacts of products and product packaging, through product design, encouragement of product reuse and recycling, and Producer Responsibility. This theme includes work on consumer and business behaviours with relation to products as well as evidence-gathering related to design to improve waste prevention, recyclability and reusability of products.

4.3 Resource Efficiency Theme

This theme includes evidence that underpins work with business to improve its operations, with a view to conserving resources, including energy, water, eco-system services, greenhouse gas emissions and raw materials. It also covers any evidence used to underpin new or revised legislation and regulation.

The cross-cutting nature of work under this theme is reflected by close coordination with other areas of policy (e.g. Food Policy). Work under this theme will include making the case for better resource management (economic & risk analysis, waste prevention etc); new business models and processes; sector specific work; analysis of resource trends; resource-specific challenges; and the waste minimisation aspects of permitting under Pollution Prevention and Control (PPC). Some of these evidence needs will require understanding of consumer & business behaviours in relation to resource efficiency and management, including on waste prevention. This theme also makes a distinction between water efficiency as part of land management (for example as part of domestic ecosystems management), which falls outside of this

programme, and water efficiency by industry in a corporate and supply chain context, which is included in this theme.

4.4 Waste Collection and Sorting Theme

This theme will cover evidence on the collection, sorting and preparation for reuse of packaging, products and materials (including food) once they have entered the waste stream, and will cover all waste streams. The cross-cutting nature of this work is reflected by close coordination with other areas of policy (e.g. Food Policy and Environmental Behaviours). It therefore excludes evidence relating to waste prevention and direct re-use (covered by Themes 2 and 3), but covers other work relating to the development of the recycles market. Work captured under this theme will include attitudinal, economic and behavioural evidence.

4.5 Waste Treatment and Technologies Theme

This theme covers evidence on all methods of waste treatment (recovery and disposal) relating to design and choice of treatment. It will therefore include energy from waste, anaerobic digestion, landfill, application of materials to land and their efficiency and environmental impacts.

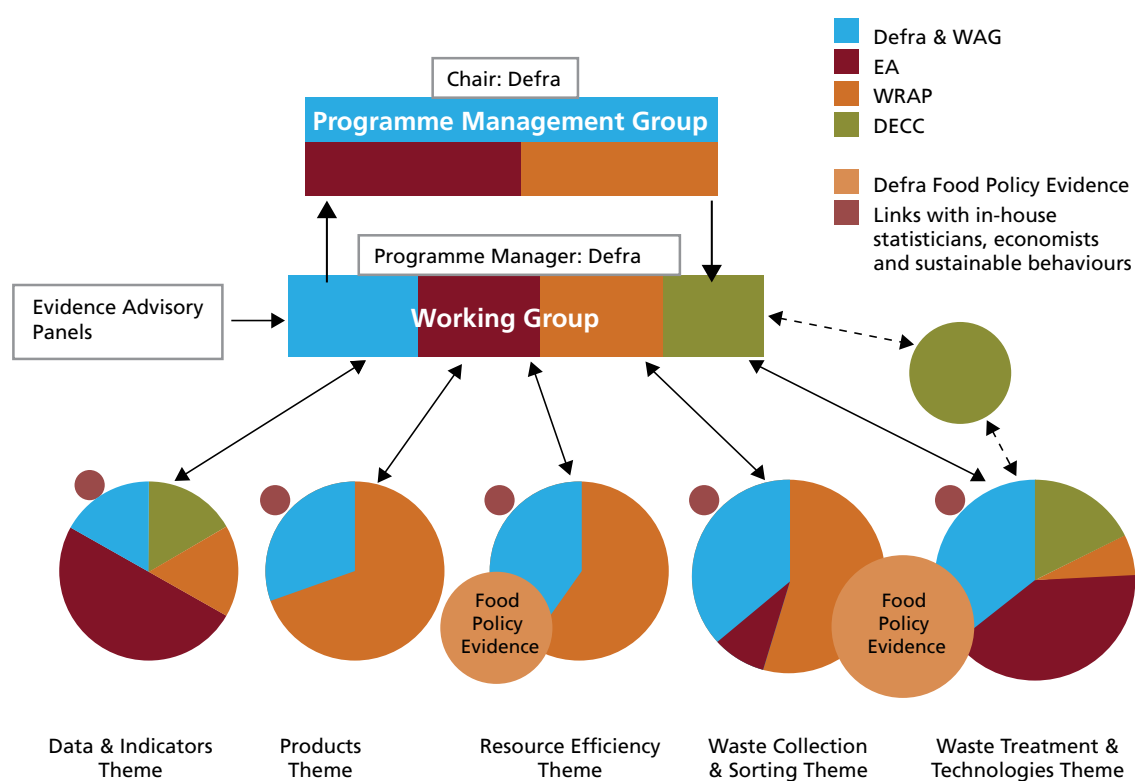
Work under this theme will also cover waste exports and imports, hazardous wastes, evidence to support interventions (regulatory and otherwise), and the consequences of waste management, across waste streams. This theme will also capture evidence required on emerging issues in waste treatment practices, so that it is possible to take an evidence-based view on the potential impact and regulatory requirements of new technologies in the marketplace. This may also include monitoring the balance of differing technologies across the waste and resources market, economics of the waste industry, shifts in trends and their consequences, to highlight emerging risks to the environment.

5. Governance

Preserving the funding base of each partner organisation, the governance framework developed for this programme encourages liaison and coordination of the evidence work through a formal programme structure. The programme structure comprises a Programme Working Group overseeing the work of the themes, steered by a Programme Management Group. The roles of the groups are explained in more detail below (section 5.1).

Figure 1 illustrates both the governance framework and the interface between this programme and others, such as Food Evidence¹⁰; and that with in-house specialists on economics, statistics and environmental behaviours. The levels of organisational involvement within the themes demonstrated in Figure 1 are *indicative*.

Figure 1: Programme Management Structure



¹⁰ The Food Evidence Programme covers the whole food chain (post-farmgate focus) and address challenges around competitiveness and increasing resource efficiency (energy, water, waste), improving raw material quality, reducing environmental and social impacts of food production across the supply chain and consumption, and identifying risks to the food supply. It also addresses how food can be produced and sold sustainably, including understanding behaviours and practices across the food chain, consumer confidence in food and society's engagement with food production and sustainable healthy diets.

5.1 Groups within the programme management structure

The **Programme Management Group** is composed of users of evidence on waste, resources and sustainable consumption at a senior level within the programme partners. It is responsible for setting the overall direction of the programme, ensuring that it acts to support and inform Government policy and delivery goals. It also provides high-level endorsement for the programme rationale and objectives. This group reviews and approves the content of the programme on an annual basis and takes a longer-term view of evidence requirements.

The **Programme Working Group** is responsible for delivery of the programme and providing day to day management. It comprises staff working on evidence representing the programme partners; experts leading individual themes; and

the Programme Manager. This group identifies and consolidates evidence requirements in close liaison with policy leads, making the best use of opportunities to collaborate and use skills in each partner organisation to best effect. The Programme Working Group acts as a conduit for information on both development and delivery of evidence to the Programme Management Group.

The programme is supported by **Evidence Advisory Panels** made up of external experts from academia, research councils, key trade associations and other nations, as well as representation from complementary programmes such as Living With Environmental Change. They set the context for the programme by identifying broader research needs and providing information on research being commissioned or carried out beyond the programme. They also help shape the longer-term programme, within the boundaries provided by the direction of policy and delivery.

6. Planning and Delivery - Defining the evidence portfolio

The commissioning of new evidence operates under an annual planning cycle, against the backdrop of a longer term view within a five¹¹ year programme. This longer term view is supported by horizon-scanning, which identifies both potential future policy challenges; and more easily foreseen requirements, such as the periodic review of regulation. Recently developed scenarios for the future of waste will be refreshed as new evidence becomes available and complemented by horizon-scanning concentrating 'upstream' of waste. Defra's Science Advisory Council report on waste and sustainable consumption evidence and our Evidence Advisory Panels have a key role in providing the academic foresight to identify

evidence required to meet future policy challenges highlighted through this forecasting.

The annual cycle aligns the evidence planning processes across the partner organisations, for the start of the financial year. Having identified business requirements for evidence, the Programme Working Group develops the collaborative programme portfolio for the year, which is agreed by the Programme Management Group. There is, of course, scope to react to emerging requirements in-year. The flow of information up to the Programme Management Group ensures that periodic updates on new work and the outputs of evidence projects, maximises the use of evidence across partner organisations.

¹¹ Subject to policy refresh timescales.

7. Communications

Communications, internal and external, are an important element of the programme. Reports from evidence projects will be published using the usual publication channels¹² of the programme partners, developing joint information releases and other, targeted dissemination as appropriate to each project.

Where appropriate, outputs will be published as Official Statistics, and conform to the relevant code of practice. Social research will comply with the Government Social Research (GSR) Publication Guidance¹³. Following each financial year, an annual report will be published providing information on the outputs of the programme and highlighting key outcomes.

8. Further information

For more information about the programme, please contact wasteresearch@defra.gsi.gov.uk.

¹² www.randd.defra.gov.uk
www.defra.gov.uk/statistics/environment
www.wrap.org.uk/wrap_corporate/publications/index.html
www.environment-agency.gov.uk/research/library/default.aspx
<http://wales.gov.uk/about/aboutresearch/researchbytopic/>
www.decc.gov.uk

¹³ http://www.civilservice.gov.uk/Assets/GSR%20Publication%20Guidance%20-%202029%20Jan%202010_tcm6-35775.pdf