



CESME

Action Plan – Wales

October 2018

CESME Action Plan – Wales

Introduction – Policy instrument and target

The Action plan aims to impact: “Other regional development policy instrument.”

The name of the principal policy instrument to be impacted is:

- Priority Axis 2: SME Competitiveness: Specific Objective 2.4 of the ERDF Operational Programme for Operational Programme for West Wales and the Valleys (ERDF) and East Wales (ERDF): To increase the growth of those SMEs with growth potential, in particular through accessing new markets (both domestic and international). Types of action eligible to be supported might include the following areas of support:
 - Tailored support for economically important and growth businesses, including Social Enterprises, to address barriers to improving productivity, for example: sales, marketing, product development, pricing and risk management
 - Tailored advice and business support to address barriers to growth, for example: HR issues, strategy, marketing, business models, systems, risk management, resource efficiency, operational improvement, product development, supply chains and distribution.
 - Capacity building, advice, guidance and support to address barriers for Welsh businesses to access procurement opportunities (including internationally)
 - Support for resource efficiency and energy efficiency measures within SMEs, including addressing barriers to related investment, supporting behavioural change, supporting the diffusion of technology and innovation and encouraging SMEs to undertake energy audits

A second policy instrument impacted is:

- Priority Axis 1: Research and Innovation: Specific Objective 1.2 of the ERDF Operational Programme for Operational Programme for West Wales and the Valleys (ERDF) and East Wales (ERDF);
 - paragraph 25: ‘To increase the successful translation of research and innovation processes into commercial products, processes and services, in particular through improved technology transfer from HEIs.’

In addition, ‘Innovation Wales’, the **regional innovation strategy for smart specialisation (RIS3)** for Wales, includes an aim to reduce the amount and type of material used in production and addresses whole-lifecycle issues such as reuse and re-manufacture and that these activities often incorporate the principles and concepts of eco-innovation and eco-design. It identifies how eco-innovation can be used to target the reduction in the use of natural resources in a process. The strategy identifies that an eco-design approach may lead to solutions both contributing to business resilience and economic growth.

The CESME Target for Wales is: 5 businesses cooperating with supported research institutions on circular economy/eco innovation process implementation.

Actions in Wales:

Action 1: Work with higher education institutions (HEIs) in Wales to increase their transfer of knowledge on resource efficiency / circular economy to SMEs.

1. Background:

The Ellen MacArthur Foundation report, '*Wales and the Circular Economy: Favourable system conditions and economic opportunities*'¹ commissioned by WRAP Cymru on behalf of the Welsh government, identified the need to promote circular economy innovation to SMEs, and to provide relevant assistance. Wales has very fertile ground when it comes to innovative and forward-looking initiatives on the circular economy. The need to foster innovation was emphasised by many of the partners at the first Inter-Regional CESME meeting in Cardiff on 17-18 May 2016.

The attendees at the November 29th-30th, 2016 Inter-Regional meeting in Bologna identified in the breakout workshop a number of barriers and bridges for a circular economy in SMEs that included the need for support on innovation from the academic sector (HEIs).

The CESME case studies from the other partner regions have been very useful as examples of innovation that could be transferred to Welsh SMEs. The approaches by other partners in terms of innovation and their Smart Specialisation Strategies (eg. the presentation at the Bologna Inter-Regional meeting given by Silvan Bertini, Emilia-Romagna region), have been particularly useful.

Also the set up of, and discussions in, the Wales Local Support Group (LSG) have helped shaped the way forward in terms of delivering this action.

2. The action:

The CESME team in the Waste & Resource Efficiency Division will work with our Department of Economy and Transport innovation team in Welsh Government and with HEIs in Wales to increase the transfer of knowledge on resource efficiency / circular economy to SMEs, building on the new partnership working developed in the LSG and as a result of the CESME project.

Specific actions include:

- i) Carried out a survey of attitudes and awareness of SMEs to the circular economy potentials. This work has been completed (March 2018) and the report has been produced and published².
- ii) Running circular economy workshops for Welsh Government innovation support staff, HEIs and SMEs. So far the following workshops have taken place involving the CESME team:
 - o Welsh Government Department of Economy and Transport Innovation team workshop held on 2nd November 2017 (18 attendees)

¹ <http://www.wrap.org.uk/node/17570>

² <https://cronfa.swan.ac.uk/Record/cronfa40956>

- Swansea University SME workshop held on 11 September 2017 (11 attendees).
- Cardiff University Business School and School of Engineering workshop held on 29 September 2017 (approximately 30 attendees).

The Wales CESME team have offered to run workshops in all of the other Wales HEIs.

- iii) Highlighting opportunities for funding for innovation projects to support SMEs – eg. Horizon 2020, ERDF, Innovate UK, Interreg, UK research council, UK Industrial Strategy Challenge Fund etc.
- iv) Setting up an HEI/academic network on the circular economy (CE) – either virtual or a physical centre of expertise – with the aim of increasing the CE capacity of Welsh HEIs to further support innovation in Welsh SMEs. This includes the development of a directory of academics in Wales working on circular economy related research.

To help deliver this action, Swansea University have decided, with the support of the CESME Wales team, to convene a new pan-Wales Circular Economy Research and Innovation Group (CERIG). An article describing the group has been published here: <http://www.iwa.wales/click/2018/07/arloesedd-economi-gylchol-yng-nghymru-circular-economy-innovation-wales/> The proposed aim of the group is to connect complementary expertise and experiences to facilitate circular economy innovation and research in Wales, achieved through the following objectives:

- Provide a forum to share good practice and facilitate knowledge exchange between academia, business and policy makers.
- Through collaboration, increase circular economy research capacity in Welsh institutions.
- Engage with industry to develop industry led research.
- Provide evidence to inform Government policy and programmes.
- Develop an online forum to facilitate exchange of good practice, funding opportunities, news and events.
- Showcase the network's circular economy outputs internationally, thus supporting the development of international partnerships.
- Collaborate on curriculum development and training.
- Work with the Global Regional Centre of Expertise (RCE) network (acknowledged by the United Nations University) to share learning and good practice at regional, national and international levels.

The inaugural meeting of the group took place on 8 June 2018 and the second meeting took place on 19 September, both hosted at Swansea University's Bay Campus.

3. Players involved:

- Swansea Uni School of Management – survey of SMEs and SME workshops, and 'Regional Centre of Excellence – orbit of interest on the circular economy'.

- Swansea University School of Engineering – working jointly with the School of Management to set up the pan-Wales Research and Innovation Group on the Circular Economy.
- Welsh Government Innovation team (SMART) – promoting circular economy and increasing take up of circular economy innovation projects between SMEs and HEIs
- Cardiff Metropolitan University (Eco-Design / PDR) – LSG member
- Bangor University - Bio-Composites Centre – LSG member
- Cardiff University – School of Engineering – the CESME team presented at an internal circular economy workshop, including staff from other schools (eg. Business).
- Cardiff University – Psychology Department – member of CERIG
- University of Wales Trinity St Davids – member of CERIG
- Aberystwyth University – member of CERIG
- National Procurement Service – promoting innovation in the circular economy through public sector procurement. WRAP Cymru are funded to provide support for circular economy procurement for the public sector in Wales.
- WRAP Cymru – working with SMEs on circular economy innovations.
- Constructing Excellence in Wales – working with SMEs on circular economy innovations.

4. Timeframe:

Action already underway, and growing.

5. Costs:

The costs to raise the CE capacity of HEIs mostly relate to staff time, and to administrative costs for meetings etc. They are likely to be less than £10,000 per year over 2018/19 and 2019/20.

Setting up of CERIG will come at a yet to be determined cost. Options to secure funding are being actively explored.

CE innovation support to businesses will cost according to need, and in accordance with funding sources secured.

6. Funding sources:

- Welsh Government
- Horizon 2020
- ERDF / ESF
- RDP
- Innovate UK

- UK research councils
- UK Industrial Strategy Challenge Fund
- Small Business Research Initiative (SBRI)

Action 2: Utilise public procurement to drive CE growth in Welsh SMEs

1. Background:

There have been various very useful discussions in the CESME Inter-Regional meetings on the role of public procurement in driving innovation in the circular economy, especially with SME suppliers. The development of the Public Health Wales office move case study under the CESME project has proved very useful as an exemplar approach for the remanufacture of office furniture and reuse of office carpet tiles. Examples of resource efficient public procurement in Emilia Romagna region have also been useful.

Also the set up of, and discussions in, the Wales LSG have helped shaped the way forward in terms of delivering this action.

2. The action:

The CESME team in the Waste & Resource Efficiency Division will work with Value Wales (the Welsh Government's procurement policy team) and the National Procurement Service (who set up and manage major public sector procurement framework contracts in Wales) and individual public sector body procurement teams to drive innovation in resource efficient, circular economy, procurement within the public sector in Wales, using the support provided by WRAP Cymru.

Specific actions include:

- i) The 'Better Jobs, Closer to Home' (BJCH) initiative that ensures that the benefits of major investment are recycled back into Welsh communities to support local supply chains and stimulate investment in deprived communities. The BJCH initiative pilots an approach that includes deploying innovative public procurement policy and supports businesses to grow by creating employment and training opportunities in areas of high economic deprivation. Circular economy principles are being embedded into manufacturing where at all possible. Circular economy related public sector procurement projects that are being specifically explored include: outdoor protective clothing; reuse of paint; use of cross laminated timber (derived from waste wood) in construction; and office furniture manufacture. The CESME team have met with the BJCH staff on several occasions to discuss opportunities for a circular economy approach, and to be updated on circular economy projects underway and planned.
- ii) Small Business Research Initiative (SBRI)³ – Launched in Wales in 2013, the SBRI offers businesses - many of which are small and medium sized enterprises (SMEs) - the opportunity to bid for research and development (R&D) funding to

³ <https://www.gov.uk/government/collections/sbri-the-small-business-research-initiative>

develop technology-driven solutions for specific procurement challenges facing the public sector, including circular economy projects. The Wales CESME team have met with the team that run the SBRI, and opportunities to use SBRI for CE related projects are promoted to public sector procurement staff by the CESME team.

- iii) To help embed circular economy and sustainability into procurement policies and practice into public sector organisations, the Welsh Government has funded WRAP Cymru to deliver support programmes to help the sector rethink the way it procures goods and services, delivering a step change in its approach to waste and resource efficiency. Details of the support available can be found at: <http://www.wrapcymru.org.uk/public-sector>

Components of the support programme to the public sector by WRAP Cymru includes:

- **Organisational Support:** Provision of consultancy support to individual public sector organisations and influential bodies such as the National Procurement Service to implement resource efficiency (materials & waste) activities.
- **Supportive Case Study Evidence:** Development of viable pilot projects (this includes looking at cost-effective decarbonisation initiatives and assessing the role of low carbon supply options, and exploring opportunities for procuring more recycled and/or reused materials). Publishing case studies to demonstrate best practice will enable these to act as exemplars for other public sector organisations.
- **Networking Events:** Organising events to showcase organisations that deliver services/ products that work towards meeting the needs of a circular economy and sustainable practices to provide inspiration/example to others.
- **Procurement Frameworks:** Development of frameworks that enable public sector organisations to identify and employ alternative procurement practices embedding principles of circular economy and sustainability.

3. Players involved:

- Value Wales – they develop Welsh Government procurement policies for the public sector in Wales.
- National Procurement Service – they set up and manage major public sector procurement framework contracts in Wales.
- WRAP Cymru – the provision of advice and support for circular economy procurement by the Welsh public sector.
- Welsh public sector procurement teams, including the Welsh Government itself.

4. Timeframe:

On going throughout 2018/19 and 2019/20, and beyond.

5. Costs:

Significant budgets are available within Better Jobs Closer to Home and SBRI, though there is no specific sum ring fenced for circular economy related projects. They will attract funding based on merit.

WRAP Cymru's programme of future work on public sector procurement has yet to be agreed.

6. Funding sources:

- Welsh Government Value Wales / NPS – eg. Better Jobs, Closer to Home project (bringing work back to Wales)
- Welsh Government – grant funding to WRAP Cymru
- UK Government / Innovate UK - SBRI

Action 3: Support/materials/tools/training to engage SMEs on the CE journey / skills / training and to innovate

1. Background:

There have been various very useful discussions in the CESME Inter-Regional meetings on the role of tools, training and other ways to engage SMEs on the circular economy and to stimulate them to innovate. The development of the CESME circular economy tool is particularly relevant.

The attendees at the November 29th-30th, 2016 Inter-Regional meeting in Bologna identified a number of barriers for a circular economy in SMEs that included lack of information/problem in understanding the benefits of a CE approach and education (people are not aware). Bridges (solutions) identified included better tools, education and training.

Also the set up of, and discussions in, the Wales LSG have helped shaped the way forward in terms of delivering this action. Leadership training is particularly important.

In addition, the Interreg funding has allowed the Wales CESME team to engage with the British Standards Institution on the development of BS 8001 Guidance on the circular economy, including becoming members of the BSI Standards Committee developing BS 8001.

2. The action:

The CESME team in the Waste & Resource Efficiency Division will strive to ensure the dissemination and use of advice, support, guidance and tools to help SMEs decide to innovate to reap the benefits of the circular economy. This will include building circular economy into as many leadership training courses as possible, and promoting the use of the BS 8001 standard. This will include working with ERDF

projects already funded under Policy instruments “Priority Axis 2: SME Competitiveness: Specific Objective 2.4” and “Priority Axis 1: Research and Innovation: Specific Objective 1.2” to secure a resource efficiency / circular economy approach where relevant.

Specific actions include:

- i) To embed resource efficiency and a circular economy approach within the work of the Welsh Government’s pan Wales Innovation team, within the Department of Economy and Transport, working closely with businesses and research institutes to support Innovation and Research and Development and commercialisation. They run 3 EU-funded programmes: SMARTCymru; SMARTInnovation; and SMARTExpertise to support and engage with a wide range of SMEs, multi-nationals, Higher Education Institutes and Further Education Institutes. As part of the ERDF funding from Europe (from policy instrument Specific Objective 1.2 of the ERDF Operational Programme for Operational Programme for West Wales and the Valleys (ERDF) and East Wales (ERDF); paragraph 25), via the Welsh European Funding Office (WEFO), the team address WEFOs cross-cutting themes (CCTs) on equal opportunities & gender mainstreaming; sustainable development and tackling poverty & social exclusion, in a way that would be meaningful and lasting to customers.

The team work closely with the CESME team in the Waste and Resource Efficiency Division of the Welsh Government. The Innovation team will include CE/resource efficiency as a subject of constructive dialogue between the team and 1,000s of Welsh businesses over the next 5 years.

- ii) The Welsh Government’s pan Wales Innovation team is in the process of creating something tangible for businesses to measure themselves in regards to sustainability. The online tool that is being developed will allow companies to baseline their current status in regards to areas such as sustainability, circular economy, eco-design, waste reduction, carbon reduction and equality. potential to link this to the CESME Circular Economy Tool Kit and ROI for SMEs will be explored.
- iii) As part of the Welsh Government Innovation Team’s identification of the circular economy as a key area for Innovation and R&D, they approached BSI to examine how they might use BS 8001:2017 Framework for Implementing the Principles of the Circular Economy in Organisations to support their work. BSI designed a series of workshops and masterclasses for their in-house team of Innovation Specialists and for a range of Welsh businesses. The aim of these courses is to use BS 8001 to inform organisations across the country about circular economy principles, and to grow the circular economy in Wales.

There are two components to the course:

- **Part 1: BS 8001 Circular Economy Masterclass for Business:** This one-day course is designed for anyone wishing to gain a thorough rounding in Circular Economy thinking, and has the world’s first Circular Economy standard, BS 8001, at its core. The course is designed to cater for up to 20 individuals; these may be from the Welsh Government’s Innovation team or

from (at most 6*) different businesses seeking to examine the potential opportunities from the Circular economy.

- **Part 2: BS 8001 Maturity Matrix Evaluation and Action Plan Development Workshop:** This one-day focussed activity provides a continuation and development of the learning which took place in Part 1. It is aimed at individual businesses that have identified a need for a deeper understanding of how their organisation could benefit from a Circular Economy approach, and would take place at their premises. Part 2 should be conducted as close to the Part 1 training day as practicable, to maintain the momentum, interest and knowledge gained in Part 1.

The Welsh Government & BSI held a training workshop for the in-house team on “Part 1 - BS 8001 Circular Economy Masterclass for Business” in Newtown on 9 May 2018.

It is planned that Part 1 and Part 2 courses will be offered to businesses in Wales over the rest of 2018/19.

- iv) The ION Leadership programme (Swansea University & Bangor University) being delivered across the West Wales & Valleys regions with support of ESF (WEFO) will include the promotion of circular economy concepts as a key part of leadership, including signposting to the CESME Circular Economy Tool Kit and ROI for SMEs. Also, the Swansea University School of Management’s Developing Innovation Performance (SmartExpertise funded) will develop the knowledge and skills of businesses in Wales who undertake a New Product Development programme. An application to continue the programme beyond October 2018 is in development.
- v) The CESME Wales team supported, and spoke at, the 4TheRegion circular economy seminar held at the Liberty Stadium in Swansea in June 2018 (<https://www.4theregion.com/single-post/2018/07/11/Empowering-Future-Generations---the-start-of-the-journey>). Around 250 delegates and 20 exhibitors attended.
- vi) The CESME Wales team will be recording a video lecture on the circular economy for the new BioInnovation Wales SME training initiative that has received over £3 million of ESF funds to help employers address high level skills shortages in the agri-food and biotech sector. This will be delivered by a partnership between Aberystwyth University and Swansea University. It will target people already working in the sector, offering bespoke qualifications and industry accredited skills tailored to industry needs. This includes technicians, consultants, researchers and managers working in the food and biotechnology supply chain. The initial (January 2019) modules are all focussed on the circular economy as follows:
 - **Sustainable Supply Systems:** The latest ideas to make a business more resilient in an uncertain environment. Covering supply management, data management, logistics, waste reduction and productivity vs efficiency.

- Waste Management Solutions: Describing how the latest waste management strategies can help to turn waste streams into profit; from minimising and recycling to using innovative technology to add value.
 - Membrane Filtration Technologies: Aimed at food processors, farmers and farm advisers, this module will enhance any business with liquid products (e.g. milk) or waste (e.g. slurry) which needs low cost constituent separation.
 - Future Packaging: To cover emerging packaging technologies and materials to help a business meet growing demands from consumers and legislation to reduce packaging throughout the supply chain.
- vii) The CESME Wales team have been advising on the content of a new circular economy undergraduate level course for manufacturing businesses that has received ESF funding. It will be run by the Project Metal team in the School of Engineering in Swansea University.
- viii) The CESME team have engaged with Business Wales (funded through ERDF policy instrument “Priority Axis 2: SME Competitiveness: Specific Objective 2.4” to secure a resource efficiency / circular economy approach, in particular in relation to their ‘Green Growth Pledge’. This will include discussing how CE advice can be provided to businesses in Wales, including through participation of the CESME Wales team in relevant conferences, seminars and workshops.
- ix) The CESME Wales team are planning to raise the awareness of the benefits of a circular economy with the Welsh Government officials and support agencies that work with the food and drink sector in Wales. The CESME Wales team will be speaking about the benefits of a CE to food businesses attending the Zero Waste Conference for Food Centre Wales (<http://www.foodcentrewales.org.uk/>) conference that will take place on 16 October 2018.

3. Players involved:

- Welsh Government – Waste Strategy Branch
- Welsh Government - Innovation team (SMART) – promoting circular economy and increasing take up of circular economy innovation projects between SMEs and HEIs
- Welsh Government – Food Policy team
- Business Wales
- BSI – promoting BS 8001 Circular Economy
- WRAP Cymru – supporting CE innovation across the sectors they support.
- Constructing Excellence in Wales - supporting CE innovation in the construction sector
- Swansea University School of Management
 - Leadership Development, the ION Leading Growth programme will signpost to the SME audit tool

- The Developing Innovation Performance (SmartExpertise funded) will develop the knowledge and skills of businesses in Wales who undertake a New Product Development programme. An application to continue the programme beyond October 2018 is in development.
- Swansea University School of Engineering
- Cardiff Metropolitan University (Eco-Design / PDR)
- Bangor University Bio-Composites Centre.
- Cardiff University – School of Engineering
- Aberystwyth University - Institute of Biological, Environmental and Rural Sciences (IBERS)
- Food Centre Wales

4. Timeframe:

From April 2018 onwards.

5. Costs:

The costs are borne within funded programmes, and are drawn down for circular economy related projects and activity, based on merit.

6. Funding sources:

- ERDF
- ESF
- RDP
- Welsh Government

Action 4 – Embed circular economy thinking into Welsh Government policy and programmes, especially for innovation support for business and HEIs

1. Background:

The Wales waste strategy, Towards Zero Waste (2010), sets the long term ambition of ‘one planet’ resource use by 2050, achieved through achieving ‘zero waste’ (100% recycling) and a 65% reduction in waste arisings. It highlights the need for eco-design techniques to change the way that products are designed to help achieve these long term goals. The promotion of eco-innovation in the manufacturing sector in Wales is identified as a priority area for action in the Waste Prevention Programme for Wales published in 2013.

“Eco-innovation” also features in ‘Innovation Wales’, the Welsh Government’s regional innovation strategy for smart specialisation (RIS3) for Wales, published in 2013. It includes an aim to reduce the amount and type of material used in production and addresses whole-lifecycle issues such as reuse and re-manufacture. The strategy notes that these activities often incorporate the principles and concepts

of eco-innovation and eco-design. It identifies how eco-innovation can be used to target the reduction in the use of natural resources in a process. The strategy identifies that an eco-design approach may lead to solutions both contributing to business resilience and economic growth.

The potential of Wales to increase growth through the circular economy was outlined by a study by the Ellen MacArthur Foundation and commissioned by WRAP in 2013: “Wales and the Circular Economy. Favourable system conditions and economic opportunities”. The report found that the achievement of a more circular economy in Wales would generate more than £2 billion of economic savings per year in material costs and up to 30,000 jobs, reduce the region’s dependency on raw materials and increase the value of agriculture.

The “Well-being of Future Generations Act” was passed by the National Assembly for Wales in 2015. The Act aims at improving the social, economic, environmental and cultural well-being in Wales for current and future generations. The Act places a duty on public bodies to set and publish well-being objectives and take all reasonable steps to meet them. The ‘A Prosperous Wales’ well-being goal includes a specific reference to resource efficiency. The national indicators laid before the National Assembly for Wales as required under section 10 of the Well-being of Future Generations Act (Wales) 2015 include (as number 15) “Amount of waste generated that is not recycled, per person.”

The Welsh Government’s National Strategy, ‘Prosperity for All’ (2017) includes a commitment to “set out a route map for a more resource efficient economy, building on our success in recycling and reducing the environmental impacts of production and consumption”.

The Natural Resources Policy for Wales (as required under Environment (Wales) Act 2016 – Part 1), published in 2017, includes the headline opportunity to support a more resource efficient economy, and one of the three key priorities is “Increasing renewable energy and resource efficiency”. It identifies that moving towards a more circular economy in Wales, where raw materials are kept in productive use for longer is already reducing the demand for materials. It states that further progress can significantly reduce the impact on Wales’ natural resources whilst providing opportunities for jobs and sustainable economic growth and helping address risks to long-term supply chain security.

2. The action:

The CESME team in the Waste & Resource Efficiency Division will seek to further embed a circular economy approach across all of the policy areas, programmes and activities supported by the Welsh Government, especially for innovation support for business and HEIs.

Specific actions include:

- i) The CESME team worked with the team that produced the Welsh Government’s Economic Action Plan towards the end of 2017. The published Economic Action Plan includes actions to: publish a route map for a more resource efficient economy in 2018; develop a support package for businesses to improve their

energy and resource efficiency, through working with businesses to ensure the more resource efficient use of materials; provide a £6.5 million capital fund for 2019-20 to help Wales move towards a circular economy; work with the private sector to increase investment in reuse, recycling and reprocessing infrastructure; embed resource efficiency within the programme of innovation support to SMEs by using public sector procurement to create new opportunities for resource efficient manufacturing in Wales; and develop the regulations under Part 4 of the Environment (Wales) Act 2016 in order to increase recycling by businesses in Wales.

- ii) The Economic Contract arising from the Economic Action Plan requires businesses receiving Welsh Government funding support (including grants) to commit to a range of five principles including progress in lowering their carbon footprint. The Welsh Government guidance for staff and partners requires employers to have a commitment to improving resource efficiency as part of furthering business sustainability. The CESME Wales team has met with Business Wales to discuss their role in advising business in this regard and supporting its Green Growth Pledge which embeds sustainability and resource efficiency in business thinking from start-up levels. We have also ensured that they are aware of further sources of advice and support to business including from WRAP Cymru. We are currently exploring ways of developing our work with Business Wales to further support businesses in this area which will help them work towards meeting this aspect of the Economic Contract.
- iii) The CESME team are members of the internal Welsh Government Construction Alignment Group whose role includes ensuring that construction activities across the Welsh Government and the bodies it funds are aligned to core Welsh Government policies, including those for resource efficiency and a circular economy.

A very useful guide on the opportunities for a circular economy approach within the construction sector has been produced by Constructing Excellence in Wales under grant funding from the Welsh Government, "Closing the circle - Circular economy: Opportunity for the Welsh built environment"

http://www.cewales.org.uk/files/1714/9372/0995/Closing_the_circle_Circular_economy_Opportunity_for_the_welsh_built_environment_Summary.pdf

The CESME team will promote the opportunities for an innovative circular economy approach within the building sector and its supply chain through the Construction Alignment Group, drawing upon the guidance in the Constructing Excellence Wales report, and on CESME case studies, where appropriate.

- iv) There will be strong consultation with internal and external stakeholders during the development of the updated waste strategy for Wales, and the development of the route map for a more resource efficient (circular) Wales. This will include embedding this CESME action plan within the document. Innovation will be a key aim of the route map.

3.Players involved:

- Welsh Government – all relevant policy areas.

- Business Wales
- WRAP Cymru
- Welsh HEIs
- Constructing Excellence Wales
- Other relevant stakeholders.

4. Timeframe:

The updated waste strategy and route map for a more resource efficient Wales will be published for consultation in early 2019, with final documents published later in 2019.

5. Costs:

In house staff costs, not quantified.

6. Funding sources:

- Welsh Government.

Signed on behalf of the Welsh Government

Jasper Roberts

Deputy Director and Head of Waste & Resource Efficiency Division

Department of Environment

Welsh Government