

**Annex 1 to Resources & Waste UK response to Department for
Business, Energy and Industrial Strategy Green Paper Consultation
“Building Our Industrial Strategy”**

BEIS Industrial Strategy Green Paper

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Submitted to Building our Industrial Strategy

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About you

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Are you happy to be contacted if we have any questions about your response?

Yes

Are you happy for your response to be published?

Yes

Comments:

Postcode

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Are you answering on behalf of:

an organisation (in an official capacity)

About you - organisations

What is the name of your organisation?

Resources and Waste UK

Approximately how many employees are there in your organisation?

1

What type of organisation is it?

Advocacy organisation with two Members: The Chartered Institution of Wastes Management and the Environmental Services Association

Responding to this consultation

Turning to the 10 “Pillars” identified in the Green Paper, the more detailed comment of Resources and Waste UK are as follows:

1. Investing in Science, research and Innovation

- We welcome creation of UK Research and Innovation (UKRI) and increased Government R&D investment. We understand from universities in particular that the proposed UK exit from the EU is already frustrating access to EU funding programmes, so we assume this increased UK investment in research will more than off-set the losses incurred under Brexit. We therefore look forwards to the 2017 UKRI consultation.
- Innovation in science and technology is key to development of improved resources management across the whole product and service lifecycles. Materials science and its application to products as diverse as electronics and packaging means that this industry needs new techniques to re-process wastes to deliver new resources at the right quality and price back into the market. However, resource management and resource efficiency projects made up a total of only 1% of Innovate UK funding last year. We are therefore working closely with Innovate UK to improve awareness across the sector of the Industrial Strategy Challenge Fund. This includes promotion of the increased frequency of “calls” for proposals and the scope of those calls. We will also work with relevant universities and other research establishments to improve awareness of funding under this strategy for earlier stages of development including fundamental scientific research.

Q5. What should be the priority areas for science, research and innovation and investment? In general the Green Paper identifies good priorities for innovation, many of which are directly applicable to improve resource productivity and resource security including applications of robotics, remote sensing and the use of waste materials as input in biotechnology. The role of wastes and resources management in all forms of energy generation, storage and distribution will be important as will the

development of manufacturing processes and materials science, and the processes of materials separation and re-refinement suitable for markets.

Q7. What else can the UK do to create an environment that supports the commercialisation of ideas? Development and commercialisation lead times can be significant in wastes and resources management and investment will be encouraged through clear and stable policy and stimulation of markets for secondary resources and waste-derived energy. We also applaud proposals in the Green Paper to explore that taxation status of R&D projects and look forwards to hearing more from Government on that in due course.

2. Developing Skills

- The waste and resources industry already recognises and has responded to the need to develop knowledge and skills in both existing and future workforces. We are developing Pathfinder Apprenticeship schemes with partners across the industry including the Industry's own awarding body "WAMITAB" and Energy and Utility Skills. We also have a well-developed scheme of technical competence and continuing competence in the industry. Permitted waste site operators have to demonstrate their day-to-day operations are in the hands of technically competent management and that those managers keep their knowledge up to date. We expect to see this regime strengthened in the future through government's forthcoming waste crime and persistent poor performance consultation.
- Our industry is a growth sector which does and will offer employment opportunities at a range of skill levels throughout the United Kingdom. Clear, ambitious and stable UK policy in this area will encourage investment and future employment opportunities across a broad range of disciplines / trades and skills levels.
- There is a strong professional institution in the sector with a mandatory continuing professional development scheme for Members, plus the Society for the Environment providing cross sectoral professionalism and competences.
- We aspire to work with universities and colleges to influence under-graduate programmes in a broad range of disciplines to build an understanding of the importance of resource efficiency into the next generations of business leaders and decision makers across all sectors. Suitable disciplines would include business studies, all forms of engineering courses, planning, design and finance. We aspire to work with knowledgeable partners to improve resource productivity and security in all sectors.
- We also recognise the need to up-skill the workforce at all levels to improve resource efficiency awareness and practice through programmes such as CIWM's WasteSmart, delivered through a variety of training media. Given the direct relevance of resource

productivity to all sectors we would be pleased to discuss these programmes and their future delivery with the Department.

Q10. What can we do to improve basic skills? Given the cross-sectoral importance of improved resource productivity, its importance and practice should be included as an element in a broad range of apprenticeships, undergraduate disciplines and training / development programmes.

Q13. What skills shortages do we have or expect to have in particular sectors.....? UK businesses in all sectors need to have access to an incoming workforce at all skills levels already aware of the importance of resource productivity and in a position to contribute to it, as above.

3. Upgrading Infrastructure

- The sustainable resources and waste management industries do not have the generation of infrastructure and technologies that the UK will need to gain maximum advantage of the potential for improved resource productivity and secondary resources use as an economic and environmental advantage.
- We are working closely with the National Infrastructure Commission who have identified “wastes” as a priority for their current National Infrastructure Assessment. In our evidence we stressed the need for clear, ambitious and stable waste and resources policy in the UK to encourage investment in infrastructure and services – and the important links into this Industrial Strategy development. In the short term, policy uncertainty associated with the Brexit process and the status of policy development under the EU Circular Economy Package has created an unwelcome hiatus in investment. Clarification of UK policy through the Defra 25 Year Environment Plan would have been helpful to formulate our response to this Green Paper, but we understand this is newly-delayed and may not be available until later in this parliament. Similarly the Clean Growth Plan has been delayed until the middle of this year and is not available to inform this response. We understand that development of the Industrial Strategy will continue well beyond this green paper response period and we look forward to working further with the Department and the Strategy team, especially in the light of clarification of Government policy in these areas.
- A copy of our submission to the National Infrastructure Commission has already been provided to inform this BEIS initiative.

Q15 Are there further actions we could take to support private sector investment in infrastructure? Development of infrastructure and services needed to drive better resource productivity through this sector depend on clear, ambitious and stable

policy from Government(s). The status of post-Brexit policy, especially where transposition of EU directives etc into UK law will be difficult will be an important signal to investors of all types. Similarly the Clean Growth Plan will be key to informing the next stage in infrastructure development and the services we will provide to all other sectors.

Q16 How can local infrastructure needs be incorporated with national UK infrastructure most effectively? The contribution of this sector to improved resource productivity across all other sectors lends itself to planning on a larger-than-local scale, helping to group together secondary resource availability (including materials and all forms of waste-derived energy) with industries who will use those outputs as their industrial feedstock. Economic development planning including consideration of resource demands and supply should be undertaken at a regional or sub-regional level. There is currently an important gap in the planning system between development of policy and strategy at a national level and more local planning. Government should consider how this gap could be bridged either through re-introduction of regional scale planning or through strengthening the duty to co-operate between planning authorities.

4. Supporting Businesses to start and grow

- The key to investment in infrastructure and services to drive improved resource productivity through this sector in the UK is policy clarity, ambition and stability, especially through the Brexit process period and the transition beyond to UK policy wherever that will be different to EU policy.
- Waste crime is a serious “drag” to confidence in the sector including encouragement of new businesses into the sector and further investment by existing sector members. UK Governments and their regulators are working closely with this industry and those we serve to improve operational performance and to drive compliance with waste law. We estimate that waste crime costs the UK at least £1/2Billion per year through tax evasion, clean-up costs and under-cut compliant businesses. Continued and strengthened government commitment to fighting waste crime is vital. This will include making sure that regulators are properly resourced to undertake the tasks and strengthening of policy and legislation to detect, deter and stop illegal waste management activities.
- There is an important balance to be struck between reducing barriers to entry to the sector for innovative businesses and ideas with the need to raise the quality of entrants to the sector. The waste and resources management industry manages a range of potential health and environmental risks and the knowledge and skills needed to operate in the industry continue to rise – hence the importance of

continued learning and continued competence identified under “skills” above. At the same time the already relatively low barriers to entry into the industry coupled with high turnover and potential for tax evasion for example, make the industry increasingly attractive to criminals. We are working closely with Defra and the Environment Agency – as with Governments and regulators throughout the UK – to make it increasingly difficult for waste criminals to enter the industry and prosper at its expense. Therefore whilst we applaud all forms of support for new business growth from research through to skills etc, we need to raise the quality and performance of new entrants as well as established businesses in the sector.

Q18. What are the most important causes of lower rates of capital investment in the UK compared to other countries, and how can they be addressed? Policy clarity, ambition and stability will be key to further investment in this industry and its contribution to improved resource productivity. Clear differences already exist in this respect between the 4 countries of the UK and this strategy should examine closely the differences between Scotland and Wales and England in particular.

5. Improving procurement

- This is a key “pillar” for the sustainable resources and wastes sector and our ambitions to develop improved resource productivity across all UK businesses. The document concentrates on public sector procurement of all goods and services. Whilst that represents roughly a 14% (and reducing) share of UK spending, public / private sector contracts set the framework for most procurement and investment in this sector. Contracts are often for periods in excess of 25 years where important infrastructure is involved and 7 years for collection contracts etc centred around working vehicle lives. The value of these contracts is therefore often high and some waste management contracts have been amongst the highest value public sector contracts in Europe for example. We are working closely between public and private sector contracts experts to identify best practice and will be happy to share any outcomes from the work with you. In the meanwhile we also recognise the guidance available through the balanced scorecard and will incorporate that into our work.
- In the context of the UK Industrial Strategy, however, we believe that “Procurement” should support the concept of resource productivity in businesses. This pillar should therefore address all resource demand and supply for all sectors. This could and should include the full resources cycle including how we drive resource efficient design, to reduce primary raw material demand to an absolute minimum - to cut costs; cut overall product and service impacts; and protect businesses from raw material shortages or higher costs where competition for resources is high.

An important part of reducing primary material demand is resource efficient design and process. An equally important part is to feed as much industrial procurement of feedstock as possible from “secondary” resources – ie the output of processing of end-of-life products and materials, and all forms of waste-derived energy. Traditionally, policy has concentrated on setting recycling or recovery targets from waste streams on our industry. Whilst this guarantees provision into the market of secondary resources – it does not guarantee a ready market demand for those materials.

We believe that as global population and consumption grow rapidly though the rest of this century, supply of many virgin resources will be stressed, potentially harming UK business competitiveness and ultimately business continuity. In the shorter term, materials markets are typically unstable and governments need to design market mechanisms to drive improved resource use. Procurement to support resource productivity should therefore include market “pull” mechanisms for secondary resources. These can take a variety of forms including extended producer responsibility (ies) and financial instruments such as variable taxation and levies. Many of these approaches are currently being explored as part of development of the EU Circular Economy Package and will have direct relevance to UK resources management outside of the EU. WE would be keen to discuss the options available to drive procurement decisions to support resource productivity using the Industrial Strategy as a catalyst for consideration and action involving a number of government departments.

Whilst market interventions of this sort might appear radical to some, the UK has a track record of successful interventions including the Landfill Tax and the Aggregates Levy, and other EU Member states have embraced extended producer responsibilities to a much greater degree than the UK (eg France which now has 29 such schemes compared to just 4 in the UK). In the meanwhile Sweden has agreed to introduce a variable VAT rate to encourage equipment repair and the EU Environment Committee has suggested variable VAT as a way to reduce food waste across the EU. A range of market instruments are identified for consideration in the Scottish Circular Economy Strategy “Making Things Work” published in February 2016 and we would urge UK government collaboration in considering these approaches.

6. Encouraging trade and inward investment

- The secondary resources industry for materials from metals and plastics through to waste-derived-fuel is heavily dependent on export markets. Supply quantity, price and quality are already important concerns across the sector, but with such strong

reliance on exports leaves the UK potentially vulnerable to market conditions or supply choices / policy of receiving countries. We believe there is a UK economic development opportunity in resource productivity and a more “circular” materials economy which is under-developed. We do not plan for, encourage or steer demand for secondary resources / waste-derived energy or complementary demand management for virgin resources. We believe this opportunity should be recognised and developed under this strategy as a significant business efficiency and business continuity issue relevant across all business sectors.

- UK businesses have a significant but under-developed export potential for knowledge, skills, and equipment into a rapidly developing world market for wastes and resources management worth at least £4Tr and growing. We are working with DIT to raise awareness of this potential and to encourage businesses in our sectors to access support in developing export markets
- This is an industry with a successful record in attracting inward investment to the UK. We believe this would continue and grow with stable, clear and ambitious environmental and resource efficiency policies in all 4 UK countries.

Q25 What can the Government do to improve our support for firms wanting to start exporting? What can the Government do to improve support for firms in increasing their exports? In terms of export of knowledge, skills, equipment and services in sustainable resources and wastes management we are already working closely with DIT to raise awareness and uptake of export opportunities across this sector. With regard to export of secondary resources this industry will remain reliant on export to other manufacturing economies but Governments in the UK must plan for and actively encourage markets in secondary resources and waste-derived energy as an essential element in economic development, business resource productivity and long term business continuity in an increasingly resource constrained world.

7. Delivering affordable energy and clean growth

- This is the key “pillar” in the Green Paper for the sustainable wastes and resource management industry (ies).
- It is important that the concept of improved productivity through improved resource use is recognised in this green paper. Competitiveness of UK business will be helped by reduced feedstock costs which could be achieved through cutting overall resources consumed through lean design / process, but also through improved use of secondary resources to reduce demand for virgin feedstock materials. This is likely to become increasingly important as demand for virgin material feedstock increases globally. That will affect feedstock price (and probably price stability) as well as access to feedstocks. Both feedstock price and feedstock availability have the

potential to become serious business continuity threats. We need to develop UK materials markets whereby “home” businesses benefit from ready supply of materials at dependable quality, quantity, and price derived from re-processing wastes and end-of-life products.

- The Green Paper concentrates on improving labour productivity in the UK – an attribute we envy in some other leading developed economies. This should be matched with measurement and improvement of UK business resource productivity ie making – or achieving – more with less. The National Waste Prevention Plan published in Dec 2015 included national indicators for resource productivity including GVA per tonne of resource, including total resources and UK-derived resources. These were included in the Defra waste and resource statistics published in February 2017, and these provide a useful starting point for measurement of resource productivity.
- The Defra resource productivity measures operate at a national level, and are too high level to measure and improve resource productivity in individual businesses or sectors. If this strategy is to recognise the vital contribution to business competitiveness and continuity achievable through resource productivity, we would recommend consideration of suitable measures which could be applied through individual sectors, and especially useful in development monitoring and improvement of Sector Deals (as under pillar 9 below).
- We note that this section of the Green Paper advises that the Defra 25 year Environment Plan will be important in developing the concept of resource efficiency in businesses but unfortunately that Plan will now not be available to inform this response. We anticipate further work on this key strategy after the consultation however and we would be especially keen to develop a discussion between BEIS, Defra and other key government departments on the important role that resource productivity will play in the future of all business sectors, and how this could be built into the strategy as a cross-cutting priority.
- Similarly, the Clean Growth Plan (expected June 2017) will be key to considering this pillar but will fall outside of this consultation period. We hope for additional opportunities to maintain input to this vital policy development beyond the consultation close date.

8. Cultivating world-leading sectors

- Resources management in the UK could and should be a world beating sector given our all-sector importance. Restricted or higher cost feedstock for all UK sectors will automatically frustrate growth, competitiveness and business continuity.
- Under this “pillar” the Green Paper proposes the development of “Sector Deals” and encourages sectors to come forward with suggestions to government regarding what

they could deliver and what they would need from government(s) to help them to do that. This is something that this sector will actively consider. We would also urge all other sectors and government to include improved resource productivity as well as improved labour productivity in those deals. This will be especially important in terms of future competitiveness and business continuity as global demand for accessible, affordable and low environmental impact feedstocks increases.

- Whilst we see important scope in Sector Deals for transformation and general productivity improvement we do not see broad scope in de-regulation for wastes and secondary resources. The industry has engaged fully in two recent “red-tape” challenges and they have identified very little unnecessary or problematic regulation. More importantly we have consistently highlighted the importance of rigorous and consistent enforcement of the regulations already in place to prevent waste crime, and that a well-resourced and skilled regulator is vital to the success of more sustainable resources management.
- The EU leads in environmental issues in general and, especially in the field of sustainable wastes and resources management, has created an important stable and ambitious policy framework for this industry which has seen it develop very significantly over the last 2 decades. We also recognise Government’s intention to bring in all existing environmental policy and legislation from the EU under the Great Reform Act. This is potentially a difficult and time consuming process but an important step in maintaining policy continuity through an otherwise uncertain period. That stability needs to be balanced with recognition of an opportunity to develop post-EU policy in the UK and its 4 countries which could be “better” than EU policy – promoting the UK as a world leader in resource productivity, supporting competitiveness, export opportunities and UK business continuity. For example Scotland and Wales have suggested more ambitious waste management targets in some cases than are being proposed in negotiation of the EU Circular Economy package. Policy continuity across all 4 UK countries in terms of targets and objectives will be an important aspect of future industry performance. Opportunity could also exist for the UK to develop policy and targets more suited to development of resource productivity in the future – for example development of recycling and secondary resource objectives not based on tonnage of material alone, but incorporating targets based on whole life cycle cost or material scarcity / strategic importance. If Governments do wish to develop UK policy in this way, then the transition between EU and UK policies will need to be carefully controlled and we would want to work very closely with Governments under those circumstances.

Q31. How can the Government and industry help sectors come together to identify the opportunities for a “sector deal” – especially where industries are fragmented or not well defined?. Resource productivity should be encouraged, proposed, measured and driven with the same vigour as labour productivity. Government

should propose that resource productivity, including all aspects of resource efficiency, future feedstock security etc are considered in all sector deals. Where a “sector” is hard to define it could be easier to map resource flows – supply and demand – to identify groups of business who share an interest in availability of specific secondary raw materials or low cost / low carbon heat for example. Economic development planning at a regional level is the appropriate scale as planning at national or local level is unlikely to match demand with potential supplies.

9. Driving growth across the whole country

- Our industry is in a position to deliver secondary materials and waste-derived energy (in all of its forms from heat through biogas to electricity) together with employment opportunities across a broad range of disciplines and skills levels in all regions of the country.
- To derive maximum business opportunity from the outputs from this sector we need to plan for resource demand and provision at a regional level. This document asks for barriers to success between national initiatives and local delivery, and fail to plan at a strategic level for resources.

10. Creating the right institutions to bring together sector and places.

- The Green Paper recognises the importance of LEPS. These concentrate on locally important issues but LEP variability and lack of concentration on resource supply and demand at a regional level is a weakness. We believe that resource productivity and the economic development potential of secondary resources and waste-derived energy should be assessed under all LEPS – or through another tier of regional planning.