

Environmental societal and governance traceability in sustainable value chains of the circular economy.

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Are we even near a circular economy?

Defra Remit: Policy and evidence to drive circularity internally

Our waste our Resources: a strategy for England. (2018). Overarching principles

- 1) Maximise resource use
- 2) Minimise waste and its impact on the environment.

Short-term plans mirror those of others

Modular design, passports (battery's, products, metals) Enshrined in UK legislation (Environment Act), specifics to follow through secondary legislation.

Substantial R&D funding close to half a billion - sustainable approaches green transition

Long term commitment to net zero by 2050 - wholesale servitisation.

Servitisation is with us now, Netflix (DVD), Apple (games), the cloud (data). Some estimate 80% of products by 2050.

How do we get there?

Product as a service, material as a service.



Policy EPR

UK based supply chains. Drive internal circularity.

EPR (Extended Producer Responsibility). Plastic tax . The token economy. Lessons Learned.

Market development, internal circulation for basic material flows: paper, card, glass, green waste, food waste.

Reduce carbon: local collection, local sorting, local recycling, local manufacture

International supply chains. Complex quality assurance challenging

Market development, economies of scale make transition easier (rPET)

Further challenges with more valuable waste material streams (aluminium, WEEE, batteries)

Revisit our policies of specific types of waste :

Consultation on the Product Export Recycling Note. Major waste reforms; WEEE, battery's.

Data. Supply chains are complex. Do the basics well

UK: Waste material flow. EA Waste interrogator. ONS stocks and flows. Waste tracking International: Standards/Stocks and Flows: ISO, UNRMS (UN Resource Management System)

Other Drivers

Market Size: The size of that market governs the power Plastic tax 30% recycled content. Investment: Venture capital for projects that are environmental beneficial and sustainable.



In Summary

Which policies, legislative framework, and institutional arrangements were proven to be successful in advancing ESG monitoring and reporting in global value chains of high priority sectors

- 1) Promoting circularity within Low carbon industry that supports Reduce, Reuse, Remanufacture, Recycle.
- 2) International supply lines. Quality assurance with passports, underpinned by high quality data.
- 3) Understanding where our waste goes PERN.

What are the right incentives to put in place for spurring ESG monitoring and compliance along the global value chain of such sectors?

1) EPR and/or tax on noncircular virgin material as an entry requirement to the market. That could be minimum recycled content of plastic in bottles or lithium in battery's.

How to address potential barriers to trade that ESG compliance may pose for access to market and investment opportunities, and particularly for SMEs and vulnerable actors?

1) Global Equity: Sustainable approaches become a market qualifier. Economies of scale. Diffusion of innovation allowing SMEs and more vulnerable actors to enter the market with more innovative approaches.





Thank You