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'Our Waste, our Resources; A Strategy for England'– Switching to a circular economy through the use of extended producer responsibility

Louis Dawson
University of Birmingham, Birmingham, UK

Abstract
High landfill rates compared with flatlining rates of recycling have ensured that waste disposal is once again on the legislative agenda in England. In 2018, the Department for Food, Environment and Rural Affairs published 'Our Waste, Our Resources: A Strategy for England' which is the first major policy publication on waste since 2013. Encouraged by the release of this Strategy, this article examines the potential use of extended producer responsibility and the 'polluter pays' principle to fuel the transition to a circular economy.

Keywords
Circular Economy, EPR, Extended Producer Responsibility, Waste

Introduction

Recycling in England has flatlined[1] and waste disposed to landfill is estimated to be around 32 million tons per year.[2] Consequently, it seems that we live in a society that 'makes, takes, uses and throws'.[3] The publication of 'Our Waste, Our Resources; A Strategy for England' (the Strategy) is seeking to change that premise. It attempts to create a society that is considerably more resource efficient and aims to foster a

1. Department for Environment, Food and Rural Affairs, 'Statistics on Waste Managed by Local Authorities in England in 2017/18' (London: Defra, 2018) 3. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/763191/LACW_mgt_annual_Stats_Notice_Dec_2018.pdf.
2. S. Burnley, 'The Impact of the European Landfill Directive on Waste Management in the United Kingdom' (2001) 32 *International Journal of Sustainable Resource Management and Environmental Efficiency* 349–58.
3. HM Government, 'Our Waste, Our Resources: A Strategy for England' (London: The Stationery Office, 2018) 4.

Corresponding author:
Louis Dawson, University of Birmingham, Edgbaston, Birmingham, B15 2TT, UK.
Email: L.J.P.DAWSON@bham.ac.uk

culture that re-uses or re-manufactures products that could still have a useful life or recycles them instead of disposing to landfill.

Recycling, a 'precondition for a circular economy',[4] came to fruition in small scale as a viable waste management tool during the late 1970s in the European Union (EU). As a result, the waste framework hierarchy[5] is based on reducing, re-using, recycling and recovering to combat an ever-present 'throw away' culture in society. Accordingly, Michael Gove, in the foreword to the Strategy seeks to redress the balance to our natural world through creating an economy which is fundamentally circular.[6] The Secretary of State for the Department of Environment, Food and Rural Affairs (DEFRA) recognises that waste disposal needs to dramatically shift from the traditional linear model of waste to a resource-efficient circular economy (CE). To instigate this change, DEFRA identifies the need to uphold the 'polluter pays' principle and expand current or construct new and viable extended producer responsibility schemes which work for businesses, consumers and the environment alike.

The Strategy – An overview

The Strategy, released on 18 December 2018, is the first significant government policy paper in the sector since the Waste Prevention Programme in 2013.[7] It has been designed in the knowledge that within a matter of months the United Kingdom will no longer be a Member State of the European Union (subject to an agreed transition period). The Strategy is a broad and ambitious plan with the main objective to render the UK a 'world leader in using resources efficiently and reducing the amount of waste we create as a society'.[8] It incorporates existing EU environmental law as a foundation to build on current waste disposal practices.[9] That being said, it is striking that although there are many new plans contained within the policy paper, the Strategy is considerably lacking in detail regarding implementation mechanisms for those policies. This may ultimately hinder its success.

The Strategy's ambition is to achieve the maximum value of resources whilst minimising the impact of waste on our environment.[10] It particularly focuses on the circularity of plastics and therefore seeks to ensure that plastic packaging can either be recycled or eliminated wherever possible.[11] The Strategy is divided into eight chapters, with the primary focus on endorsing circularity. The first three chapters – of main significance for this article – aim to achieve this by introducing policies covering the complete life-cycle of a product. The remaining five chapters address administration, research and enforcement, alongside tackling specific issues such as food waste.[12]

4. European Commission, 'Circular Economy, Closing the Loop'. (2015) 1. Available at: https://ec.europa.eu/commission/sites/beta-political/files/circular-economy-factsheet-waste-to-resources_en.pdf.
5. Council Directive 75/442/EEC of 15 July 1975 on Waste OJ L 194/39.
6. See HM Government, above n. 3 at 4.
7. HM Government (2013) 'Prevention is Better than Cure: The Role of Waste Prevention in Moving to a More Resource Efficient Economy'. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/265022/pb14091-waste-prevention-20131211.pdf.
8. Above n. 3 at 7.
9. The United Kingdom will retain EU environmental law after its exit from the EU as a result of the European Union (Withdrawal) Act 2018.
10. Local Government Association (2018) 'Local Government Association Briefing Resources and Waste Strategy Summary' 3. Available at: www.local.gov.uk/sites/default/files/documents/LGA%20briefing%20-%20RW%20strategy%2020122018.pdf.
11. Above n. 3 at 41, 1.2.1.
12. Chapters 1–3; 'sustainable production', 'helping consumers to take more considered action' and 'recovering resources and managing waste'. Chapters 4–8; 'tackling waste crime', 'enough is enough: cutting down food waste', 'global Britain: international leadership', 'research and innovation' and 'measuring progress: data, monitoring and evaluation'.

In order to kick start the transition to circularity, the Strategy focuses on manufacturers. Accordingly, it is the government's intention to invoke the 'polluter pays' principle, therefore extending producer responsibility.[13] Furthermore, the Strategy also places an emphasis on consumers by ensuring they have access to products that are both sustainable and long lasting. If a product becomes unwanted or unusable, it should be either reused or remanufactured. Consumers should thereafter be offered incentives to buy the recovered products.[14] Additionally, the Strategy also indicates that some traditional policies will be used to ensure the recovery of waste from households. This may include expanding Britain's recycling network to develop greater frequency and consistency in recycling collections.[15]

The circular economy

The Strategy attempts to lay the foundations for the government to meet its 25-year Environmental Plan pledge to 'leave the environment in a better condition for the next generation'.[16] It sets out a vision that waste management ought to follow the principles of the CE model which was first conceptualised by Kenneth Boulding in 1966.[17] Such a model has been endorsed by the EU which is currently implementing a legislative agenda known as the 'Circular Economy Package'.[18] The package seeks to foster measures that would achieve greater circularity in the EU's economy. It enables increased waste management targets, and responsibilities to ensure the proper reporting of targets, alongside a 'strengthening' of extended producer responsibility and waste prevention policies.[19]

The CE model is advocated by the Strategy which seeks to 'keep resources in use [for] as long as possible, so we extract maximum value from them'.[20] This model is aligned with the premise to reduce, reuse and recycle waste. For example, a CE model in relation to lithium-ion batteries could seek to redress reliance on virgin materials such as cobalt. This can be done by obligating producers to collect batteries from consumers (otherwise known as a collection or take-back scheme) once they have reached the end of their useful lives. Thereafter, the product can, subject to relevant technological advances in deconstructing lithium-ion batteries, either be re-used, or recycled. Recovered materials are subsequently placed back into the economy and the process repeats itself in a continuous looped cycle. However, there are currently no existing examples of an economy which is completely circular. This is due to challenges relating to recovery and recycling, where no effective solution has been found to recover or recycle 100 percent of materials placed on the market. This illustrates just how ambitious the Strategy is attempting to be by envisaging England as a world leader in circularity.

Extending the life-cycle of products is fundamental and complementary to becoming a resource-efficient country focusing on circularity. It contributes to the CE model, as products are kept within the economy for as long as possible; ideally until a product is beyond repair and is in need of being recycled. One way in which this can be done is by ensuring that repair, reuse and remanufacturing is considered first not only by

13. Above n. 3 at 1. A notable policy is that the government will seek to tax any plastic packaging which does not contained 30 per cent recycled material.
14. Ibid. at 50–65, 2.
15. Ibid. at 66–83, 3.
16. HM Government, 'A Green Future: Our 25-year Plan to Improve the Environment', (London: The Stationery Office, 2018) 57.
17. K. Boulding, 'The Economics of the Coming Spaceship Earth' in H. Jarrett (ed.), *Environmental Quality in a Growing Economy, Resources for the Future* (Baltimore: Johns Hopkins University Press, 1966) 3–14. Available at: http://arachnid.biosci.utexas.edu/courses/thoc/readings/boulding_spaceshipearth.pdf.
18. European Commission, 'Closing the Loop – an EU Action Plan for the Circular Economy', COM (2015), 614.
19. D. Bourguignon, 'Circular Economy Package: Four Legislative Proposals on Waste' (2016), European Parliamentary Research Service. Available at: www.europarl.europa.eu/EPRS/EPRS-Briefing-573936-Circular-economy-package-FINAL.pdf.
20. Above n. 3 at 7.

producers, but also by consumers.[21] The Strategy explores many policy options to reduce England's throw-away habits. Examples of the policies set to be consulted upon, include extending product lifetimes through guarantees to discourage the disposal of products such as faulty laptops;[22] creating demand for re-manufactured products through developing quality assurance schemes;[23] and supporting campaigns that seek to promote reusable alternatives.[24]

However, where a product has reached the end of its useful life and cannot be targeted by the reuse, repair or re-manufacture policies, the Strategy favours 'closed loop' recycling.[25] This is the process of keeping recovered materials in the same supply chain,[26] as opposed to materials being collectively collected and smelted in a mixed-material batch, known as an 'open-loop' CE model.[27] One motive for the government targeting a 'closed-loop' CE, instead of an 'open-loop' CE could be to preserve the quality of recovered materials so that the supply chain does not become overburdened with sub-standard materials that producers feel obliged to use as a result of waste management regulations. In order to achieve such quality, the government has highlighted, through the Strategy, that there must be improved public information initiatives[28] and waste collections. Such improvements may come by way of extended producer responsibility policies or through an increased frequency of separate item recycling collections.[29] This will allow for a better quality of collected material and will also reduce the large amounts of contamination (of recycling) that occurs in current collections.[30] However, such a policy is likely to see a reduction in overall collection rates as some households may favour the current 'status quo' and consider the sorting of recycling into separate waste streams as burdensome and unnecessary. Contrary to the Strategy's focus on preserving the quality of waste, it is proposed that materials classed as 'waste' should have an easier route to being re-designated as 'non-waste'.[31] Such a policy is designed to increase the economic viability of recycling,[32] although it may ultimately hinder the progress in this sector as it may lead to a lower quality of material infiltrating the supply chain.

Extended producer responsibility

The Strategy seeks to achieve circularity through invoking the 'polluter pays' principle using extended producer responsibility (EPR) as the main regulatory tool. EPR was first established in Sweden but is in use globally with around 400 schemes known to be in existence.[33] The basis of EPR is that the producer of a

21. Ibid. at 55, 2.2
22. Ibid. at 55, 2.2.1
23. Ibid. at 58, 2.2.5
24. Ibid. at 58, 2.2.4
25. Ibid. at 52 2.1, 69 3.1.1
26. Ibid. at 70, 3.1.1. An example of a closed-loop would be a tin can being recovered, and thereafter made into another tin can or a cathode from a battery being remade into a cathode.
27. J. Deschamps, B. Simon, A. Tagnit-hamou, B. Amor, 'Is Open-loop Recycling the Lowest Preference in a Circular Economy? Answering Through LCA of Glass Powder in Concrete' (2018) 185 *Journal of Cleaner Production* 14–22. Available at: https://doi.org/10.1016/j.jclepro.2018.03.021.
28. Above n. 3 at 30, 1.1.
29. Ibid. at 66–83, 3
30. Ibid. at 68, 3.1
31. Ibid. at 81, 3.2.4
32. F. Schultmann, M. Zumkeller, O. Rentz, 'Modelling Reverse Logistic Tasks Within Closed-loop Supply Chains: An Example from the Automotive Industry' (2006) 171 *European Journal of Operational Research* 1033. Avalable at: https://doi.org/10.1016/j.ejor.2005.01.016.
33. Organisation for Economic Co-operation and Development, 'Extend Producer Responsibility: Guidance for Efficient Waste Management' (2016). Available at: www.oecd.org/environment/waste/Extended-producer-responsibility-Policy-Highlights-2016-web.pdf.

product will be given continued responsibility for the product throughout its useful life, and once it comes to the end of its useful life.[34] Therefore, unlike the traditional linear waste disposal model, the burden of responsibility placed on the producer is extended.

EPR schemes provide regulation in a wide ranging and varied manner, all of which focus on making the producers responsible for the complete life-cycle of their product. The release of the Strategy signifies a change in government rationale for waste disposal. It firstly seeks to redress the linear model that focuses on products that have already been made and instead addresses waste disposal before products have been designed and placed on the market. It therefore recognises that there is a need for product design policy to allow for effective reuse and recycling schemes.[35] It is imperative that products are designed in such a way that once they become unwanted or consumed they can easily be deconstructed. Products that are easy to deconstruct will ensure that all (or at least a sufficient amount) of materials are recovered, reused or recycled. Design policy not only enables the mitigation of harm to the environment but also allows for more economical reuse and recycling. A product which is easy to deconstruct requires less labour and machinery to recycle; accordingly, the extracted material has a greater net value. In order to stimulate the introduction of sustainable products, the Strategy suggests a set of 'minimum design requirements'. These will offer incentives for eco-design and impose penalties for non-eco-design, thus extending the producer's responsibility.[36] However, the Strategy falls short of identifying how such a policy might work in practice.

Nonetheless, EPR regulations in the UK are predominately focused on allocating the cost burden of 'take back' and recycling to the producer in order to increase recycling rates. Presently, the UK has a number of EPR regulations in force, all of which contain recycling targets. These regulations have arisen as result of EU directives on waste packaging,[37] end-of-life vehicles,[38] batteries and accumulators,[39] and waste electrical and electronic equipment.[40] Although the Strategy announces that the current EPR policy is set to be expanded and enhanced, such schemes will likely continue to fall into one or more of the following traditional strategies to stimulate sustainable design and disposal programmes:

1. *Physical responsibility* – the producer must handle the end-of-life management of the product.
2. *Economic responsibility* – the producer covers the cost of end-of-life management, labelling and informing the public.
3. *Liability* – the producers becomes the liable party for any environmental damage that the product causes during its life.[41]

34. K. Forslind, 'Implementing Extended Producer Responsibility: The Case of Sweden's Car Scrapping Scheme' (2005) 13 *Journal of Cleaner Production* 619–29. Available at: https://doi.org/10.1016/j.jclepro.2003.12.017.
35. Above n. 3 at 28–49.
36. Ibid. at 38.
37. Council Directive 1994/62/EC of 20 December 1994 on packaging and packing waste OJ L 365 transposed by the United Kingdom under the Producer Responsibility Obligations (Packaging Waste) Regulations 2007, SI 2007, No. 871. It is notable that there was no obligation for an EPR scheme to be established in relation to waste packaging; however, all but one of the EU Member States chose to implement EPR in this area.
38. Council Directive 2000/53/EC of 18 September 2000 on end-of life vehicles OJ L 269/1 transposed by the United Kingdom under the End-of-Life Vehicles Regulations 2003, SI 2003, No. 2635.
39. Council Directive 2006/66/EC of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC OJ 266/1 transposed by the United Kingdom under the Waste Batteries and Accumulators Regulations 2009, SI 2009, No. 890.
40. Council Directive 2002/96/EC of 27 January 2003 on waste electrical and electronic equipment OJ L 37/1 transposed by the United Kingdom under the Waste Electric and Electronic Equipment (WEEE) Regulations 2013, SI 2013, No. 3113.
41. Ibid.

Governments tend to ensure that they meet recycling targets through EPR legislation – typically schemes for 'take-back' and 'collection' of goods. Such schemes guarantee that a consumer can return a product, at the end of its life, to the retailer/producer free of charge. An example of such a scheme, is the take back of lead-acid batteries under the Waste Batteries and Accumulators Regulations 2009.[42] However, it is recognised that, for example, large batteries (such as lead-acid car batteries) are more likely to be disposed of through 'take-back' schemes and thereafter recycled than smaller batteries (such as AA batteries)[43] because smaller batteries are easily disposed of in municipal waste collections. As a result, the Strategy proposes a 'review' of the current schemes in existence and proposes consultations on how best to ensure products are returned to the producer from the consumer.[44] Future schemes may include 'individual responsibility' or 'collective responsibility'.[45]

Many EPR schemes, such as those within the scope of Waste Electric and Electronic Equipment (WEEE) Regulations 2013[46] are designed to permit the individual producer to transfer its burden of responsibility.[47] This is often transferred by the incumbent instructing a producer responsible organisation. The producer thereafter pays proportionate fees in contribution to the collection and recycling of its product. However, it is notable that currently some producers are only obligated to contribute as little as 10 per cent to the final collection and recycling costs of their product, the rest falling on local authorities.[48] It is here that the Strategy seeks expansive change. It is proposed that the 'polluter pays' principle is invoked in its purest form to ensure that producers pay 100 per cent of the end-of-life management costs of their products[49] – which is in line with the EU's Circular Economy Package.[50] The hope, in so doing, is that by burdening the producer with the costs of collecting, sorting and handling their waste product, they will become more willing to design products that facilitate reuse and recycling. Furthermore, this may also act as an incentive for producers to develop alternative business models. In contrast to the above, it is here that the Strategy seems to be unimaginative. It chooses to focus on shifting physical products to services[51] rather than providing policy that champions pioneering concepts such as, for example, leasing lithium-ion car batteries.[52] This concept ensures that once the lease of the car battery has come to an end, the consumer returns the product to the producer to be repurposed or recycled. The ownership of such batteries never transfers from the producer. Consequently, this form of business model facilitates an economy which is much closer to being circular, therefore every effort should be made to ensure that such concepts are supported.

The Strategy proposes further consultations with the aim to expand and draft EPR legislation that would assist in developing a CE in England. Limited consultations focusing on waste packaging and, in particular,

42. See Council Directive 2006/66/EC, above n. 39.
43. Figures show that there is disproportion of recycling in batteries. Lead-acid batteries make up a significant amount of recycling in this area as shown in National Packaging Waste Data Base, 'Summary of Portable Battery Data for the 2018 Compliance Period – as at November 2018' (2018). Available at: https://npwd.environment-agency.gov.uk/FileDownload.ashx?FileId=1b8db8b5-b43d-40d5-abb9-b549222bcc57.
44. Above n. 3 at 36, 1.1.3.
45. A. Atasu, R. Subramanian, 'Extended Producer Responsibility for E-Waste: Individual or Collective Producer Responsibility' (2012) 21 *Production and Operations Management* 1042–59. Available at: https://doi.org/10.1111/j.1937-5956.2012.01327.x.
46. See Council Directive 2002/96/EC, above n. 40.
47. Deloitte, 'Development of Guidance on Extended Producer Responsibility (EPR)' (2014), Available at: http://ec.europa.eu/environment/waste/pdf/target_review/Guidance%20on%20EPR%20-%20Final%20Report.pdf.
48. Above n. 3 at 34.
49. Ibid. at 4.
50. See European Commission, above n. 18
51. Above n. 3 at 30, 1.1.
52. Renault first conceptualised a model of leasing car batteries separately from the car itself.Renault, 'Battery Hire' (2019). Available at: www.renault.co.uk/renault-finance/battery-hire.html.

incentivising sustainable design and the 'polluter pays' concept were launched in early 2019. It must be mentioned, however, that any future inception or amendment of EPR legislation will only be appropriate if it meets the set framework and guiding principles contained in the Strategy. Any EPR legislation must contain 'clear objectives, targets and responsibilities', alongside fostering eco-design and consumer friendliness. However, most notably, appropriate enforcement will be central to ensuring that all producers make full financial contributions to EPR schemes.[53] The lack thereof may result in 'free-riders', those seeking to sell goods within the UK from another country thus avoiding registration with a relevant EPR scheme.[54] Nonetheless, the Strategy fails to adequately set out a plan to address such challenges.

Further consultations are proposed to take place between 2019 and 2022, focusing on waste electrical and electronic equipment, batteries and end-of-life vehicles.[55] However, the lack of detail released by the Strategy could limit the effectiveness of any future consultations. That being said, the planned consultations will provide a welcome insight into how the current, outdated, EPR legislation can be enhanced and updated. The release of a consultation timeline is also welcome, as it enables the public to hold the government to account.

As already mentioned, current EPR legislation has become outdated. This is particularly evident in relation to batteries, as a result of the political and technological shift from combustion engines to low-emission alternatives, such as electric vehicles. For example, progressive technologies, such as lithium-ion battery cells, have caused confusion as to how the current batteries and accumulators EPR regulations should be applied. Unclear labelling of lithium-ion batteries has resulted in the highly volatile batteries being loaded into industrial recycling shredders and exploding. Equally, lithium-ion car batteries are considered to be 'industrial' under the Batteries Directive.[56] This means that there are currently no collection targets; producers are only required to consider taking back spent batteries free of charge where they are either supplying a new battery or they sell the same chemistry battery.[57] These are some of the many problems that have arisen as a result of outdated schemes. Hence, the Government plans to 'promote . . . improved technologies to increase the feasibility of remanufacturing or recycling of batteries',[58] alongside developing 'domestic processing infrastructure'.[59] Any future additions to the current EPR battery regulations will be subject to consultation. Nonetheless, the Strategy highlights that such additions will likely include the producer paying the full cost of recycling and collection, along with ensuring that labelling and communication from producers to the public on 'how to recycle' are improved. However, a notable omission is that the Strategy makes no mention of the legislative mechanisms that will be deployed in implementing and enforcing these measures.

Whilst EPR schemes are considered to be an effective environmental regulatory tool, they are not considered a panacea. This may result from the inability of such schemes to recover near perfect amounts of material to allow for a true CE. An example of this can be found in end-of-life vehicles scheme[60] which, in theory, due to a car's size and its inability to be disposed of freely should produce the required near perfect amounts of recovery. For example, out of the 1.8 million cars which leave the road permanently every year,

53. Above n. 3 at 32. Any such contribution will be required to be modulated and cover the full net cost of end-of-life disposal costs.
54. Organisation for Economic Co-operation and Development, 'Extended Producer Responsibility (EPR) and the Impact of Online Sales' (2018), 11. Available at; www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/EPOC/WPRPW(2017)2/FINAL&docLanguage=En
55. Above n. 3 at 34. There will also be consultations on the inception of additional schemes such as textiles and tyres.
56. See Council Directive 2006/66/EC, above n. 39.
57. Ibid.
58. Above n. 3 at 38.
59. Ibid.
60. See Council Directive 2000/53/EC, above n. 38.

around 500,000 to 800,000 are unaccounted for, thus they are unaudited and therefore classed as 'leakage' from the EPR system.[61] Such figures may challenge the Strategy's ambition of creating a CE through the use of EPR without conducting significant reform to ensure that problems caused by 'leakage' are nullified. Furthermore, there is also a concern that in offering 'take-back' schemes, such as the end-of-life vehicles scheme, there is an increased risk of products bypassing the reuse market and instead being sent to recycling facilities; thus, missing a vital chance to keep the resources in use for as long as possible.[62]

Finally, the significant difference in value of waste goods at the point of disposal may provide the government with a hurdle to expanding and enhancing the use of EPR without causing harm to business. An example of this difference is that lead has a significant value whereas steel does not or, if the product is hazardous, this will lead to expensive transportation and recycling costs. These differences could put economic pressure on certain businesses, such as steel producers, that make little or no further profit from recycling.[63] However, in practice, the burden of EPR costs on the producer is passed on to the consumer, which inevitably means that through price increases this risk may be negated. This may result in lower purchase rates of any given product at its original point of sale.

Conclusion

It is clear that the traditional linear model of waste disposal is outdated and no longer appropriate for modern-day consumerism. Therefore, the release of the Strategy provides a real glimmer of hope that there is a sustainable alternative to the 'take, make, use and throw' premise that most of the population currently live by. The Strategy sets out a clear ambition for England to become an economy which is circular. It looks to achieve circularity by introducing policy plans that will affect businesses, consumers and local governments. It focuses not just on waste disposal per se, but on the whole lifecycle of a product which is a welcomed development.

However, it is important to note that a significant number of policy plans set out in the Strategy are required as a result of the EU's Circular Economy Package. This means that it may face a turbulent time. It is important to remember that, although the Strategy gives an indication of government policy, it is only a 'strategy'. In other words, any given indication of policy is subject to change, especially as a result of Brexit. Once the UK leaves the EU, it will have free reign to decide its own policies, without the need to ensure that it meets the commitments set out in the EU Circular Economy Package. Therefore, as a result of the ambitious nature of the Strategy, we may see that certain policies are watered down or even abandoned.

Furthermore, it is noteworthy that the Strategy's goal of developing a CE cannot be based on precedent because there is currently no example of an economy which has successfully transformed from a linear model to one which is circular. In fact, we are yet to see an economy which has effective, near perfect recovery and recycling of large items such as cars, let alone smaller items such a batteries or waste packaging. That being said, the planned enhancement of existing EPR legislation may help to drive the success rates of recovery and recycling through implementing better techniques to ensure enforcement, public awareness and consistency. Nevertheless, the ambitious target of achieving circularity set in the Strategy may be jeopardised by its severe lack of detail. It provides little explanation of how the policies will be implemented. Instead, it seems to rely on consultations, which although useful, are unlikely to foresee the success or failure of intended policies. Nevertheless, it is somewhat encouraging that the Strategy contains a

61. G. Williams, 'ELVs: Carrot or Stick?' (2017) *CIWM Journal* 59. Available at: http://uk.emrgroup.com/files/ciwm-may-2017_emr.pdf.
62. M. Despeisse, Y. Kishita, M. Nakano, M. Barwood, 'Towards a Circular Economy for End-of-Life Vehicles: A Comparative Study UK – Japan' (2015) 29 *Procedia CRP* 668. Available at: https://doi.org/10.1016/j.procir.2015.02.122.
63. See Schultmann, above n. 32 at 1033.

timeline of events, which has been put into the public domain, meaning that the government is accountable for the delivery of policy plans.

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