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In response to your online request for additional information on these following points:

- Additional evidence relevant to consideration of suitability of a Deposit Return System, DRS, in Scotland (eg impact on litter, recycling of litter, wider sustainability impacts, performance and cost compared with experience elsewhere)
- Evidence on how a DRS could be designed and managed
- Evidence of impact on business, consumers (costs and acceptability).

I would like to submit the following information for your reference and to assist with decision making process, as a Scottish person working within the packing industry living in Scotland this subject is of great pertinence. I would love nothing better than for our country to efficiently manage our waste, something we are sadly failing in however through analysis with colleagues and industry experts it is my opinion that **the feasibility report is of limited value, as:**

- There was no cost-benefit analysis documented .
- It didn't consult any retailers, local authorities or waste management companies who are key stakeholders
- It did consult Reverse Vending Machine, RVM, manufacturer TOMRA which lobbies worldwide for DRS. And in my opinion give a biased view point. RVMs are expensive, sophisticated machines. Installing them to accept a minor stream of used packaging will be costly and inconvenient for consumers and will tie retailers and manufacturers to a system that will generate long-lasting profits for RVM manufacturers.
- It failed to consider A.G. Barr's returnable bottle scheme that still operates today. Current return rate is 54% with a 30p refundable deposit. In contrast and with no supporting evidence, the report predicts return rates of 85-95% with a 10p-20p deposit.
- The report includes information about DRS in selected countries but did not assess countries that have rejected DRS after carrying out impact assessments – Czech Republic, France, Ireland, Spain, Switzerland, Poland.

The conclusions of the report are therefore of limited value.

A deposit return system would increase costs, be inconvenient for consumers, especially disabled people and would penalise low income families



- The proposed scope is wider than anywhere in Europe. It includes drinks cans, bottles, and cartons made of glass, metal, plastic. It includes alcoholic drinks, possibly milk and even food products.
- The report does not take account of a number of costs that will be passed on to consumers, including provisions to deter fraud, the use of counterfeit-proof ink for labelling and many others.
- Consumers will have the inconvenience of having to store empty containers at home separately from other containers, take them back to stores and queue to return them. Consumers are also likely to be confused by which containers carry a deposit and should be returned to store and what should be recycled by the local authority.
- It takes no account of older people, those without access to transport or low income families.
- The cost of a can or bottle could increase by up to 40% to cover system costs - an average can of soft drink would go up from 65p to almost £1 (with only a 20p refund). A daily bottle of milk could cost an extra £1.40 per week.
- **The report puts a high value on people's willingness to pay for reduced littering but no value on the social costs, wasted time and inconvenience that people would face.**

A deposit return system would add cost, unnecessary administration costs and complexity for Scottish and other businesses

- The report says TOMRA charges £30,000 per RVM and £2,000 for installation. It isn't clear if these costs are based on the report's assumption that top-of-the-range RVMs would be used which compact containers and can also read bar-codes on cartons.
- Even using the report's assumptions, this would mean an investment of £86.4 million for the 2,700 machines the report says would be needed.
- The report has not considered the problems faced by companies that have tried RVMs. **See Appendix A for Tesco's experience.**
- Space in bars and shops that have never had to store empty containers will be a problem. Supermarkets will also have to be careful how they store milk and juice containers to safeguard health and safety requirements.
- The deposits scheme in Germany changed shopping habits. People shifted from small convenience stores to larger retailers. Small stores often do not have the space to install reverse vending machines. People tended to bulk up containers for return in one trip, often by car, instead of walking. A DRS risks turning people away from shopping in high streets.

A deposit return system risks undermining Local Authorities' kerbside recycling systems

- The impact of deposits will affect both street cleaning services and recycling systems and will likely increase costs of both.
- The cost of emptying litter bins and street sweeping will hardly decrease because other litter – newspapers, travel tickets, coffee cups, chewing gum, cigarette packets and ends etc. – will still need to be dealt with.



It is likely that costs could increase because if people are encouraged to empty litter bins to scavenge for containers, they are unlikely to replace other items of litter after emptying.

- Drinks containers have a relatively high scrap value compared with other recyclables. Local authorities would therefore lose this value but would still incur the same collection costs (primarily labour and transport) collecting a smaller amount of lower value materials.

A deposit return system would target only a small amount of litter and have no impact on littering behaviour

- Eunomia says beverage containers are 40% of litter based on volume but studies that measure number of littered items put it at 3%-20%.
- The report suggests that there could be a reduction in litter of around 17% but there is little hard evidence from anywhere that deposit schemes reduce littering. Sweden had deposits on drinks containers for 30 years and despite increasing the on-the-spot fines for littering drinks containers to £80 in 2011, it is still a problem.
- The report's estimate of cost savings from litter reduction is speculative.
- No Scottish authority records the amount of litter collected. The report has ignored the most recent survey of the number of littered items in Scotland, carried out by Keep Scotland Beautiful [Composition of Litter in Scotland 2104](#). Instead it has used an estimate of the amount of littered drinks containers by weight from a previous study by Eunomia.
- Weight of litter is of little importance - 30 grams of plastic could be 1 bottle or 20 yogurt pots. The cost of cleaning them up is very different. The report applied a further calculation to the weight data to come to the conclusion that 86% of litter could be recycled, worth £0.6 million.
- The report puts a value of the disamenity cost of litter at between £73m to £770m, based on four studies of people's claimed willingness-to-pay for less litter, three of which are not named. The fourth is a 2011 study by Wardman, University of Leeds Institute for Transport Studies for Defra. It showed people four photos of different levels of littering but, as the study points out, the results are an average value.

A deposit return system would lead to fraud and therefore increase costs to consumers and businesses

- Some system of labelling containers that would carry the deposit would be required. Two labelling options are suggested:
 - a Scotland-specific label and barcode. This would create stockholding and distribution problems for retailers and would increase costs of goods and likely reduce choice
 - a UK-wide label which would only be active for goods sold in Scotland. This would encourage people to buy drinks in England and claim deposits in Scotland. Financial losses from fraud would get passed on to consumers.
- In the US fraud is a serious problem, even though deposits levels are only 5 cents or 10 cents (3p or 6p). The California state body that administers their deposits system carried out a 3-month study of truckloads



of containers coming into California from non-deposit states. It found that \$30 million (£19 million) was being claimed for illegal redemption in the state each year.

- There has also been a case where Hungarian containers with counterfeit labels were sold in Germany (the German deposit is 3-6 times higher than the US deposit rate). Distance from Budapest to Berlin is 545 miles, more than the distance from Calais to Edinburgh (519 miles).
- Any labelling system would require a counterfeit-proof ink. These are expensive and the cost would be passed on to Scottish consumers.

A deposit return system would not increase recycling rates

- **The report provides no evidence for its assumption that a 10p deposit would produce an 85% return rate and a 20p deposit a 95% return rate.**
- It suggests that a deposit return system would increase recycling rates. However, this would only be for those containers within the system.
- Even in Denmark, which has always had deposits on drinks containers and where consumers never lost the habit of returning containers to the store, the return rate is below 90%, though the law set a target of 95% in 2001 and the deadline for achieving it has been postponed more than once since then.
- Hawaii, the most recent US state to impose deposits (2005) was at 72% until 2011 and reached 77% in 2012.
- The report has ignored AG Barr's experience with a deposit on glass refillable bottles. Their customers make a conscious decision to choose containers with a deposit so a high return rate would be expected.

In fact, despite much effort to keep the system working, including increasing the deposits from 20p to 30p in 2008, many of its customers forfeit the refund. In 2012, when the government included glass in kerbside collections the return rate dropped from 65% to 57% and has kept going down to 54% today.

- The trial machines in Heriot Watt University achieve 50% recovery, despite the machines being close to where the drinks are consumed and the sales outlets and the fact that the university campus is a largely closed and largely pedestrian community.

The Packaging Recycling Group Scotland (PRGS) is a group of 33 leading food and drink companies and industry bodies that shares the Scottish Government's ambitions to tackle litter and increase recycling. It believes a DRS will undermine existing efforts and is not right for Scotland. Instead it offers a progressive, unprecedented alternative to tackle litter and achieve a drink container recycling rates of 80% by 2025, exceeding government targets.

For more information and to read its proposals visit www.prgs.org.uk



Should you require any further information or assistance please do not hesitate to contact me

Best Regards



Anne Logan

Appendix A

Subject to checking by Tesco

Tesco experience of Reverse Vending Machines

- Tesco started installing Tomra Reverse Vending Machines, RVMs, in the car parks of stores in the late-1990s.
- Car parks were chosen because of lack of space in stores.
- RVMs were installed in 100 stores (including some in Scotland)
- The total cost of a machine plus its installation, ground work wiring, internet connections is far in excess of the estimate of £35,000 in the DRS feasibility study. Per store it could be as high as £100,000 today.
- Some smaller RVMs were installed in small stores at a cost of around £10,000 plus installation. These created problems because they occupied space that would otherwise have been used for selling and the return rates were low.
- The machines collected only a limited range of container types.
- Infestation by wasps, flies and even rats was a problem.
- In the early days of operation, club card points were offered as an incentive to return plastics bottles and metal cans. Some customers however cut bottles into small pieces to claim a reward on each piece so the incentive had to be removed.
- The machines were removed after 9 years because they had reached the end of their life and new spare parts would have had to be manufactured because there were none available.

