

Circular Economy Opportunities



In our September/October edition we looked at forthcoming legislation around sustainability. Understandably some people are fearful of the obligations that such legislation will place on them, but if you are a reputable manufacturer or supplier of durable, resource-efficient goods, with a clean supply chain and low-carbon operations, upcoming legislation will benefit your business, writes *Elaine Butler*.

Capturing value from the 5Rs

The holy grail of circularity is reuse, often achieved through resale or rental, and supported by repair, refurbishment and remanufacture. This is a sea-change from how most businesses operate and it can seem like an unwanted burden. That is until you consider the new streams of income that they can offer.

Reuse through resale and rental

To date, most resale and rental has been delivered by third parties. As the circular economy matures it will become increasingly difficult to generate profits from unit sales and so we expect to see more reselling and rental by companies that heretofore would have only dealt in direct sales of new merchandise.

Resale and rental are often dismissed as the poor cousin of virgin goods, but wrongly so. Not only does it provide a new way to generate income, it also offers opportunities for repeated engagement with customers, protection of your brand, the recapturing of residual value in pre-owned goods and a chance to discover and develop new customers and markets.

The decision to resell or rent is largely down to your market segment, your current business model and your operations, and in particular stock flows. As it stands, resale or rental is unlikely to be financially viable but, as costs shift from labour to virgin materials and transportation, that will change. To prepare, it is advisable to carry out some costed trials now, thereby flagging key benchmarks that affect profitability. That way, when the pendulum has swung far enough to make resale or rental profitable, you're ready to jump.

Repair, refurbishment and remanufacture

These three circular strategies are crucial to the functioning of the circular economy. There are a myriad of ways in which they can be delivered. Finding one that best suits your company is key to unlocking the value available to your organisation.

Repair and refurbishment have been with us for millennia but, what was once commonplace, has been reduced to a small, disjointed sector in Ireland. It is anticipated that the repair and refurbishment sector will grow as circular economy initiatives gain traction, but the profile of it will change.

Currently, repair and refurbishment services are mostly delivered by third parties and are disconnected from original manufacturers and suppliers. Given the eagerness of EU legislators to connect EPR schemes back to product design and original manufacturing processes, we will probably see legislation linking repair and refurbishment back to primary manufacturers.

That is not to say that products will be shipped back to the factory that made them. It is more likely that goods that cannot be repaired or upgraded by the end-user will be attended to by on-shore or near-shore services. One example of this in action is the partnership between the social enterprise Crown Workspace and Herman Miller, who have appointed them as their authorised refurbishment partner.

Not only will such partnerships help boost light manufacturing in Ireland, they will also make it easier for original manufacturers, and their agents, to protect their brands, generate new streams of revenue, engage with customers, provide access to excellent product development data and secure stock for resale.

Remanufacturing is a concept that has EU policy makers very excited. They hope it will solve a lot of environmental woes without requiring behaviour change on the part of purchasers, which to be honest, rarely materialises. The concept is simple enough and involves taking products back, disassembling them and then

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Those that profit most will be the companies that identify and integrate customer value into their new way of working. Unfortunately, Ireland is lagging behind in this race, but this is a marathon, not a sprint.



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reassembling them to be as good as new. It is a step up from repair and refurbishment, in that the final product is virtually indistinguishable from a virgin product and is often sold with similar warranties. Caterpillar is an example of a large company that has been engaged in remanufacturing successfully for years.

Given how little we currently manufacture here in Ireland, remanufacturing poses particular challenges. Most of the goods on the Irish market are made on the far side of the world, so it does not make environmental or financial sense to send them back there for remanufacture. As with repair and refurbishment, it is more feasible that we will see authorised regional remanufacturing hubs for products that continue to be made offshore. These remanufacturing hubs will be licenced to work on particular brands and may end up working across multiple brands and businesses.

Additionally, these onshore small-scale remanufacturing hubs will not only bolster manufacturing in Ireland, but will also provide Ireland Inc with unparalleled access to the design and engineering expertise of global brands. This can only have a positive impact on our indigenous R&D skills and sector.

Ecodesign for Sustainable Products Regulation

The most relevant piece of legislation coming down the tracks for physical goods is the Ecodesign for Sustainable Products Regulation (ESPR) which the Irish government sought feedback on in September of this year, and will go for official public consultation at some point in 2022.

Essentially, this piece of legislation is aimed at supporting the design, manufacture and use of products that are resource efficient and easier to

repair, refurbish, remanufacture and recycle. It also intends to prevent and stop the destruction of unsold consumer goods, encourage sustainable procurement, introduce Extended Producer Responsibility (EPR) schemes for more products, and educate and empower customers to choose such sustainable products.

What are eco-modulated levies?

It is expected that the ESPR will be most noticeable at the point of purchase, in the form of eco-modulated levies. These levies will be determined by how a product scores in terms of longevity, repairability and recyclability. Simply put, a high score will mean a lower levy, thereby encouraging purchasers to buy the most sustainable product at the outset.

We can often have a negative knee-jerk reaction to levies but, implemented properly, these eco-modulated levies will level the playing field for sustainable products that currently struggle to compete with short-lived, single-use versions that have the economic and environmental cost of their disposal subsidised by the nation's taxpayer.

The best way to minimise the levy applied to your goods is to: (1) use as little material as possible; (2) avoid as many chemicals as possible; (3) design products that are easy to disassemble – and therefore repair, upgrade and recycle; (4) provide easy access to repair information and parts; (5) use materials that are recyclable or compostable at the end of their functional life.

Apart from the obvious benefit of safeguarding human existence, product development of this nature will also make your product more attractive for architects and developers seeking LEED, Breeam or Well accreditation. None of this is rocket science, but it

does take time to put into place. So, if you haven't started yet, now is the time to get going.

Digital passports

The ESPR also introduces the idea of digital passports, which are a compilation of all the information that effects the environmental (and possibly social) impact of a product. Understandably, some companies are concerned with the administrative burden that this will place on them. No doubt in time technological solutions will help companies track, compile and communicate pertinent information to customers and stakeholders in an efficient and cost-effective manner.

Digital passports can be leveraged to support business activities. Take the Danish kitchen manufacturer Stykka for example. They place scannable labels on all their products, not just to comply with legislation, but to help customers seamlessly reorder products if damaged in transit. Dutch office furniture rental company Ahrend also uses scannable QR codes, this time to continually track the history of their assets (i.e. furniture). Not only does this ensure a smooth flow of information on the quality and health of their products, it also provides important datasets to enable scaling and management of their furniture-as-a-service business model. The same could apply to building services products.

The circular economy is the perfect chance for us to do better and profit from it. Those that profit most will be the companies that identify and integrate customer value into their new way of working. Unfortunately, Ireland is lagging behind in this race, but this is a marathon, not a sprint. We are perfectly placed to build on the learning of other countries further along on their circular journey. The most important thing is to start. ■