What Is Reuse?

Purva Tavri investigated the "perceptions of reuse" in the UK for her PhD at Kingston University. Here she summarises her findings…

A PhD research investigation regarding reuse behaviour at organisational level in the UK identifies reuse as representative of a "human action" approach to climate change (the other approach constitutes the science first model, which is a reliance on technological solutions).[1] The research concludes that based on type of materials and type of sectors, reuse – as a human action – could be considered as providing a solution to the seemingly irreconcilable dichotomy of reducing waste production while maintaining economic growth, in order to achieve absolute decoupling. However, the research indicates that one of the complexities surrounding the challenges that organisations encounter while engaging with reuse activities lies in understanding the exact meaning of "reuse".

The literature review on reuse indicates that it is overshadowed in the waste hierarchy by the umbrella term "preparing for reuse". It further demonstrates that this overshadowing of reuse is relatively recent.

Furthermore, the literature illustrates that different authoritative bodies have provided varying definitions of reuse that range from the international, to the national and regional authorities, and even the authorities at local level.

Firstly, at the EU level, the Packaging and Packaging Waste Directive 94/62/EC defines reuse as "…any operation by which packaging, which has been conceived and designed to accomplish within its life cycle a minimum number of trips or rotations, is refilled or used for the same purpose for which it was conceived, with or without the support of auxiliary products present on the market enabling the packaging to be refilled; such reused packaging will become packaging waste when no longer subject to reuse."[2] Whereas, the End of Life Vehicle Directive 2000/53/EC defines reuse as "…any operation by which components of end-of-life vehicles are used for the same purpose for which they were conceived."[3]

Furthermore, at the London level, reuse is defined in economic terms as "…an item or material which becomes unwanted by the current owner but it is still considered to be usable and have an economic value. The owner has, however, decided to write off its value to expedite its removal and in doing so the item or materials have the potential to enter the waste stream or alternatively be offered for reuse to a reuse organisation".

Moreover, the London Community Resource Network (LCRN) further argues that "…a reusable item is one where there is an economic value and a demand for it by another person, in its current form and purpose. It is likely to have a residual value, but the current owner has decided to write off this value and is thus prepared to send it to the bulky waste stream or, if known, to a reuse organisation".[4]

Along with these, at the international level the Organisation for Economic Co-operation and Development (OECD) defines product reuse as "…involv[ing] the

multiple use of a product in its original form, for its original purpose or for an alternative, with or without reconditioning".[5]

And finally, at the UK level, reuse is defined as "...buying and selling whole used items, possibly after washing or minor repair (other terms used, particularly in the construction sector include reclaimed)".[6]

The above variations in the distinct definitions of reuse reveal that, despite being the second principle of the circular economy, the complexity regarding the understanding of what constitutes reuse (and of how to engage in reuse behaviour) could certainly be based on the different interpretations. The definitions are rendered increasingly complex due to their focus on different aspects of the term "reuse", ranging from the item's physical form, to the socioeconomic value of reuse.

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At the same time, the range of definitions demonstrates an ambiguity that lies in the "purpose" – essentially, does reuse mean using items for the "same purpose", or can it also be fulfilled by the reuse of items for an "alternative purpose"?

The meaning of the "same purpose" is defined by Lox as "...use, for the second or more time, under the same form and with the same properties of the material as the first use, the material having constantly remained under the same form between several users."[7]

To gather the perceptions regarding reuse within some of the organisations that are at the leading edge of waste management in the UK, the research uses a mixed method approach. In so doing, the research initiates by conducting content analysis on 36 organisations selected from the WRAP case studies between the years 2012 and 2013. The content analysis establishes an awareness of certain approaches to waste management, and thus reflect on the organisations' attitudes. This analytic foundation then provides a firm basis for carrying out further semi-structured interviews: an in-depth analysis regarding the perceptions of reuse, and how this affects organisations' approach to waste management. The semi-structured interviews are comprised of a study of 11 corporations (five retailers, two construction companies, two waste service providers and two manufacturers) and eight third sector organisations (TSOs).

A Complex Entity

THE RESEARCH reveals that reuse is a complex entity; the application of reuse strategies in real life scenarios varies between sectors. One of the elements demonstrating a clear disparity concerns the use of "unsold stock", which content analysis findings indicate is considered as constituting reusable materials by retailers, manufacturers and TSOs.

This is juxtaposed by the fact that the semi-structured interviews reveal that, even while they consider unsold stock as reusable, retailers and manufacturers also recognise unsold stock as revealing a flaw in their business practice, which requires improvement through streamlining and better balancing of their supply and sales of materials, so that they are left with fewer materials in the form of unsold stock. Therefore, while recognising the importance of "unsold stock", the research suggests that government could provide reuse schemes for managing this unsold stock in order to avoid materials being sent to recycling or disposal.

Similar to the variation regarding the precise definitions of reuse in the literature, the research reveals that, even at an organisational level, the understanding of reuse varies from one sector to another. For instance, a flooring manufacturer considers the practice of reprocessing material as reuse, by indicating that "...we will take the waste that is processed as reuse and send it to somebody else to reuse it for something else."

However, retailers and waste service organisations interviewed indicate that they regard reuse in accordance with the recent government definition. In contrast, the two construction companies interviewed explain that their understanding of reuse is not limited to the government definition: they consider any form of reuse as valid, even if the product is being utilised for a different purpose, so long as it is kept in the same format and provided the product is not being reprocessed. In a similar way, most of the TSOs suggest the necessity of an extension to the government definition of reuse, by highlighting that the items could be used for alternative purposes, so long as they are not being reprocessed.

Synthesising the research findings suggests that the ambiguity and variations in understanding reuse could be because the practises of both reuse and remanufacturing (despite their differences) are defined under the category of "preparing for reuse".[8]

On the one hand, reuse is analysed as a "human action" solution; but on the other, remanufacturing is a technological solution towards waste management at organisational level, which has been revealed to be part of the "science first model" approach to climate change, rather than being associated with the human action model. Consequently, the research recommends that "preparing for reuse" could be revisited in the waste hierarchy by separating reuse from remanufacturing.

Furthermore, the findings also suggest a method of revisiting the way reuse is defined, by aligning with the OECD definition[9] and the recent Defra definition.[10] By doing so, this redefinition of reuse could make it clear and visible, which is crucial, because reuse forms an essential category of the waste hierarchy and also an important principle of the circular economy. ■

References for this article are available upon request. Email ben.wood@ciwm.co.uk

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