Empowering the consumer for the green transition

Consumption Research Norway (SIFO) is a non-profit, transdisciplinary research institute at the Oslo Metropolitan University. Our research aims to understand the role of consumption and consumers in the society, and to provide the knowledge basis for public consumer policies.

We want to express our enthusiasm for Empowering the consumer for the green transition initiative. Greenwashing as a marketing strategy, lack of correct information, as well as early and planned obsolescence are important barriers to address in transitioning to a more sustainable production and consumption system. We have some comments that we hope will be helpful in the further work.

The use- phase of consumption

We quote:

1. Consumers often lack reliable and relevant information at the point of sale on:

- *products' sustainability, e.g. environmental characteristics, expected or guaranteed lifespan, etc.;*
- *the availability of repair services, spare parts and repair manuals; and*
- *software updates/upgrades*

These three points are important; however, the list is not exhaustive. Two key aspects are missing. 1) use and maintenance, and 2) technical specifications. Below, we address these two conditions.

Our arguments support the addition of a fourth point to the existing list: **use and maintenance**. Moreover, we suggest changing the first sentence to also include information about the product's technical characteristics: *products' sustainability, e.g. environmental characteristics, expected or guaranteed lifespan, **technical specifications**, etc.;*

Use and maintenance

The use phase of many products has major environmental impacts. This is apparent for cars and other means of transport. Electrification and streamlining of the car fleet is thus an important element in an environmental policy. The environmental impact of the use phase has also been recognized for household appliances and other electrical products, and the development of energy label schemes has been an important step towards improved consumer information, and it has influenced technological development.

For other product groups, the environmental impact of the use phase is not commonly recognized, neither is it transparent to consumers in most cases. It is nevertheless of potentially great importance, which might differ between otherwise comparable products. One illustrative example from the Nordic countries is skis. Waxless skis cause very small environmental impacts in use, compared to regular skis, because wax contains a number of pollutants.

Textiles is one of the product areas mentioned specifically in the text. We are specialists in the use phase of clothing and will thus focus on this industry as an example. Through years of research, SIFO has shown the importance of including the use phase when considering the environmental impact of

textiles[1]. For example, we recently contributed to a life cycle assessment (LCA) of a sweater[2]. The results showed that "garment use phase was a significant contributor to fossil fuel (30.4%), global warming (13.4%), and water stress (37.1%). Consumer transport and the retail of garments in stores contributed 12.6% fossil fuel, 5.2% global warming, and 3.6% water stress impacts across the value chain." Consequently, there is great need to develop measures that increase the number of times a product is used in its total lifetime.

Not many LCA analyses of clothes have been carried out where the use phase is included in detail, but the few that have been done all show similar results. The use phase is important and becomes relatively more important the longer the garments are used. In the analysis of the sweater, an average number of wears and frequency of use were used. This amounted to 109 times of use (divided between two users) and 5.2 times of use per wash.

The costs pertaining to the use of clothing will depend on the infrastructure (i.e. type of washing machine), the specificities of the products and the habits of the consumers in a combination. This is illustrated by an overview of carbon emissions for one year of use of socks in the figure below. It is assumed that socks are worn every day. The differences between countries are large. The CO_2 emissions of the use phase of some clothing, in our example socks, is five times higher in the United States than in Japan. The differences are a reflection of the various combinations within these countries of the types of washing machines, temperatures and washing frequencies, as well as the use of clothes' dryers, in addition to the carbon intensity of used energy sources. The figure also shows that the difference between products is large. Woollen socks use less energy in the use phase mainly due to lower washing frequency.

Carbon emissions of one year of use of socks in kg CO_2 eq
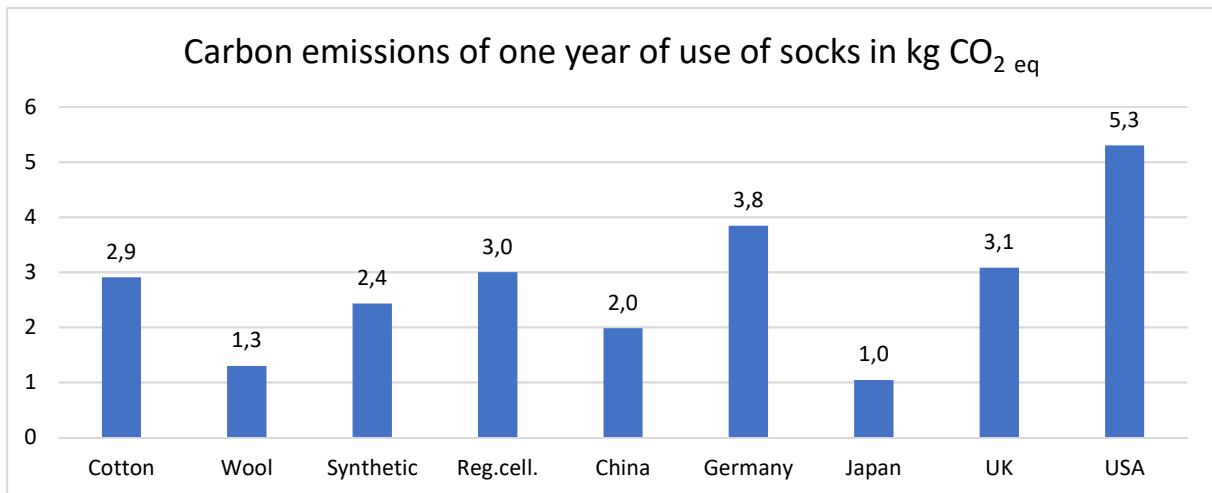
Businesses can influence the cost of use through design and labelling. Garments that require to be dry-cleaned or tumble dried have a greater environmental impact. The same applies if they have to be washed alone or with the similar colours. Because consumer behaviour is so decisive, it is possible to use this type of knowledge to change behaviour. It is possible to provide information on use costs

[1] Klepp, I. G., Laitala, K., & Wiedemann, S. (2020). Clothing lifetimes: What should be measured and how. Sustainability, 12(6219), 21. doi:10.3390/su12156219
Laitala, K., Klepp, I. G., & Henry, B. (2018). Does Use Matter? Comparison of Environmental Impacts of Clothing Based on Fiber Type. *Sustainability, 10*(7), 2524. doi:10.3390/su10072524
[2] Wiedemann, S.G., L. Biggs, B. Nebel, K. Bauch, K. Laitala, I.G. Klepp, P.G. Swan, and K. Watson. 2020. "Environmental impacts associated with the production, use, and end-of-life of a woollen garment." *The International Journal of Life Cycle Assessment*. https://doi.org/10.1007/s11367-020-01766-0.

both for average practice and best practice. Raising awareness among producers and consumers of the environmental impacts in the use of products will in itself be an advantage because it has the potential for rapid change - as we have seen in household appliances and cars. At the same time, this will contribute to an overall goal of enabling more informed choices by consumers and fair competition among producers. It is reasonable to assume that the products that now have low production costs, due to high environmental costs and short life cycles, will become less attractive to consumers if the real financial and environmental costs are communicated convincingly and emphasis is unilaterally across product categories in a lifecycle perspective.

Technical specifications

Crucial to getting products used frequently over long periods is that consumers choose the products that fit their needs over the longest possible periods of time. This is because buying less reduces the impact of consumption much more than buying a "sustainable products". For some product groups such as cars and appliances, the information about technical properties and consumption values provided to consumers is standardized, regulated and well documented. For others - such as clothing - it is insufficient and often also directly misleading.

For instance, varying size labelling of clothes leads to many mistaken purchases. Moreover, there are labelling and claims on properties such as that clothes "breathe", do not smell, or are waterproof. Such claims should require an explanation of how big the difference is compared to alternative materials and how the property is achieved. Insignificant differences are inflated and help to obscure, not inform.

The only required labelling of textiles pertains to fibre content. This labelling is important. Consumers need and have the right to know which textile fibres have been used. At the same time, fibre labelling is easily confused with a content declaration - and thus hides the content of chemicals and which technologies are used to give the product specific properties. There is a big difference between products that naturally inhibit the smell of sweat (such as wool), and products where these are properties that have been obtained by adding chemicals (e.g. silver salts, nano silver or triclosan) both because they are often quickly washed out and because they have different environmental consequences. It is thus possible to look at the extensive greenwashing in clothing and textiles as a result of low regulation and follow-up of general product information, such as lack of content declarations and uniform communication about use properties. Achieving effective work against greenwashing and planned obsolescence also requires that the requirements for the general information about the products is tightened.

Consumer rights: Warranties and consumer complaints

It is important to focus on warranties and the right to file consumer complaints. The experience from Norway is that consumers are not familiar with their rights, and seldom file complaints, especially within the area of clothing, but also in relation to other consumer goods[3]. In practice, this means that many have experienced that textiles are damaged before the two years warranty period is over, but very few have complained[4]. We would therefore like to point out that for consumer rights to be an effective tool, not only the rules must be in place, but consumers must know about their rights.

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[3] Strandbakken, P., & Bøyum, L. S. (2017). *Reklamasjonsfrister*. Oslo: SIFO http://www.hioa.no/Om-OsloMet/Senter-for-velferds-og-arbeidslivsforskning/SIFO/Publikasjoner-fra-SIFO/Reklamasjonsfrister
[4] Bøyum, L.S., K. Laitala, and I.G. Klepp. 2017. "Billige og dårlige klær - Få klager." [Cheap and bad clothes - Few complaints]. In Forbrukstrender 2017. SIFO-survey, Prosjektnotat nr. 6 - 2017, 47-53. Oslo: SIFO.

Consumers and retailers must have access to knowledge about the content of the regulations, but also on how to apply them. The warranty period is two years in the majority of European countries based on Consumer Goods Directive[5], but longer for some product groups in some countries such as in Norway where the current regulations state that the products must withstand "normal use" for 2 or 5 years, depending on the product group[6]. But what is normal use? An important task is therefore not only to develop regulations and labelling schemes, but to create practical guidelines on how these can be operationalized. How can damages caused by "normal use" be distinguished from damages that occur for other reasons? For clothing, this is complex, and thus the regulations that give consumers a rather strong rights to reimbursement are not utilized.

The effects of information on behavioural change has proven limited

A vast body of consumption research has shown that information alone is seldom enough to achieve significant behavioural changes at the societal level[7]. However, information in combination with new policies towards market regulation could increase the impact on consumer behaviour. For example, energy labels provide information to consumers, whilst the industry is improving their products, and regulations are adjusted so that the worst products are phased out from the market. Similar regulations could be applied to other product groups, resulting in poor products (i.e. those with short lifespans, non-repairable etc) being phased out. Therefore, communicating more information about the environmental impact of products should be supported by strengthened regulation of those products and labels.

Information about the estimated financial cost of owning, operating, and importantly, maintaining the product could be provided as a reinforcing element, in addition to the environmental savings. The calculations should at minimum include aspect such as expected lifespan and yearly costs of energy and water use, as well as consumable parts (such as ink for printers). This would enable consumers to evaluate the cost effectiveness of products with unequal lifespans and consumption values. Repair costs can be significant, so should be estimated when the product has parts that are expected to have shorter lifespan than the product's total estimated lifespan.

[5] Maitre-Ekern, E., & Dalhammar, C. (2016). Regulating planned obsolescence: a review of legal approaches to increase product durability and reparability in Europe. *Review of European, Comparative & International Environmental Law, 25*(3), 378-394. https://doi.org/10.1111/reel.12182

[6] Act relating to consumer purchases LOV-2002-06-21-34 https://lovdata.no/dokument/NLE/lov/2002-06-21-34

[7] Southerton, D., & Welch, D. (2018). Transitions for Sustainable Consumption After the Paris Agreement. *The Stanley Foundation: Policy Analysis Brief*. https://stanleycenter.org/publications/pab/SustainableConsPAB1118.pdf