



Enjoying  
more

with  
less!

## **EXECUTIVE SUMMARY**

### **A surprisingly simple answer to a very big problem**

In 2016, Earth Overshoot Day<sup>1</sup> was 8 August. Put brutally, in less than 8 months, today's generation exhausted its annual budget of natural resources and started plundering that of its children, and theirs. This situation is getting worse. Overshoot day was 24 December back when it was invented in 1971<sup>2</sup>. That direction could continue, as economies start growing out of the 2008 crisis and political instability.

Here then is one of humanity's greatest questions - how to marry the consumption of billions with the limits required for a healthy planet? The answer to such a huge question is surprisingly simple. It lies at our feet, around us in communities already creating solutions in a thousand ways. For a hundred reasons, from saving money to convenience and reigniting social links in their neighbourhoods, people are rejecting the classic take, make, and dispose approach of today's consumption in favour of a more circular version, giving this new economy its name. The circular economy does not have a unique definition. It is rather an attempt to conciliate the environmental and economic agendas in which governments, business and consumers all have their parts to play and a responsibility to share<sup>3</sup>.

But to what extent can consumers join a more circular economy? That is the question addressed in this report, through highlighting some of the many outstanding examples. The result is a deeply inspiring patchwork with a focus on Italy, but a relevance for the whole of Europe. We investigate what obstacles exist to their mass uptake, and what local, regional and national government can do to help.

### **Consumers first**

This report will focus on options for the average consumer with concrete examples of circular consumption routes. Far from being something frustrating or boring, the circular approach enhances consumption experiences, extends freedoms and hands us control over what we buy and use. While today's throwaway society has locked us into some trivial consumption patterns, the economic, social and environmental crises are forcing change. Necessity is the mother of invention and digital tools are now spreading new consumption patterns and reclaiming old ones. People are at the centre of the circular economy "not as passive targets of the latest marketing promotion, but as the greatest potential force for value generation and change."<sup>4</sup> And their motivations to change habits are numerous.

### **Different Circular Economy consumption possibilities**

This report gathers existing, mainly economic, ideas rather than developing brand new concepts. While the scope of circular consumption is wide, ranging from transport to housing, food to leisure,

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<sup>1</sup> <http://www.overshootday.org/>

<sup>2</sup> <http://www.overshootday.org/newsroom/past-earth-overshoot-days/>

<sup>2</sup> <http://www.overshootday.org/newsroom/past-earth-overshoot-days/>

<sup>4</sup> Rethink Consumption, Consumers and the future of sustainability, BBMG, GlobeScan, SustainAbility, 2012 p4

we concentrate on products and services in Italy and Europe. We classify possibilities open to consumers as follows:

- Made to last
  - Preferring things made to last – e.g. heirloom goods, products with a long warranty period or reusable items etc.
  - Buying things that can be repaired or upgraded, reused or given for reuse and of course buying second-hand, refurbished or remanufactured products.
  
- Disown ownership
  - Sharing items that we don't use every day,
  - Renting or leasing things,
  - Swapping or exchanging.
  
- Get local
  - Buying local and seasonal food,
  - Using the services offered at community level by local organisations,
  - Buying fair trade products (for products not available at local level).
  
- Get clean
  - Choosing things that do not consume more materials than needed or generate waste – e.g. reusing container/bags and buying in bulk,
  - Avoiding things with toxic components – e.g. certified toxic free products or things that can be easily recycled.

The process of segmenting<sup>5</sup> consumers can help identify the potentials and the challenges of spreading circular economy consumer patterns. We conclude that groups like 'occasional purchasers', 'aspirational' and 'practical' consumers should be targeted, since they can systematically adopt circular consumption patterns when barriers are removed. They represent both the majority of consumers and the group more ready to change practices if convenient and not over costly. Young consumers should also be targeted, since they influence the consumption behaviour of their peers<sup>6</sup>.

### **Barriers and how to overcome them**

The second part of the report examines the barriers and leverage points facing each form of consumption. In summary:

- **Access is important.** Circular consumption possibilities must be enhanced, mainstreamed and promoted. They should be easy to access, supported by information that is structured, trustworthy and compelling.

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<sup>5</sup> Segmentation of Green Consumers, Meera R. Mayekar, K. G. Sankaranarayanan, International Journal of Science and Research (IJSR), 2014

Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition, Ksenia Benifand, 2015  
Rethink Consumption, Consumers and the future of sustainability, BBMG, GlobeScan, SustainAbility, 2012

<sup>6</sup> Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition, Ksenia Benifand, 2015

- **Cost and affordability** barriers can be overcome with information about full life cycle costs and economic incentives.
- **Resource efficiency services**, information & advice platforms could be established, along with dedicated places to swap, repair and exchange experiences.
- **Fear of unfashionable or out-dated goods**, can be offset by promoting upgradability. To add new components to old products, they must be made in a way that allows non-destructive disassembly and replacement.
- **Short-term fads** can be an obstacle to circular consumption patterns, but vintage can be cool and when it comes to gadgets, long-term compatibility of software can be stipulated.
- Repair services can be perceived as poor quality and you always have to wait. However, this can be addressed through quality standards, contractual clauses and courtesy replacement schemes.
- **Changing buying habits** is hard, especially when it is so easy to order online. But there is good scope for making local level alternatives more accessible and appealing. More support and promotion of community based initiatives and sharing should be undertaken to help people break old habits.
- Lastly, psychological factors can be a problem. Many of us are **deluged with information, but feel isolated, unable to question claims or navigate the information maze**. However, circular consumption can lead to inclusiveness through local and virtual communities that seem to be key to activating certain consumer groups most ready to adopt sustainable consumption patterns.

The circular economy is not perfect. The more repairable product may not be local, the less toxic one may not last so long, for example. Trade offs and the need for more clarity will always exist. Our advice for consumers is to do their best given these limitations, rather than be frozen by doubt.



### Case studies

Various Italian and European examples and advice are introduced in the third part of this report. We focus on appliances, clothing, ICT, furniture, food, cleaning products, toys and leisure. The important thing to keep in mind is that circular consumption possibilities are already taking place in Italy and Europe in almost every sector. Examples and good practice exist and need to be scaled up to multiply the benefits.

### The potentials of digital society

The fourth chapter in this report focuses on the role of digital tools in enhancing the circular patterns. As journalist Anne-Sophie Novel stated it in her “La vie share”<sup>7</sup> essay, an economic,

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<sup>7</sup> The title is a play on word in French since it is pronounced the same way as « la vie chère » meaning « the expensive life »

financial, social, environmental, philosophical and political crisis has combined with the use of the internet to change daily lives and consumption patterns<sup>8</sup>.

Indeed ICT has the ability to create networks and enhanced transparency by making information readily available. For example, pairing a circular economy approach with smart appliances makes sense: It informs how to make, use and reuse appliances by improving the knowledge of their location, condition and availability:

- Granular product usage information enables continuous improvements in design
- Automated guidance for usage avoids appliance wear or facilitates shared use
- Predictive maintenance and replacement of components prior to failure
- Accurate information for decision-making on future loops (e.g. reuse versus recycling)
- Automated localisation of appliances available for reuse or recycling
- Optimised route planning for customer and repair services / end of life (also called reverse) logistics
- Digital marketplace for refurbished appliances and/ or spare parts

## Recommendations

In conclusion, priority recommendations for national and local decision makers can be made.

At the national level:

- **Fiscal and financial incentives** can be introduced – e.g. reduced VAT on circular economy consumption possibilities
- **Exchange platforms**, both virtual and physical, should be created and supported.
- **Information and education** are key parts of the solution.
- A proper registration of environmental profile of products in a national base could be set as a technical specification in public sector tenders, so that we can incentivise more circular offers and eventually scale them up.

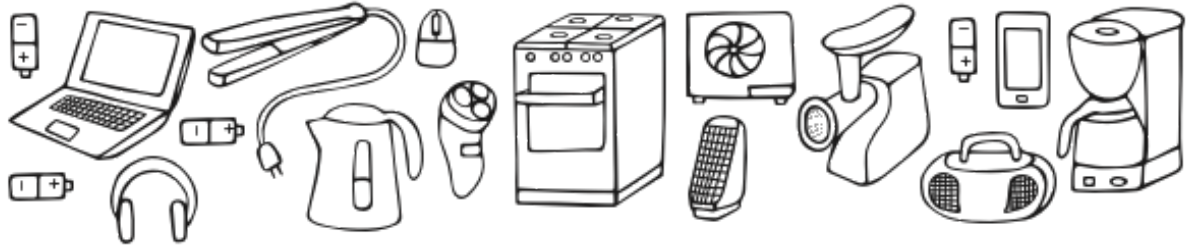
At local level:

- Create **dedicated public spaces for goods swapping and exchange of practical experiences**.
- Multiply **repair workshops** to foster repair and exchange of knowledge.
- **Support repair shops**.
- **Make deals with retailers** to have reward schemes for more circular goods and services.
- **Cooperate with retailers in promoting greener products ('choice editing')** and guiding consumers towards those ('consumer **nudging**').

Of course, adopting a consumer centric point of view, which is to say looking only on the demand side, is necessary but not sufficient. This approach needs to be complemented with renewed effort on the offer side and strong product policy options. New production systems, better product design and new business models should be put in place and their development fostered to unleash the potentials of more circular consumption patterns.

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<sup>8</sup> La vie share mode d'emploi, consommation, partage et modes de vie collaboratifs, Anne-Sophie Novel, Manifestô, 2013



## **INTRODUCTION**

In 2016, Earth Overshoot Day<sup>9</sup> was 8 August, which means that in less than 8 months, humanity exhausted the Earth's ecological budget for the year and after this day until 31 December it was consuming the budget of the next generation, violating the planet's boundaries. This date, calculated by the NGO Global Footprint Network, illustrates the urgent reality of the current ecological crisis linked to overconsumption. The situation is worsening. Indeed in 2015, overshoot day was one day earlier, while it fell on 24 December when it was first measured in 1971.<sup>10</sup> On the other hand, the Economy has not completely recovered from 2008 crisis and unemployment is still high together with social, political and geo-political tensions.

In this context, one wonders how the economy could abide by environmental constraints, or even if it could not become a key feature of any economic recovery. Unlimited use of resources, pollution and climate change need to be addressed. And the transition from today's "take, make, and dispose" production model to a circular model, i.e. the circular economy, is one of the solutions and surely a viable way forward, as proven by many recent reports issued by the Ellen MacArthur foundation and the Club of Rome in 2015 (<http://www.clubofrome.org/wp-content/uploads/2016/03/The-Circular-Economy-and-Benefits-for-Society.pdf>).

The circular economy does not have a unique definition. It is rather an attempt to reconcile environmental and economic agendas in which government, business and consumers have a part to play and a responsibility to act<sup>11</sup>.

The question addressed in this report will be to what extent consumers can help reconcile the environmental and economic agendas by changing their consumption habits. It is an attempt to highlight the possibilities of new circular consumption patterns in Italy and Europe and ask what the obstacles are and leverage potential for their uptake.

Indeed, in this report, we focus on consumption patterns, thus adopt an individual consumer point of view. Consumption can be defined as "*[t]he selection, purchase, use maintenance, repair and disposal of any product or service*" (Campbell, 1995)<sup>12</sup>. We focus on what is feasible for a private

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<sup>9</sup> <http://www.overshootday.org/>

<sup>10</sup> <http://www.overshootday.org/newsroom/past-earth-overshoot-days/>

<sup>11</sup> Rethink Consumption, Consumers and the future of sustainability, BBMG, GlobeScan, SustainAbility, 2012 p 6

<sup>12</sup> Quoted in Sustainable Consumption: Perspectives from Social and Cultural Theory, David Evans and Tim Jackson, RESOLVE Working Paper 05-08, p6

consumer, what is under his/her control, at least what is felt under a certain control. We will provide concrete examples of consumption possibilities.

Far from the impression that circular consumption is frustrating or boring, people can make new experiences and discover new opportunities while enjoying circular consumption possibilities. These possibilities represent an extension of our consumer power and experiences. Indeed, the throwaway model has locked us to trivial consumption patterns and denying us a rich range of alternatives. The economic, social and environmental crisis combined with digital tools is a cradle of invention toward new consumption patterns and the reclaiming of old ones.

In the end, not only consumption patterns are shifting. Consumers in a circular economy perspective are given an important role “not as passive targets of the latest marketing promotion, but as the greatest potential force for value generation and change.”<sup>13</sup> Their motivations to change habits are various.

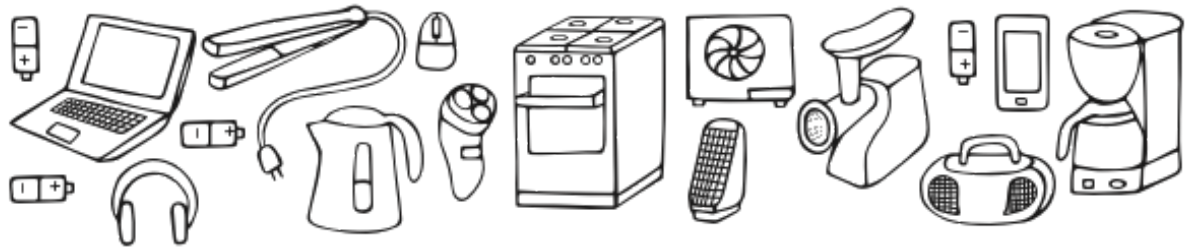
The scope of application of circular patterns is wide from transport to housing, from food to leisure. We will in this report mainly concentrate on products or services and present Italian and European examples.

Identifying circular consumption patterns would build on approaches and ideas also developed in the context of sustainable development actions. In this report, we gather together existing ideas rather than developing brand new concepts.

We start with a simple list - a *typology* presenting different routes - of consumption models. Some existing barriers to their uptake are referred to. Those barriers are analysed a bit more in a second part, also mentioning potential leverage points to help increase adoption. To provide concrete examples in more detail, the third chapter presents a deployment on certain specific sectors and types of goods with case studies from Italy and other countries. A section is dedicated to enhancing the possibility of uptake of circular patterns through digital tools, and presents some ideas around the concept of product profile. Finally, the report is concluded with some priority recommendations for national and local decision makers.

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<sup>13</sup> Rethink Consumption, Consumers and the future of sustainability, BBMG, GlobeScan, SustainAbility, 2012 p4



## **CHAPTER 1: TYPOLOGY OF CONSUMPTION PATTERNS**

### **1. A growing interest in circular economy consumption patterns**

We make the assumption that circular economy means more possibilities for consumers through reusing, repairing, upgrading, sharing, swapping, etc. and these possibilities also reflect the growing role of the collaborative economy and digital platforms.

Such consumption trends seem to be more and more common in Europe<sup>14</sup>. The interest in these new possibilities is also growing. The multiplication and the success of circular economy consumer centred events or books are an illustration of this phenomenon. For example, the Festa del Riuso e del Riciclo is held in Padova and attracts every year around 10,000 persons. In other European countries too, the motivation of consumers is becoming clear. Alternatiba<sup>15</sup> is another example, a “citizen mobilisation on climate change and movement in France with events presenting concrete alternatives to fight climate change”. It started in 2013 with an event in Bayonne had attracted 500,000 people in 94 events since then. The Zero Waste Festival that took place in Paris in June and July 2016 gathered 5,000 people as a debut event.

Tens of thousands of books sold on the topic of how to avoid food waste, Do It Yourself, or the zero waste way of life. In another example from the United Kingdom, over 30,000 people recently registered to take the Waste less, Live more Challenge<sup>16</sup> organised by the Keep Britain Tidy association. It consists of encouraging people to complete as many of the 101 suggested ways to waste less and live more as they can and share their experiences with on Facebook, Twitter and Instagram using #wastelesslivemore.

A simple list (typology) of consumption possibilities is proposed below.

### **2. Typology (list of approaches) for Circular economy consumption patterns**

#### **2.1. Buy things that last**

In the first instance, consumers **can choose things made to last**<sup>17</sup>. Indeed, durability is a top possibility to make the best out of our natural resources and become more and more a marketing argument.

<sup>14</sup> Study carried in November 2012 by Cetelem Observatory based on a survey of 6500 persons in 12 countries in Europe, Quoted in La vie Share p 20

<sup>15</sup> <https://alternatiba.eu/>

<sup>16</sup> [www.wastelesslivemore.com/challenge](http://www.wastelesslivemore.com/challenge) Centre for Social Innovation, Keep Britain Tidy

<sup>17</sup> E.g. a growing webbased organization: <http://www.buymeonce.com/>



### *2.1.1. Heirloom goods*

When we think about things that last we can picture **heirloom goods** as an iconic example. They are iconic because their quality is enough to cross the times, be transmitted and inherited, and we might take better care of them because of their sentimental value. A piece of family jewellery, furniture or inherited garments are possible examples of heirloom goods.

### *2.1.2. Items with good guarantee*

It can also be goods with a longer than average warranty. 13 NGOs recently launched the “10 years warranty” campaign in France<sup>18</sup>, a plea for 10 year mandatory warranty on some products instead of the normal 2 years. According to them, the producers have more economic incentives to make good more durable if it is their responsibility to repair or replace them over a long period as opposed to planned obsolescence- artificially limiting useful life.

### *2.1.3. Alternatives to disposable products*

Finally, buying things that last can mean preferring durable alternatives over products designed for disposal. For instance, using reusable packaging containers instead of disposable plastic or paper bags or use reusable cotton pads.

### *2.1.4. Systems granting longer software and consumables compatibility*

Beyond extended warranty, it should also be possible to continue using our products as long as we are happy with them. Too often product lifetimes are shortened due to incompatibility with the broader operating system and its changes. In the ICT sector, it's too common to be 'forced' to replace products in order to continue playing the games we like, running the programmes we like and navigating the internet because of software or application incompatibility. Or we have to change our printers as cartridges are not available anymore.

Consumers should be guaranteed a minimum usage time during which they will find the necessary accessories and consumables to enjoy their products and this could become a marketing argument. At the moment the necessary information and certainty about medium and long-term compatibility is missing. Remediating such a shortfall could also be addressed through 'upgradability' of products.

### *2.1.5. Obstacles and ways to address them*

Although the availability of things built to last seems obvious, there are obstacles impeding their uptake.

At first sight the price can be a barrier, as studies show that it remains an important criteria for purchasing decisions. Nevertheless, having more information on durability, such as a long period of free warranty or displaying estimated lifetime, can help the consumer to reconcile price compared to utility. This information can be compared with the situation of buying cheap, short lasting items and

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<sup>18</sup><http://www.journaldelenvironnement.net/article/les-ong-repartent-en-campagne-pour-une-garantie-etendue-a-10-ans,74763>

having to replace them several times in the same period. Lifetime cost, combining upfront cost with energy and consumables use (such as water and detergents for laundry, or cartridges for printers) as well as likely repair or replacement requirements, could be more systematically referred to. Reuse could also be stimulated by indicating a residual value after a certain number of years and offer channels for reselling the product to a second or even third user.

Nevertheless, in some cases the lack of trustworthy information is a problem and in order to “invest” in more expensive durable goods, information on durability must be perceived as highly reliable and not only a marketing ploy. Indeed, consumers know that it may be hard to complain and be compensated by suppliers if durability promises are not fulfilled (notably if being asked the burden of proof for such durability complaints). That may stop them from investing more money unless they are firmly convinced about long product durability claims. Certification or a longer period of free warranty can help, as they are tangible sources of information. Finally, economic incentives can be introduced to enhance this practice’s uptake.

## 2.2. Chose repairable and upgradable things

### 2.2.1. *Non-destructive disassembly and spare parts availability*

Another way to extend lifetime and to embrace circular economy consumption patterns is to buy things made to be repaired or/and upgraded. Repair means the possibility to fix failures or replace worn out parts/components. Upgrading refers to the possibility of adapting the product to new functionalities, new features, notably those boosting the performance of the product and personalisation. This strongly depends on the design of the product and the ability to dismantle while not destroying it. This is a common practice in the automotive industry.

Basic personalisation, such as changing the casing of a smartphone, can be performed by consumers themselves. But repair and upgrade may require skills and may not be easy for everyone. Nevertheless, repairable products can be repaired in specialised stores or in repair cafes - a volunteer-based repair service that teaches people how to repair their broken items that developed quickly in recent years<sup>19</sup> - when not by consumers themselves. Support tutorials are blooming on the web. According to a Cetelem Observatory 2012 study on Europe consumers, 64% consider fixing their appliances.<sup>20</sup>

### 2.2.2. *Obstacles and ways to address them*

Main obstacles for repair and upgrade are linked to design and business models associated with the products. If design does not allow a non-destructive disassembly to replace parts and or customise a product, for example because materials are unnecessary glued or welded together, the repair and upgrade potential is lost. Furthermore spare parts and accessories need to be made available for a long period of time, and that depends on the business models adopted by the producers. Some companies even use proprietary fixings and screws and make spare parts

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<sup>19</sup> A Longer Lifetime for Products: Benefits for Consumers and Companies, Directorate-General for Internal Policy, Study for IMCO Committee, 2016, p 65

<sup>20</sup> Quoted in La vie share mode d’emploi : consommation, partage et modes de vie collaboratifs, Anne-Sophie Novel, Manifestô, 2013p 10

and instructions unavailable. Repairers also face incompatibility of software and ‘defeat devices’ to thwart repair (such as the “error 53” for Apple products<sup>21</sup>).

Embedded electronics in more and more of our goods are also considered a barrier to repair and upgrade as they frequently require specialist diagnosis devices as a precondition to repair.

Several things could be done to foster reparation and upgrade such as:

- prohibit design-inhibiting repair (e.g. proprietary screws, using glue or welding where it is not needed),
- develop certification for durability, partly based on reparability
- set up economic incentives to lower the cost of repairable products and help repair workshops, since costs remain a barrier.

### 2.3. Reuse and buy second-hand

#### 2.3.1. *A full range of practices*

Reuse or give for reuse, sell and buy second hand, these are examples of traditional consumption patterns that staged a comeback in recent years. According to the Cetelem Observatory study mentioned above, 63% of European consumers do reuse, 59% buy second hand products and 68% declared they will do as much or more in the coming years.<sup>22</sup>

We can transfer goods to family or friends, bring unused goods to charity and social economy networks for second hand markets instead of throwing them away when they are no longer wanted. Almost every town in Italy (but also in UK and other EU countries) has a second hand shop often ran by charities, such as the well-established second hand network Emmaus. They can also be privately owned, like the franchising network of second hand shops Il Mercatino<sup>23</sup>.



**Il Bazar del Dono<sup>24</sup>** is a project developed by an NGO in Lecce/ Puglia that merges a second hand shop, an up-cycling workshop and a co-working space.

Flea markets are also good occasions to buy and sell second-hand products. The use of internet platforms and auctions also enables people to sell their unused goods and buy second hand like in peer-to-peer online marketplaces such as le Bon Coin in France or subito.it<sup>25</sup> in Italy and worldwide IT companies such as Ebay.

<sup>21</sup> See the Ifixit article on error 53 <http://ifixit.org/blog/7889/whats-up-with-error-53/>

<sup>22</sup> Idem p 20

<sup>23</sup> <http://www.mercatinousato.com/>

<sup>24</sup> <http://www.ilformicaio.eu/bazardeldono/>

<sup>25</sup> <http://www.subito.it/>

More recently internet-based platforms started giving people the possibility to pass on things for free or share information on objects and furniture abandoned in the street, e.g. GEEV/Freecycle Network/AdopteUnObjet<sup>26</sup>.

### 2.3.2. *Obstacles and ways to address them*

Nevertheless, there are still barriers to reuse, such as incompatible functionality, toxic residues in materials, resources consumption during use (e.g. energy, consumables), fear of data privacy violation (mainly for information and communication appliances), product failure or the being seen as not trendy.

But things can be done to overcome these obstacles such as ensuring full deletion of data, establishing reuse centres, offering warranty for second hand goods, informing people about resource consumption during use and re-branding second hand.

### 2.4. Do not buy things, just enjoy them

As noted in the Rethink Consumption study, there is a “tension between material possessions and social and environmental progress” and *“the very concept of “sustainable consumption” holds an inherent tension driven by impacts from each product’s development, dissemination, use and disposal on one hand, and market pressure for ever increasing sales volume and scale on the other”*<sup>27</sup>.

One way to address it is to develop alternatives to property. Indeed, a major pathway towards the circular economy is in slowing down on the consumption of resources and enjoying things rather than buying them. Why buy a car when we only need transportation? Why buy a drill when we only need holes in a wall? Compelling alternatives to ownership now exist.

#### 2.4.1. *Share, rent and lease*

Instead of everybody buying things consumers can **share items**. This is particularly attractive for items rarely used, or which are expensive. A drill or a car are good examples.

They can be shared, for instance, via cooperative ownership schemes, share shops or internet-based platforms promoted by collaborative consumption or sharing economy communities. These can be both convenient and possibly cheaper for the occasional borrower.

Sharing and renting can also be a way to offset the initial investment costs for products that are used infrequently and/or have high upfront investment and maintenance costs. It can be a possible return on investment for the consumer that bought on purpose a long lasting item and help justify efforts to maintain its durability. With the use of the internet, numerous specialised websites have been developed and the sharing economy has taken off in recent years.

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<sup>26</sup> <http://www.adopte-un-objet.fr/>

<sup>27</sup> Rethink Consumption, Consumers and the future of sustainability, BBMG, GlobeScan, SustainAbility, 2012 p20

Consumers can also lease products to meet ongoing needs. Leasing consists of renting for a long time often with an associated assistance service, as it exists for instance for cars<sup>28</sup>. This can be done via numerous specialised shops and websites. It is a convenient way to enjoy a service without requiring ownership. Leasing can avoid discarding items when not desired anymore or there is a need for a change. Leasing schemes allow the use of a product for a given time with potential benefits of included services and upgrades.

As Anne-Sophie Novel underlines in La Vie Share, there is often a “tribe” phenomenon in shared economy websites, where people tend to lend not only objects but eventually also services. She notes that there is a sort of escalation process, where people start by renting one thing and end up renting more, including services in what develops into a trusted community.

#### *2.4.2. Obstacles to sharing, renting and leasing and ways to address them*

Some consumers might hesitate to lease, fearing inconvenience stemming from lack of full ownership. Will everything not become too constraining to rent or share each time when I need the product/service compared to having it always at hand because I own it? They might also fear lack of availability: what if when I have time and need the product, none is available or accessible? This is also true and more common for business to business situations than for business to consumers.

In this respect, a leverage point can be the multiplying of the usage of convenient digital platforms. Indeed, these sharing practices operated through digital platforms are generalising. Web catalogues, as well as rating and booking systems can help overcome some shortcomings. A key argument for sharing is that it makes possible access to more professional type high performance appliances.

Finally, the price of some renting and leasing services can seem high compared to buying low quality items. Consumers may have doubts about the quality and reliability of the services provided. As renting and leasing for individuals from professional and peer-to-peer platforms is developing, these remaining barriers could be lowered by introducing tax rebates and improving contractual clauses granting full confidence for users (e.g clauses to swift repair or replacement in case of failure).

#### *2.4.3. Swap and exchange things*

Swapping or exchanging things is also a way of limiting the extraction of resources and production of new goods and avoid throwing away an item that could be used by someone else. It is an ancestral practice that is making a comeback in recent years.

This applies to, for instance, books, clothes for children of different ages, but also services and skills, such as painting or gardening. Many specialised websites have sprung up for this purpose in recent years.

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<sup>28</sup> <http://www.consumerreports.org/cro/2012/12/buying-vs-leasing-basics/index.htm>

Non-profit swap places and swap events are also becoming more popular . ‘Free’ shops are appearing in several countries in Europe including Italy’s PassaMano<sup>29</sup> in Trentino, where everyone is allowed to take away up to 5 items for free, leaving a voluntary tip.



The **Association ManaManà**, based on its experience of organising several moneyless events in Turin, has created an online methodology for all those who would like to organise such events or shops, and all documents are licenced under creative commons<sup>30</sup>.

#### *2.4.4. Overcoming obstacles to swapping and exchanging*

However, even if swapping is developing, obstacles remain, such as a lack of trust, fear of not being seen as trendy or simply the absence of networks and opportunities. To overcome these problems, community level actions and networks can be set up and the convenience of offers can be improved (regular timelines and dedicated adapted places for example).

### 2.5. Get local

#### *2.5.1. Buy local and seasonal (organic) food*

Another consumption pattern for a circular economy is to buy local. Consumers can embrace this possibility by buying local and seasonal (and as possible organic) food instead of ignoring the country / region of origin or the way it has been produced. It limits the impact of transportation on the environment and health, ensures respect of local norms (even if sometimes quality is not axiomatic to localness) and supports local agriculture. By buying seasonal food, consumers are sure to have more tasty ingredients and avoid long supply chains.

As shown in the fourth part of the report, purchasing groups supporting local organic agriculture and other initiatives have been multiplying since the 2000s.

#### *2.5.2. Obstacles to buying seasonal and organic local food and ways to address them*

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<sup>29</sup> <http://www.giacimentiurbani.eu/company/passamano-bolzano/>

<sup>30</sup> [www.senzamoneta.it](http://www.senzamoneta.it)

In a period in which everyone can readily buy a mango all year round and low cost supermarket strawberries in deepest winter, buying local and seasonal can seem costly and time-consuming. It might also require changing of cooking habits, but on the other hand it is sometimes the occasion to discover new products and recipes.

Moreover even if they have recently multiplied, alternatives are not always available. Education, information and development of collaborative, neighbourhood and community based platforms to access goods or services are a must.

### *2.5.3. Use community services*

Getting local can also mean using community services. Indeed, social business - these are non-profit organisations, cooperatives, charities and not-for-profit companies - offer both environmental and socially useful services for society as opposed to merely profit-maximising companies.

If the price, the availability and accessibility still pose a problem, consumers should not be left with the frustration and discouraged. Efforts can be made by decision makers to create dedicated spaces to foster development of community services, structure the offer and even set up economic incentives. That could be part of municipal events to raise the profile and opportunity of such social business and community services. Those can be promoted as part of the public services offered by municipalities: e.g. walking children to school to reduce car traffic during rush hours; etc. But thanks to the use of internet peer-to-peer services are also developing.

Finally, when local is not feasible, consumers can choose fair trade products. Indeed, the way goods and food are made is also an important aspect of circular economy and the origin is not everything. In fair trade schemes, fair prices come together with quality specifications providing a more complete social, environmental and economy sustainable background of the product. In this respect, EU wide standards and organisations, such as OXFAM, are sources of information. Interestingly, fair trade products are more and more available in stores and supermarkets.

### *2.6. Get for clean (toxic free)/smart materials*

The choice of materials making up products is crucial in a circular economy pathway. It can drive more possibilities to repurpose or 'loop' the materials and may determine the cost of its recycling and ability to be recycled and reused.

#### *2.6.1. Choose things not consuming more materials than needed or generating excessive waste*

First of all, it is up to consumers to choose things not consuming more materials than needed or generating unnecessary waste, for instance through using their own containers or bags and buying in bulk. However, many of us are trapped by packaging based marketing and end up buying excessively packaged items, whether it is food or other goods. Or we buy too much and generate food waste and waste in general. Why not providing a more systematic possibility to get the just needed quantity being for a whole family or a single person (for example medicines can be supplied in the exact quantity instead standard containers not matching the needs)? Furthermore, prices do not

necessarily reflect the whole burden of dealing with the packaging, notably if disposable and not easily recyclable.



As stated in the fourth part of this report, the recent development and success of products sold in bulk, for food and other goods, is an important leverage point.

#### *2.6.2. Obstacles and ways to address them*

Barriers to uptake of solutions offering ‘just needed’ amount of materials are, for example, time, convenience and availability. Nevertheless, there is room for improvement by e.g. offering discounts and vouchers for resource-saving purchasing or choice editing, two phrases that can be described as a strategy to decide which products to offer and to highlight with reward schemes in the retail sector.

#### *2.6.3. Choose recyclable things and things without toxic components*

Consumers can choose things that can be disassembled and recycled (and recycle them) instead of products with parts that are hard to disassemble and difficult to recycle.

With the rise of environmental and health concerns comes an additional possibility to consume in a circular economy perspective: choosing products without toxic components by getting toxic-free certified products (e.g: hygiene products without parabens, furniture without flame retardants, paints without volatile organic compounds). Hazardous content of materials is one of the bigger barriers to reuse of materials. On this matter, the CLP (for Classification, Labelling and Packaging) EU regulation<sup>31</sup> aims at easing and harmonising hazard communication through clear symbols and warnings (such as  ).

#### *2.6.4. Obstacles and ways to address them*

However, recycling possibilities and and toxic risks need to be given more emphasis. Recyclability is not often well specified on products. Moreover, consumers are not likely to look for this information spontaneously when shopping and where available toxic free recyclable alternatives may be more expensive. As regards toxic-free products, perceived lack of performance of ‘clean’ products can act as a barrier to a broader uptake of clean alternatives.

Efforts can be made on labelling and providing economic incentives to increase sales of recyclable and toxic-free products, or products containing recycled materials, such as penalty schemes penalising toxic and problematic materials while rewarding clean and fully recyclable materials. Complementarily, it should be kept in mind that things can be recycled only if they are properly collected and the necessary infrastructure and information is provided by the competent authorities.

### **3. Consumers’ segmentations**

Consumer segmentation can help us understand how consumption patterns for a circular economy could develop. Interestingly, studies show that these alternative consumption patterns are

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<sup>31</sup> <http://ec.europa.eu/growth/sectors/chemicals/classification-labelling/>



not adopted primarily for environmental reasons.<sup>32</sup> Studies show the most frequent reasons are price, convenience and the desire to share goods. This suggests consumers can be mobilised with a range of incentives.

### 3.1. The benefits of consumer segmentation

Market segmentation can help identify the opportunities and challenges to spreading circular economy consumption patterns. It provides an understanding of changing consumer values, motivations and behaviour. These help inform action by addressing different consumer segments specifically. They help identify which type of consumers could adopt which type of circular consumption patterns and what are the barriers holding them back.

### 3.2. Main findings of different studies: the need to target ‘occasionals’, ‘aspirationalists’ and ‘practicals’

A study on segmentation of green consumers, published in the International Journal of Science and Research 2014<sup>33</sup>, examined the environmental concern of consumers in Goa, India, and developed a methodology for segmentation of green consumers applicable elsewhere<sup>34</sup>. They identified frequent purchasers (33,5%), occasional purchasers (48,2%) and ones rarely making purchases (18,2%). The first are already convinced and integrate sustainability criteria in their purchasing choices. And it may be hard to make the rare purchasers change radically their habits. In contrary occasional purchasers, which represent the biggest group, could adopt more systematic green consumption patterns if barriers are removed.

This simple segmentation is echoed in the “Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition” study<sup>35</sup>, in which the author distinguishes between:

- the ‘Occasional Enthusiast’ (60%) mainly driven by cost savings and reducing the hassle of purchasing new products,
- the ‘Value Conscious Enthusiast’ (10%) a ‘practical’ and value conscious group taking into account the environmental impact but first financial considerations, convenience, and product quality,
- and the ‘Circular Lifestyler & Advocate’ (25%) *“deeply connected to their values (...) [who] will go above and beyond to reduce waste and live sustainable lifestyles.”*<sup>36</sup>

Finally, a similar but more complete conclusion was drawn by the Rethink Consumption study in 2012. Across all markets, ‘Aspirationalists’, count for the greatest number of consumers (37%), they are driven by both consumption and sustainability and could adopt more regular circular economy consumption patterns if products met their aspirations for social status, community, style, shopping and trying new things. They are followed by Practicalists (34%) driven by price and performance. Practicalists will mostly follow the sustainable behaviours of the other groups as trends become more

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<sup>32</sup> [POLFREE Policy Brief](#)

<sup>33</sup> Segmentation of Green Consumers, Meera R. Mayekar, K. G. Sankaranarayanan, International Journal of Science and Research (IJSR), 2014

<sup>34</sup> Even if the study was not carried out in Europe we chose to use it because the findings and the typology are applicable elsewhere and because it does not start with the assumption that most people are aware.

<sup>35</sup> Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition, Ksenia Benifand, 2015

<sup>36</sup> Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition, Ksenia Benifand, Master Thesis in Design in Strategic Foresight & Innovation OCAD University Toronto, Ontario, Canada, April, 2015

mainstream”<sup>37</sup>. On the other hand, the less engaged Indifferents (16%) and Advocates (14%) are already convinced and highly committed. Neither are deemed priority groups to target.<sup>38</sup>

To put it in a nutshell, ‘occasional purchasers’ or ‘aspirationals’ and ‘practicals’ can be targeted as presenting the highest potential for uptake of circular consumption patterns, as they are more numerous and with sufficient willingness to act.

### 3.3. Potential of the Millennials

In her study, Ksenia Benifand points to the need to target Millennials to spread circular economy consumption patterns. The “World Economic Forum report “Engaging Tomorrow’s Consumer” (2013) stated that they are *“the world’s most influential shoppers”, (and) they have the potential to shape the behaviour of other people and consumer markets” and (...) believe in their power to be agents of change.*”<sup>39</sup>

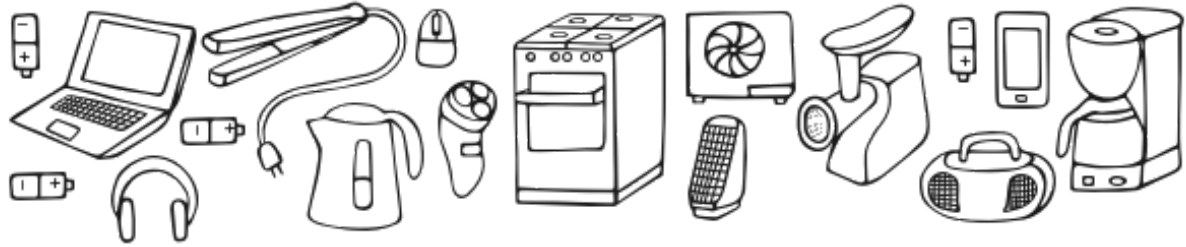
In order to make these consumers change their habits and adopt more systematic circular consuming practices, barriers need to be identified and removed.

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<sup>37</sup> Rethink consumption p 43

<sup>38</sup> Rethink Consumption, Consumers and the future of sustainability, BBMG, GlobeScan, SustainAbility, 2012 , p 6 and 38

<sup>39</sup> Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition, Ksenia Benifand, OCAD University Toronto, Ontario, Canada, 2015



## **CHAPTER 2 : MAIN BARRIERS AND LEVERAGE POTENTIALS**

As stated in Ksenia Benifand's study, "People are not always able to exercise a deliberate choice, and 'lock-ins' occur in part through the architecture of institutional structures such as market mechanisms, options of available goods and services, geographical accessibility; cultural and social norm expectations; as well as values and beliefs - influencing habits and routines."<sup>40</sup>. These barriers to the circular economy remain, but there are ways to progress.

### **1. Cost and affordability**

#### **1.1. Barrier**

Cost and affordability remains an important barrier to the circular economy. As reported in the Rethink Consumption study, perceptions of price are crucial, with 78% of consumers in developed countries (Germany, United Kingdom, United States) agreeing or strongly agreeing that they would purchase more products that are environmentally and socially responsible if they didn't cost more. In the Segmentation of Green Consumers study in India, the "high price of green products" was the reason for non-purchase of green products in 23% of cases.

#### **1.2. Leverage points**

It should be first noted that some circular economy consumption practices can be a way to save money. For example, this is often the case for reused or second hand items, Do It Yourself or sharing goods and services. In fact, some consumption practices in a circular economy offer significant savings opportunity for consumers; for instance, when selling unused goods, renting infrequently used objects, eating more local seasonal vegetables etc. In their book 'La famille (Presque) zero déchet – ze guide' the family adopting a zero waste lifestyle experienced lower living costs.<sup>41</sup> Going circular is thus not always more costly. Solutions that are both more circular and cheaper should be promoted and may be used as good examples and starting points for shifting consumption habits, as combining both economic and environmental dimensions.

Beyond that, educating consumers about more holistic lifecycle cost of products could be a priority for raising awareness on the economic consequences of some of our decisions. Indeed, it is important to show that up front purchasing cost need to be balanced with usage and end-of-life costs or revenues. A clear example is in the field of energy efficient products, where the energy saved during the lifetime of a product more than offsets the higher purchasing costs of a more efficient

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<sup>40</sup> Idem

<sup>41</sup> La Famille (presque) Zero Dechet – Ze guide, Jérémy Pichon et Bénédicte Moret, Broché, 2016

model. This lifecycle cost information could be delivered more systematically and also go beyond energy aspects alone, such as by highlighting how durability/repairability help avoid the cost of replacing a broken product, or even increasing the potential resell price.

Information about the expected lifetime of products would also help. Indeed, households benefit from buying longer lasting goods, as emphasised in the “A Longer Lifetime for Products : Benefits for Consumers and Companies” study<sup>42</sup> which states that “households can enjoy more of a product’s utility, from a longer, better or more efficient use of capital stock.”<sup>43</sup> Interestingly, a recent study commissioned by the European Economic and Social Committee<sup>44</sup> shows that lifespan labelling has an influence on purchasing decisions in favour of products with longer lifespans even if the price is still an important criteria. On average, there is a 13.8% increase of sales of products with a label showing a longer lifespan over competing products.

Finally, this information could be complemented with other leverage points, such as:

- Developing economic incentives for more resource efficient items. For example, establishing rewarding/ payments schemes rewarding or penalising product properties (sometimes called ‘reward/penalty’ schemes), reducing VAT applied to repair activities, or making Extended Product Responsibility (EPR) systems reward better reparability, etc.
- Fostering community/group purchasing to drive down product prices
- Banning the worst performing products to avoid lowest common denominator and race to bottom price scenarios
- Extending warranties and after sales services to increase trust in more circular purchasing
- Reward vouchers for purchasing sustainable products (like eco-chèques for example)

## **2. Availability**

### 2.1. Barrier

The adoption of sustainable consumption practices also depends on their availability of beneficial alternatives. According to the Rethink Consumption study, 58% of consumers in developed countries would purchase more products that are environmentally and socially responsible if these were easier to find and use. The same obstacle was confirmed in the Segmentation of Green Consumers study in India, in which “non-availability” is the reason for non-purchase of green products in 20% of cases.

### 2.2. Leverage points

First of all, venues for circular economy consumption should be multiplied, both virtual and physical.

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<sup>42</sup> A Longer Lifetime for Products : Benefits for Consumers and Companies, Directorate-General for Internal Policy, Study for IMCO Committee, 2016

<sup>43</sup> A Longer Lifetime for Products: Benefits for Consumers and Companies, Directorate-General for Internal Policy, Study for IMCO Committee, 2016 p 37

<sup>44</sup> Jahnich M., G. Boulbry, M. Dupre, É. Ferreira, V. Ramirez (2016) ILLC study: The Influence of Lifespan Labelling on Consumers, Brussels: European Economic and Social Committee (EESC)

The internet can be a useful tool to promote existing possibilities and create new possibilities of consumption – e.g. platforms like Ebay.

Choice editing by retailers could direct consumers towards more circular solutions, which might otherwise be overlooked in the vast diversity of products and services on offer.

Moreover, positive practices should be mainstreamed and the best products promoted. This could be done using trustworthy independent information channels, rather than relying primarily on individual own developed claims by producers. Indeed, there might be better results if promotion does not solely rely on manufacturer or retailer initiatives, but increasingly by consumer groups and public authority campaigns promoting certified products from independent sources.

Finally, consumers can themselves trigger the possibility to change their habits by starting their own initiatives promoting sustainable consumption patterns. Associations could spread guides and toolkits so that committed citizens can start an initiative where they live instead of waiting for others to do it for them. In the case of L'Alveare che dice sì!<sup>45</sup> citizens were encouraged to form a local purchasing group and Association ManaManà, which organised free events or free shops.

### **3. Accessibility and convenience**

#### **3.1. Obstacle**

Accessibility, lack of information and poor convenience of purchasing and using can also cause consumers to abstain from circular solutions.

#### **3.2. Leverage points**

As stated in the Ksenia Benifaand study, at a time when everybody can order almost anything online, adopting new habits can require effort and dedication. *“Shifting behaviours on a large scale requires systemic solutions to increase accessibility”*<sup>46</sup>. This is the reason why extensive possibilities and incentives of circular consumption should be multiplied and made more broadly accessible, either through local initiatives or via virtual platforms.

On top of that, consumers need to be given advice on how they can benefit from circular consumption patterns and suggestions on how these can be developed. Resource saving services could be set up along the lines of energy efficiency services such as the ‘Espaces info énergie’, present in all major French cities, which provides consumer advice on energy consumption. In fact, both energy efficiency services and resource saving services could be combined, in line with the idea that energy is also a resource.

There is good potential to boost understanding of places in cities for repair, reuse, buying local etc. Fortunately, websites have started to fill the gap, such as Giacimenti Urbani<sup>47</sup>, which gathers interesting experiences, especially about Milan. Finally, improving convenience factors can help

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<sup>45</sup> <https://alvearechedicesi.it/it>

<sup>46</sup> Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition, Ksenia Benifand, OCAD University Toronto, Ontario, Canada, 2015, p 82

<sup>47</sup> <http://www.giacimentiurbani.eu/>

motivate more sceptical consumers<sup>48</sup> For example, if borrowing a tool from a local tool library is made more convenient than buying it new in the shops, consumers could change their habits.

#### **4. Lack of trustworthy information**

##### **4.1. Barrier**

Trustworthy information on what makes a product cleaner and safer in a circular economy is also crucial. According to the Rethink Consumption study, a lack of “understanding about what actually makes products socially and environmentally responsible” is a barrier to 55% of consumers in developed countries.<sup>49</sup> In the Segmentation of Green Consumers study, the “lack of information” and lack of trust about green claims made by companies are the reason for non-purchase of green products in 16% and 31% of cases respectively.

##### **4.2. Leverage points**

That is why labels and certification schemes verified by independent third-party organisations, together with users’ community advices and rating systems have an important part to play. According to the Rethink Consumption study, 43% of consumers in developed countries consider certification schemes or labels on product packaging as the most trusted source of information about whether a product is environmentally or socially responsible.<sup>50</sup>

As mentioned in chapter 4, digital tools should become a greater source of information for consumers also on circular consumption aspects.

#### **5. Fear of poor performance and fashion**

##### **5.1. Barrier**

The fear of outdated performances or not maintained over time can be a barrier when buying second hand products or long lasting items. According to the Rethink Consumption study, perceptions of product performance is critical, since 76% of consumers in developed countries would purchase more products that are environmentally and socially responsible if they “performed as well as, or better than products they usually buy.”<sup>51</sup>

Fear of failure and of long delays for repair is also perceived risks when buying second hand or repairing a product instead of replacing it.

A related obstacle is the fear consumers can have of buying an item that will be overtaken by fashion, which is seen as a symbolic expression of personality, values and style.

##### **5.2. Leverage points**

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<sup>48</sup> Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition, Ksenia Benifand, OCAD University Toronto, Ontario, Canada, 2015

<sup>49</sup> Rethink Consumption, Consumers and the future of sustainability, BBMG, GlobeScan, SustainAbility, 2012, p26

<sup>50</sup> Rethink Consumption, Consumers and the future of sustainability, BBMG, GlobeScan, SustainAbility, 2012 p16

<sup>51</sup> Rethink Consumption, Consumers and the future of sustainability, BBMG, GlobeScan, SustainAbility, 2012 p6

The first leverage point could be to ensure upgradability. It is important to ensure products have the potential for non-destructive disassembly and upgrade. As far as electronic products are concerned, long-term compatibility of software could be better required by the authorities. Long-term certification of performance and usability of such products could become a marketing argument for companies. The growth of sharing platforms, for example leasing rather than selling, will also foster long-term certification of performance and make the usability of products a key competitive argument. Legal obligations for quick repair or temporary replacement through courtesy schemes may also become a more common pattern of shared economy business models.

Warranty periods for second hand goods can also be a leverage point. The Envie Federation<sup>52</sup> in France provides an efficient solution to overcome the lack of trust in quality of second hand items by guaranteeing repair after sale. Any fear of having to wait for such repair is overcome by the shop lending a replacement appliance for free.

As far as the fashion fear is concerned, efforts can be made to rebrand *second hand* as *vintage*. An interesting example of making second-hand trendy is the second-hand defile, organised by Legambiente in the Festa del Riuso e del Riciclo in Padova. In fact, reuse can be cool and green, so cool that half of the new jeans sold in stores today are made with a 'used' look.

## **6. Psychological barriers and social norms**

### **6.1. Barrier**

Even if the circular economy enables people to enjoy new or more consumption possibilities compared to the linear 'buy-use-dispose' system, shifting habits requires time and commitment, at least at the beginning. Compared to routine practices, it comes at a cost. As a consequence, a lack of time and reluctance to change individual consumption patterns and lifestyles can be a huge challenge. In the Segmentation of Consumers study in India, for 10% consumers the fact that buying a green product requires them to adapt their lifestyle is a reason not to purchase it.

Moreover the lack of a sharing community or feeling of belonging to a community with values can also prevent people from adopting more systematic circular economy practices. For example, the idea of sharing tools is seductive, but if the consumer feels isolated within the local community or a larger network, there can be a gap between goals and actual behaviour.

### **6.2. Leverage points**

Nevertheless the experience of the French family mentioned above puts this obstacle into perspective. It was not new habits that were time-consuming, but the transition from old to new habits.<sup>53</sup> In brief, the fact to change and deviate from established routines is costly not the new practices the change leads to. The development of community level and internet based exchange platforms (for free or not) enable the blossom of numerous services that can help consumers to save time and share tips for easing this transition period.

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<sup>52</sup> <http://www.envie.org/>

<sup>53</sup> Conference at the Zero Waste Festival, July 2<sup>nd</sup> 2016, Paris

The sharing economy practices mentioned above can take place in established communities, but also be the occasion to build new communities, sometimes virtual. More generally, the sense of belonging to a community of peers sharing the same values and habits when adopting circular economy practices should benefit from the fact it helps meet consumer needs. For instance, in the Rethink Consumption study, 31% of consumers in developed markets said they would purchase more green products if “it connected them to a community of peers who share their values and priorities”<sup>54</sup>. Some brands acknowledge it and make sustainable consumption more personal and relevant to consumers. Clothing retailer Patagonia asks consumers to match its pledges to reduce, repair, reuse, recycle and re-imagine products before buying new Patagonia products and promotes the community of consumers backing the brand.<sup>55</sup>

Finally, we also need role models to inspire us and motivate a change of habits. ‘Influencers’ could be well-known celebrities via the media, but also local personalities or even respected peers one meets and is inspired by. All help leverage new social norms.

## **7. Freezing hesitation and trade-offs**

### **7.1. Barrier**

Finally, another obstacle to action is the difficulty to take purchasing decisions when confronted to a wide range of sustainable options. The perception of different possible directions to choose from, and the fact that they cannot always be all combined to offer a very clear optimal choice can hamper the decision to ‘change’. trade-offs between different circular economy dimensions and related behavioural directions. Indeed it might not be possible to find products or services ticking all the boxes (durability, cleanliness, reparability and local production) and trade-offs may be necessary.

The truth is that such trade-offs are often inevitable and can confuse or even block consumer action, locking them to their entrenched habits. For instance, longer-lasting goods could be have toxic components, or a local product can be hard to repair etc... Which to choose?

### **7.2. Leverage points**

As such hesitations and need to chose among different options cannot be excluded, it may be more useful to recognise and address them. Indeed, accepting our limited knowledge and choosing the best options we can identify should spur action. The circular economy is about renewing and enriching our experiences and a knowledge gap should not freeze people. Users’ feedback and ranking (e.g tripadvisor platform), based on feelings and subjective appraisals are a main way to overcome such hesitation. Local situation, lifestyle and personal experience may also determine the consumers primary concerns. For example, saving water may be of primary concern in areas threatened by drought, while it would appear secondary in regions with water sources and lakes.

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<sup>54</sup> Rethink Consumption, Consumers and the future of sustainability, BBMG, GlobeScan, SustainAbility, 2012 p26

<sup>55</sup> <http://eu.patagonia.com/enGB/international>



In this perspective, it is important to question the type of information available to consumers. Trustworthy information appears to be the ideal answer, as highlighted above. Marketing hype and ‘greenwash’ should be replaced by reliable and robust science-based information. ‘Aspirational’ and ‘practical’ consumer segments declare that a lack of information is an obstacle. However, should we wait for perfect information? Work on lifecycle costs and footprint analysis, which are trying to embrace the many environmental impacts a product can have, are iconic examples of this issue. How should we communicate the many human health and environmental dimensions of a product or service to consumers?

While investigations continue on how to best convey multi-dimensional human health and environmental information of products to consumers, we should bear in mind that environmental considerations are not the main driver to adopting new consumption patterns among aspirational, practicals and occasional consumer segments who may consider price, performances, convenience, brand values in priority. Accepting imperfect information, while acting with consciousness and resolution may be more effective than not acting at all. It may well be that we first need to multiply the opportunities of circular consumption before trying to ‘rationalise’ them fully.

In the current perspective of boosting circular economy consumption, addressing the risk of paralysing hesitation in front of the many aspects to be considered and inviting to acting with imperfect knowledge should be preferred to delaying actions till when the full picture can be grasped.

**8. Conclusion on barriers and leverage points**

If more consumers are to embrace the circular economy, overcoming these obstacles is a must. Even for already convinced consumers, costs, availability, convenience, community belongings etc. are essential factors.<sup>56</sup> The following table recapitulates the main barriers and leverage points:

<b>Barriers</b>	<b>Leverage points</b>
<b>Cost and affordability</b>	<ul style="list-style-type: none"> <li>• Highlighting lifecycle costs and expected lifespan</li> <li>• Economic incentives to reward resource efficient products, including retailer rewarding voucher towards most sustainable products</li> <li>• Group purchasing to drive down prices</li> <li>• Banning the worst products to avoid a ‘lowest common denominator’ situation</li> <li>• Extended warranties and after sales services to increase buyer confidence.</li> </ul>
<b>Availability</b>	<ul style="list-style-type: none"> <li>• Multiply local circular initiatives and virtual platforms</li> <li>• Choice editing and consumer nudging by retailers</li> <li>• Better promotion by public authorities and consumer groups of good practices and products</li> <li>• Consumers starting their own initiatives</li> </ul>
<b>Accessibility and convenience</b>	<ul style="list-style-type: none"> <li>• Resource saving services</li> <li>• Information about places for repair, reuse, buying local etc.</li> </ul>

<sup>56</sup> Constraints to Resource-Efficient Consumer Behaviour, POLFREE Policy Brief 2, march 2016

<b>Lack of information</b>	<ul style="list-style-type: none"> <li>• Digital tools</li> <li>• Third party verified labels and certification schemes</li> </ul>
<b>Fear of outdated performance, time to repair and not being trendy</b>	<ul style="list-style-type: none"> <li>• Ensure upgradability of products and availability of long term assistance/services</li> <li>• Enhance trustworthy certification schemes for granting performances of products</li> <li>• Stipulate contractual clauses with regard repair and replacement of products, and use courtesy schemes</li> <li>• Warranty for second hand goods</li> <li>• Rebrand second hand as vintage</li> </ul>
<b>Psychological barriers and social norms</b>	<ul style="list-style-type: none"> <li>• Acknowledge that shifting habits is time-costly and requires engagement, and provide supportive platforms to ease the change</li> <li>• Build new community/group feeling around CE consumption (as for example the community of ‘makers’)</li> <li>• Enrol influencers’ to help persuade people</li> </ul>
<b>Perception on trade-offs</b>	<ul style="list-style-type: none"> <li>• Accepting trade-offs and possible hesitations while encouraging consumers to act on imperfect information</li> <li>• Make use of users feedback, evaluation and ranking digital platforms</li> <li>• Continue exploring how to communicate multi-dimensional information of products to consumers without freezing possible actions today</li> </ul>

### **Digital tools as a driving force towards circular consumption**

As the Ellen MacArthur Foundation study Intelligent Assets<sup>57</sup>, among others, puts it, the use of the internet and communication technologies can be an opportunity towards a more circular economic model.

ICT multiplies the opportunities to gain information and to network in communities. There is a great possibility of uptake of circular patterns through digital tools, notably through “three main intelligent asset value drivers – knowledge of the location, condition, and availability of an asset.”<sup>58</sup>

Digital tools are playing a crucial part in the transition towards more freedom of choice and shifting consumption habits. Sharing platforms are multiplying, it is easier to create community based on common values or interests, to organise events etc... As the Ellen MacArthur study puts it, “*digital tools – such as exchange platforms allowing multiple useful lives and embedded product information – become as important as physical tools when it comes to determining and steering asset flows.*”<sup>59</sup>

On the other hand, more information is available, while not always centralised, understandable or relevant. It has been often stated that proliferation of information and claims is counterproductive

<sup>57</sup> Intelligent Assets: Unlocking The Circular Economy Potential, Ellen MacArthur Foundation, 2016

<sup>58</sup> Intelligent Assets: Unlocking The Circular Economy Potential, Ellen MacArthur Foundation, 2016

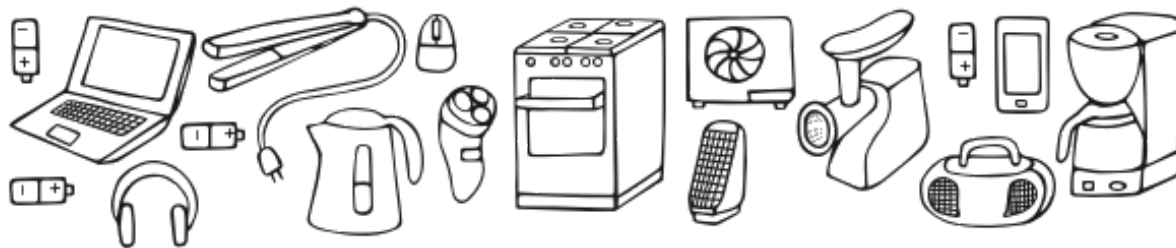
<sup>59</sup> Intelligent Assets: Unlocking The Circular Economy Potential, Ellen MacArthur Foundation, 2016

and it appears useful to frame better how information on environmental and resources use are conveyed.

Pairing a circular economy approach with smart appliances makes sense: It informs how to make, use and reuse appliances by improving the knowledge of their “location, condition and availability”. The following points taken from the Ellen MacArthur report suggest how smart, digital appliances can enhance the circular economy:

- Feedback information enabling continuous improvements of product design;
- Usage guidance and integrated warning/prevention of possible bad behaviours to avoid early wear and failures of appliances and facilitate longer use;
- Predictive maintenance and replacement of components prior to failure;
- Embedding information in products (e.g tagging) for decision-making on future potential material loops (e.g. what to reuse, what to recycle);
- Enabling localisation of appliances available for reuse or recycling;
- Optimised route planning for customer and repair services / end of life logistics;
- Digital marketplace for refurbished appliances and spare parts.

It is, however, worth balancing the advantages of connected appliances, enabling the above, and the additional resource and energy use burden associated with smart features. The internet of things should not become a barrier to repair and upgrade, by requiring specific remote diagnosis tools or denying independent repair and maintenance organisations from servicing products, for instance through the requirement of access codes or through integrated features blocking or hampering the proper functioning of products if they have been repaired/modified by independent repairer (error 53 case).



## **CHAPTER 3 : EXEMPLARY APPLICATIONS IN DIFFERENT SECTORS**

### **1. Appliances**

Appliances have become essential in our everyday life, but when we need one, we should ideally ask ourselves a few questions, such as: Is it essential for me to buy it? Or can I borrow it, rent it or lease it? And if so, can I find it second-hand and, if not, which appliance will last the longest (one with spare parts, non-destructive disassembly and maybe possibilities for upgrades)? Where was it produced? Does it contain hazardous material? Is it made of recycled materials and is it itself recyclable?

We should, when possible, avoid buying appliances when we can just enjoy their functionality and avoid purchasing on impulse appliances that are not easily repairable (glued, spare parts not available) or upgradable. This still happens far too often, notably when consumers do not want to invest a lot on items they do not intend to use a lot or that are needed quickly.

As far as the appliances that we already have are concerned, we can try to rent or lend them, have them upgraded and repaired or even repair them ourselves. When we don't need them anymore, we can sell, exchange or give them away. When nothing can be done to increase their lifetime, they should be recycled. Thus, a lot of possibilities are already available to consumers.

To be concrete: instead of buying appliances to use them only occasionally, consumers can rent or borrow them from someone else, in a shop or from a company. In France, the SEB Group has launched an experiment "Eurêcook" near Dijon<sup>60</sup>, which rents kitchen appliances for a few days guaranteeing quality and cleanliness. It is too early to draw conclusions, but some items are quite popular and the company aims is to be "pioneers in new consumption patterns". Another interesting initiative is the Kitchen Library in Toronto<sup>61</sup> where members can borrow kitchen appliances. Finally, the sharing economy provides solutions mainly on the internet in general or on specialised platforms.

There are also dozens of possibilities to buy second hand in local shops and on the internet. For instance, at Envie - a French Federation of shops repairing and selling repaired electronic and electrical appliances under warranty - not only are those appliances up to 50% cheaper, but they also come with a package of support services (1 year warranty, delivery and repairing services). This helps address the trust obstacle to buying second hand goods. The federation and other actors of the reparation sector in France are considering launching a repair guarantee.

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<sup>60</sup> [http://www.groupeseb.com/sites/default/files/eurecook\\_dossier\\_de\\_presse.pdf](http://www.groupeseb.com/sites/default/files/eurecook_dossier_de_presse.pdf)

<sup>61</sup> Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition, Ksenia Benifand, OCAD University Toronto, Ontario, Canada, 2015

Repaired appliances are also sold in shops and workshops in Italy such as Cooperativa Cauto<sup>62</sup> in Lombardia, which repairs and sells appliances in their workshops and shops.



**Cooperativa Insieme**<sup>63</sup> in Veneto is a social cooperative of 150 people, of which around 70 are people with physical, psychological or social impediments. They repair and sell appliances, among others, in shops and online. They also give thousands of Vicenza's families the possibility to leave unused or damaged small appliances at dedicated drop off points to be fixed by the cooperative. More deliveries are foreseen.



**SecondLife project**<sup>64</sup> is the largest initiative refurbishing and upgrading white goods in Italy, 'from dump sites back to shops'. Originally part-funded by the European Union, it developed into a regional project in Marche. It has direct contract with retail chain Mediamarkt, picking up electronic waste, fixing it and selling it second hand.

Finally, consumers can have appliances repaired by professionals or do it themselves. In recent years, tutorial websites have begun teaching people how to fix appliances. They are either commercial, such as SOSAV<sup>65</sup> and Spareka<sup>66</sup>, or collaborative web-based platforms like CommentRéparer.com<sup>67</sup>, which counted 3.5 million visitors in 2015. Finally, workshops and repair cafes<sup>68</sup> are occasions to learn how to fix appliances from people willing to share their skills and expertise.

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<sup>62</sup> [www.cauto.it](http://www.cauto.it)

<sup>63</sup> <http://www.insiemesociale.it/>

<sup>64</sup> <http://secondlifeitalia.it/>

<sup>65</sup> <https://www.sosav.fr/>

<sup>66</sup> <http://www.spareka.fr/> A spare part seller that provides also tutorial to help consumers repairing.

<sup>67</sup> <http://www.commentreparer.com/>

<sup>68</sup> <https://repaircafe.org/en/>

## 2. Information and Communication Technologies and smartphones

Information and Communication Technologies (ICT), particularly smartphones, tablets and computers, are ubiquitous in our daily lives. But we still have little information about their components, where and how they are produced and their reparability and upgradability. In 2006, it had been assessed that French consumers change smartphone on average every 20 months<sup>69</sup>. This overconsumption leads to pressure on resources, notably rare earths, especially since their recycling rate is low.

To help reach circular consumption patterns, we need longer lasting products and an end to planned obsolescence.

First, when buying, consideration should be made to the reparability and upgradeability of the item. This should be for example made possible by preferring items with potential non-destructive disassembly over items being glued, with welded parts or with proprietary screws (this can be assessed partially visually, or be investigated on websites, or simply be asked to the sales force). Additionally, attention should be paid the sustainability of the materials within the product for instance toxic contents, use of recycled materials, conflict free minerals...(it may not be easy to get information on the sustainability of materials however).



The crowd-funded social enterprise **Fairphone**<sup>70</sup> is an example of a durable alternative in the field of smartphones. The firm focuses on reparability, upgradability and social and environmental impacts and claims that “the lifetime of Fairphones is around 2.5 times higher than average phones.”<sup>71</sup>

Moreover, the market for reconditioned smartphones, computers and other ICT is both attractive for the consumer, since prices are lower, and beneficial for the environment, since it extends the lifetime of products that cause a lot of pollution. In addition, the field has job creation potential.

<sup>69</sup> Observatoire sociétal du téléphone mobile AFOM / TNS SOFRES - 17 octobre 2006 [http://www.tns-sofres.com/sites/default/files/171006\\_afom.pdf](http://www.tns-sofres.com/sites/default/files/171006_afom.pdf)

<sup>70</sup> <https://www.fairphone.com/>

<sup>71</sup> A Longer Lifetime for Products: Benefits for Consumers and Companies, Directorate-General for Internal Policy, Study for IMCO Committee, 2016, p 31

The Italian company **Exno Computer**<sup>72</sup> sells reconditioned ICT items. It replaces parts that commonly need to be updated, replacing worn components and fully testing the product<sup>73</sup>

Another positive step would be to repair broken item instead of giving in to marketing pressures to change it for a cheap brand new one. There are plenty of repair shops for cell phones in Italy as well as repair tutorials on the internet. Internet platforms, such as IFIXIT<sup>74</sup>, give advice to fix smartphones and other ICT. They also offer tools and spare parts for sale.

### 3. Clothes

It remains difficult to consume clothes responsibly, because of the quick turn over trend imposed by fashion and lack of information about quality (e.g. am I paying more because it's better quality or for the brand reputation, advertising costs and maximum profits?). However, many alternatives exist and there are numerous new possibilities for consumers to find clothes responsibly.

First, people can look for long-lasting basic clothes instead of cheap low quality, ones. Information about quality of fibres and design is still hard to find, but some brands are better than others. For instance, Patagonia<sup>75</sup> makes long-lasting, environmentally friendly<sup>76</sup> outdoor clothing, while Rapha<sup>77</sup> does the same for bicycle clothing. They both offer durability guarantees, high standards of after sales service (e.g. having your clothes repaired for up to 100 years) and guidelines to help repair them yourself. More recently, Loom<sup>78</sup> in France started selling affordable, long-lasting basic mensware – 'less but better' is their slogan - as opposed to the conventional fashion requiring frequently changing models.

Repairing clothes ourselves or have them repaired in shops are important practices to promote within the textile sector.

The European Ecolabel assures consumers about sustainable textiles, ones with lower environmental impacts throughout their lifecycle. Other labels, like GOTS Global Organic Textile Standard, are also useful.

Another possibility to consume clothes in a circular way is to buy second hand. There are plenty of dedicated flea markets in Italy. Besides protecting the environment, it is a way to find bargains and have a unique style. Indeed, second hand is synonymous with the trend for vintage clothes, as can be seen on the website FutureVintage.it<sup>79</sup>. Another example is the second hand fair in Padova, part of

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<sup>72</sup> <http://www.exnovocomputer.it/pc/offerte/smartphone-ricondizionati.html>

<sup>73</sup> <http://www.ebay.com/gds/What-is-Reconditioned-or-Refurbished-/1000000004614466/g.html?rmvSB=true>

<sup>74</sup> <https://www.ifixit.com/>

<sup>75</sup> <http://eu.patagonia.com/enIT/home>

<sup>76</sup> « We use recycled polyester in many of our clothes and only organic, rather than pesticide-intensive, cotton (...). And our focus on making the best products possible has brought us success in the marketplace. »Patagonia website /Company info

<sup>77</sup> <http://www.rapha.cc/fr/fr>

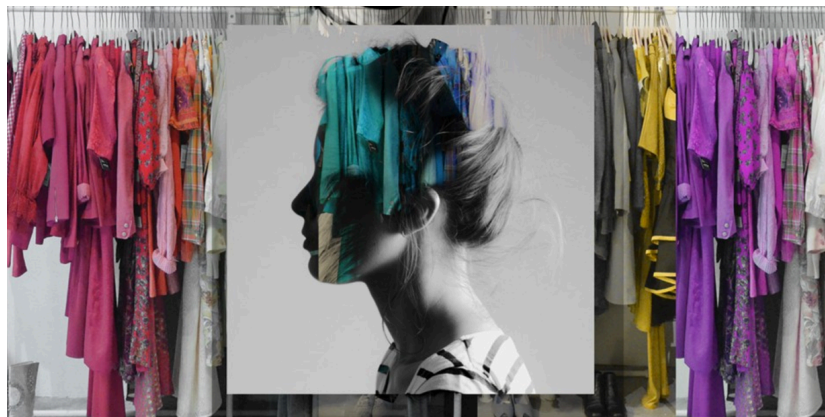
<sup>78</sup> <https://www.loom.fr/>

<sup>79</sup> <http://www.futurevintage.it/>

the regional festival of reuse<sup>80</sup>. It is also possible to shop for second hand clothes online, for instance through the website Rebelle.com<sup>81</sup>, where people can buy and sell high-quality designer items.

Clothes swaps are also becoming popular and are a perfect way to make room in our closets and still be fashionable, or find clothes for growing kids. Swapping events or websites are also a way to enliven social links and community.

Even for fashionistas, it is not necessary to have a closet full of infrequently worn clothes. As Kristy Wieber, the co-founder of Rent Frock Repeat first-of-its-kind designer dress rental service in Canada<sup>82</sup>, notes *“fashion isn’t just about owning stuff: it’s about walking into a room knowing you look good”*. In general, it is possible to rent clothes or borrow them from friends or even from a clothing library.



**Clothing libraries**<sup>83</sup> are an interesting example of new possibilities and larger freedom of choice offered to consumers from a circular economy perspective. The idea is simple. Like in a library, people pay a membership fee and can borrow clothes for a few days or weeks. Sometimes run by student associations, the community spirit can be strong.

#### 4. Furniture

Furniture should be the iconic example of long-lasting goods with heirloom status, but it is not. Going circular in furniture remains largely an untapped potential. First, labels and certification schemes such as Italian Norms, European Ecolabel and the FSC - Forest Stewardship Council - can give an indication of the origin of the material, such as the wood used to make furniture. It is also always possible to check where the piece of furniture was made thanks to the indication “Made in...”.

<sup>80</sup> <http://festivalriuso.wix.com/2016>

<sup>81</sup> <https://www.rebelle.com/>

<sup>82</sup> Quoted in Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition, Ksenia Benifand, OCAD University Toronto, Ontario, Canada, 2015

<sup>83</sup> For example Lena Library in Amsterdam <http://www.lena-library.com/english/>





**ReMade in Italy Label**<sup>84</sup> is a certification scheme that focuses on local production from recycled materials. It is an interesting way of addressing the lack of information available for uncertified recycled products.

Consumers can prefer hazardous-free furniture and/or furniture partly made from waste and bio-chemicals, instead of that made with hazardous or non-durable materials.



**PelleMela**<sup>85</sup> is a company in Alto Adige making highly realistic artificial leather from apple waste and exporting it to China furniture companies.

Consumers can choose long-lasting furniture instead of bad quality furniture. Warranty period gives an indication of expected lifetime. Dada Kitchen provides 5 year warranty, far more than the 2 year minimum EU warranty. The availability of spare parts is also a way to ensure a good lifespan.

**Molteni & Cie** ensures spare parts are available for 10 years after a purchase is made. It is safe to assume that the furniture is more robust and repairable.

Adaptive and combinable furniture can help meet the changing needs and desires of consumers, as opposed to rigid design and thinking each piece of furniture in isolation.

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<sup>84</sup> [www.remadeinitaly.it](http://www.remadeinitaly.it)

<sup>85</sup> <http://www.passoninature.com/pellemela/?lang=en>



**Valcucine-Meccanica**<sup>86</sup> sells sturdy, ‘modular’ kitchen that are built and made to be disassembled, re-assembled, and modified. The kitchen furniture they offer can be adapted in their dimensions and built on so that the kitchen can be transformed without needing to change all pieces. Thus it overcomes one of the biggest problems in relocating kitchens when changing interiors or moving house.

Finally, second hand furniture can be cheaper and always avoids resource depletion and waste. Websites and second hands shops are filled with furniture of various costs.

Repairing, restoring and painting old furniture is also fashionable, a way to have unique furniture at a reasonable costs and avoids buying new. Moreover, as part of the circular economy movement, people are less and less stranded when it comes to fixing broken furniture. They can get advice online, but also in workshops such as the Milano wood open workshop<sup>87</sup> or Falegnameria Cuccagna<sup>88</sup> in Lombardy, where people can learn how to repair and upgrade their furniture.

## 5. Food

Food is an opportunity for consumers to experience the ‘get local’ and ‘get clean’ principles we explained above, by checking its origin, buying local and relearning the seasons, instead of viewing food simply as a fuel.

Buying certified organic food by quickly checking labels (as opposed to green marketing claims) is a way to avoid toxic chemicals and supporting sustainable food. The MSC (Marine Stewardship Council) label is a good example when buying seafood.

<sup>86</sup> <http://www.valcucine.com/collezioni/meccanica/>

<sup>87</sup> <http://www.giacimentiurbani.eu/>

<sup>88</sup> <http://www.cuccagna.org/portal/IT/handle/?page=falegnameria-cuccagna>

Neighbourhood initiatives have been multiplying over the last 15 years. At the same time, a trend of buying in bulk, and thereby minimising packaging, is developing. Initiatives to reduce food waste are also important from a circular economy perspective. For example, platforms like we Foodwe in Belgium or Los espigoladors in Spain enable through organised donation of farms/retail/restaurants surplus to charity organisations taking care of vulnerable publics to feed people while avoiding waste.

Consumers have most often the option to buy seasonal local food in local shops/markets instead of shopping everything in large supermarket chains on the outskirts of town. To promote these practices, some interesting initiatives are awarding citizens with discounts in local shops. For instance, the start-up Ecopunti<sup>89</sup> enables citizens who recycle and/or perform a series of 'good actions' to claim discounts in local shops.



**Piazza Verso Rifiuti Zero**<sup>90</sup> in Piazza Armerina promotes the sorting and reuse of waste. Materials brought by citizens are weighed and turned into points that can be exchanged for local quality products, in local shops.

Positive community initiatives are multiplying. For example, collective purchasing helps people access local, good quality food, while supporting organic farming. There are hundreds of such groups in Italy, many bearing the RES logo, Rete dei Distretti di Economia Solidale.

**RES**<sup>91</sup> is a network of community purchasing groups supplying vegetable boxes to homes. One example is the local purchase group<sup>92</sup> launched by the Legambiente group in Potenza. Families coordinated by an NGO order, as a group purchasing, organic food to local farmers according to the 'from farm to fork' principle.

<sup>89</sup> [www.achabgroup.it](http://www.achabgroup.it)

<sup>90</sup> <https://www.facebook.com/piazzaversorifiutizero/?fref=ts>

<sup>91</sup> <http://www.economiasolidale.net/>

<sup>92</sup> <http://www.ecolifestyles.eu/en/node/352>

Local gardens often associated with neighbourhood composting facilities to recycle food waste are now developing and growing in number.

One of the biggest projects of social gardening in Italy has developed in Pontecagnano. Aimed at empowering low income families to produce their own vegetables and build social bonds in a troubled neighbourhood.

Another useful circular economy development is the growth in buying food without disposable packaging. Shops where consumers can buy in bulk are multiplying. They reduce both packaging and food waste by offering customers exactly the quantities needed. Franchising groups specialised in packaging-free goods are also growing in number. Day by Day in France<sup>93</sup> and Negozio Leggero in Italy<sup>94</sup> are good examples. Such shops are becoming more and more popular in other parts of Italy. Some take care to label products as organic or local. NGOs such as the Zero Waste Europe network are also calling for the comeback of deposit schemes for reusable packaging, such as bottles. Such schemes are beneficial both for the environment and economy, since consumers pay for the packaging but can get their deposit back, unlike with disposable packaging.



**Negozio Leggero**<sup>95</sup> is one of many retail franchises selling package-free goods. Goods are sold in bulk and customers use their own (reusable) bags or get some in the shop. Savings are done on primary packaging traditionally used for many products.

The internet is increasingly being harnessed as a powerful and exciting tool to reduce food waste. Mapping food is a great example, where food near its expiration date is flagged to a broad community, facilitating strong social, environmental and economic benefits at little or no cost. Events are also organised.

<sup>93</sup> <http://daybyday-shop.com/>

<sup>94</sup> <http://www.negoziolleggero.it>

<sup>95</sup> <http://www.negoziolleggero.it>



**Cooperativa Cauto's**<sup>96</sup> organises the last-minute sale of supermarket vegetables and other food leftovers. It also distributes these to charity canteens in Lombardy.

## 6. Cleaning products

Cleaning products are expensive and can be harmful to the environment and our health. It can be difficult to choose from dozens of fancy products all claiming to be either the best, the greenest or both.

But consumers can rely on ecolabel schemes, testifying the product respects human health and environmental standards, as well as products sold in concentrated form. As stated in the Cutting the Crap study<sup>97</sup>, concentrated detergents enable resource savings in the range of 10-15 percent, notably with regard packaging. It should also be kept in mind that simple, multi-purpose non-toxic products are available in most shops and already frequently used as they are as effective as others.

Another possibility now developing is to buy cleaning products in bulk, reusing old containers (important to reuse the appropriate container to conserve the right safety information in case of any incident with the product)

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<sup>96</sup> [www.cauto.it](http://www.cauto.it)

<sup>97</sup> Cutting the Crap: How to Increase Resource Efficiency in the European Personal Care Retail Sector, Deutsche Umwelthilfe e.V. Environmental Action Germany, 2016



**Biolù**<sup>98</sup> is an Italian franchising group specialising in offering detergents in bulk and rechargeable containers, cutting on packaging, while still covering a large range of products. Interestingly they have now developed an assistance service for shops wishing to offer cleaning products in such bulk and rechargeable containers.

Interestingly, there is a growing trend for people to learning how to make cleaning products themselves from simple basic ingredients. These are effective, cheap and non-toxic.

## 7. Toys

Toys are an important gateway to the circular economy since parents are sensitive to the health of their infants, which are more vulnerable to toxic compounds than adults, and yet often chew plastics toys. Additionally, toys are often locked away in storage once children grow up.

Labels by the FSC are relevant to toys made from wood, while the GOTS, Okö Tex, Ecocert and Max Havelaar apply to toys made from textiles. All those standards certify that the materials were grown sustainably. Some of them also testify that decent working conditions were granted, and that toys are made without toxics.

Second hand shops or swapping websites and events are a good way both to find toys and clear out unwanted ones.

Sharing toys is a social way to access expensive and diverse toys at cheaper rates. This can be done at sharing events or online. One virtual non-profit community to share objects is La Maddalena in central Genoa<sup>99</sup>. More traditionally, it is more common to borrow from toy libraries (*Judoteche*). Another good example for leasing quality toys is the website *Againagain.be* in Belgium.<sup>100</sup>

## 8. Leisure and others

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<sup>98</sup> [www.biolu.it/](http://www.biolu.it/)

<sup>99</sup> <http://maddascambio.it/>

<sup>100</sup> [www.againagain.be](http://www.againagain.be)

When it comes to leisure activities, the focus is on relaxing and concern for resources conservation and environmental issues may be left behind. However, going to restaurants, travelling, sports and holidays are also occasions to deviate from old habits to discover alternatives and renew leisure experiences enjoying possibilities aligned with the circular economy.

First of all, consumers can get long-lasting leisure equipment and repair them.



**Ciclo Officina Cicloriparo**<sup>101</sup> in Genoa is one of the many self-repair workshop present in Italian towns, where people can learn how to fix their bike instead of buying a new one and getting the most out of scrap parts recovered from other bikes.

Another example is the Upcycle Bike Café Milano<sup>102</sup> in Lombardi, the first Italian Bike café. It is always possible to buy and sell second hand in regular shops, websites or events or in specialised places like La Recyclerie Sportive in Paris, which repairs and sells second hand sport equipment at great prices.

There are also a lot of initiatives in the field of buying experiences and services instead of things. For instance, Make It Travel<sup>103</sup> is an interesting example of the sharing economy for leisure activities. It is a web-based collaborative platform to rent travel equipment between individuals. It optimises the use of equipment through renting equipment at cheap rates, while creating a community linked by shared values. More common are bike sharing schemes set up by municipalities in numerous cities. Spinlister.com is a good example of private bikes sharing, involving both shops and individuals<sup>104</sup>.

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<sup>101</sup> <http://cicloriparo.wordpress.net>

<sup>102</sup> <http://www.giacimentiurbani.eu/company/upcycle-milano-bike-cafe/>

<sup>103</sup> <https://makeittravel.com/>

<sup>104</sup> <https://www.spinlister.com/>



**Bike Sharing Milano**<sup>105</sup> is the largest collective bike scheme of its kind in Italy. Locals can enjoy bikes on demand instead of buying them. It also provides an original kids' bike sharing system.

Carpooling or even boatpooling are also new possibilities for travelling. They consist in offering a place in a 'shared' car or boat, often for a more attractive price than other transportation alternatives. On the one hand, it is a way for owners to recover part of the costs linked to travelling with their own vehicles and on the other hand the car or boatpooler can enjoy cheaper travel.

Finally, other initiatives go further in the perspective of re-inventing leisure in a more human and environmental way.



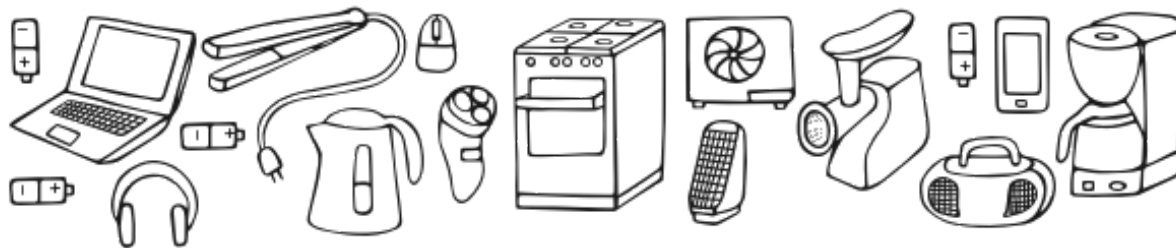
**Il Baronetto**<sup>106</sup> is an illustration of innovative way of spending time off. This Bed and Breakfast enables people to go on holiday in a very eco-conscious place and offering the possibility to barter some time and/or professionalism against an accommodation, thus limiting the traditional monetary transactions. It is aimed at rediscovering the true values of hospitality.

<sup>105</sup> <https://www.bikemi.com/>

<sup>106</sup> [www.ilbaronetto.it](http://www.ilbaronetto.it)



The circular economy represents opportunities for consumers to embrace cheaper, cleaner and more satisfying practices instead of routine habits they are often locked into. However, this transition requires the support of decision makers in order to flourish.



## **CONCLUSION: LEVERAGING ACTIONS BY NATIONAL AND LOCAL DECISION MAKERS**

Consumers and businesses<sup>107</sup> are not the only ones responsible for shifting to a circular economy; decision makers have a part to play, notably in terms of *“empowerment of consumers to move forward a resource-efficient consumption”*<sup>108</sup>. They can design policies to limit negative impacts (e.g ban the most unsustainable products) and nurture the transition to more circular behaviours, both locally and nationally.

We will focus here mainly on demand side measures, but complementary and essential supply side possibilities should not be neglected (most of the time consumers still react to what’s offered to them).

### **1. National and local awareness**

Both national and local authorities have a part to play **in raising awareness of the circular economy**. While ‘peer-to-peer’ information (= sharing information and experiences among individuals) is crucial and social media can help, public bodies should help frame the debate in terms of terminology, focus and accuracy of information<sup>109</sup>. According to Ksenia, *“the framing could be on cost savings and convenience benefits instead of focusing primarily on environmental benefits”*<sup>110</sup>. Highlighting positive alternatives is often more effective than traditional public information campaigns with a moral tint. The idea is to mobilise and educate to foster a change in culture and social norms and mainstream circular economy behaviours.

### **2. National decision makers**

#### **2.1. Economic incentives for consumers**

Playing on **fiscal and financial incentives** appear a first promising route. Cost remains an essential purchase driver. In order to be effective, fiscal and financial incentives need to be perceived as significant enough for consumers.

Costs can be mitigated, for instance through tax reductions for organic food or clean sustainable products while additional taxes or fees are levered for disposable products - where there are good

<sup>107</sup> See second report on product policy

<sup>108</sup> A Longer Lifetime for Products: Benefits for Consumers and Companies, Directorate-General for Internal Policy, Study for IMCO Committee, 2016 p 59

<sup>109</sup> A Longer Lifetime for Products: Benefits for Consumers and Companies, Directorate-General for Internal Policy, Study for IMCO Committee, 2016 p 59

<sup>110</sup> Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition, Ksenia Benifand, OCAD University Toronto, Ontario, Canada, 2015 p 69

alternatives, as well as non-reparable products, or hazardous containing products. Tax reductions could also be introduced for repair, remanufacturing and refurbishment activities <sup>111</sup> or to reward smart firms that have invested in repairable and upgradable products.

## 2.2. Product-design policy

Though product policy is primarily a European policy addressing single market and with a great potential to deal with supply issues, measures to counter planned obsolescence of products could also be defined at national level as a way to improve the availability of products built to last. Governments could for example set requirements to extend and communicate legal warranty periods, require spare parts availability and free circulation of repair information, and create awards for products whose materials and components can be more easily reused and recycled.

## 2.3. Foster circular economy consumption places

National decision makers can play a part in fostering both virtual and physical platforms for exchange, repair and sharing. A good example comes from the Italian authorities, which have recently investigated a legal provision requiring opening and making available dedicated places for repair, reuse and exchange of items at municipal level.

Online platforms can also be given support by national authorities, for example by setting specific national platforms listing organisations, local resources and places of interest for circular economy practices. This may help mobilise people at local level and trigger new projects that would benefit from associated visibility. Repair cafés should also get legal support relating to intellectual property rights and easier access to public research, development and innovation<sup>112</sup> according to the Longer Lifetime for Products study.

## 2.4. Give accurate information about different possibilities

Another possible action can be to give accurate information to consumers about the different possibilities in a circular economy model and support initiatives that provide information like the labels. In that matter, ReMade in Italy Label<sup>113</sup> mentioned above is an interesting initiative. More obvious information schemes on reuse, recycling and hazardous contents (in link with requirements of EU policy with regards waste of electric and electronic equipment or ‘right to know’ principle of REACH policy) could also be implemented. Exploration for effective communication of environmental properties of products could also be conducted although it is to bear in mind that environmental motivations may not be the primary ones to mobilise. At least some limitations to confusing proliferation claims towards consumers could be set through requiring robust back up evidences and stopping the obvious ‘greenwashing’ advertising messages. Moreover proper implementation of European legislation on product design, labelling, like recent amendment on batteries should be ensured by national decision makers.<sup>114</sup>

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<sup>111</sup> A Longer Lifetime for Products: Benefits for Consumers and Companies, Directorate-General for Internal Policy, Study for IMCO Committee, 2016 p 72

<sup>112</sup> Idem p 88

<sup>113</sup> [www.remadeinitaly.it](http://www.remadeinitaly.it)

<sup>114</sup> A Longer Lifetime for Products: Benefits for Consumers and Companies, Directorate-General for Internal Policy, Study for IMCO Committee, 2016, p51

### 3. Local decision makers

#### 3.1. Create and support spaces for goods and service exchange

Local decision makers, such as city planners and local government officials, can **create or designate spaces for goods and service exchange. These may eventually be required by national law.** Temporary or permanent spaces could facilitate swapping, sharing or repairing. They could also support events and organisations promoting reusable items, (from washable dishes to reusable nappies), and provide vouchers to increase uptake by people.

Projects can be carried out by the local authorities, which can set up their bike or car sharing system. They can also promote library systems (book, toys, tools etc) where awareness events can take place and information/advice provided. These projects can also be carried out by associations or companies, in which case public subsidies can be allocated, public buildings provided for a low rent or arrangements made for temporary occupation of public property.

Similarly, professional and Do It Yourself repair workshops can be initiated or supported by the local authority. They can encourage and invest in more community sharing schemes. As underlined in the Rethink Consumption study, consumers are also citizens and interested in sharing their ideas and experiences to shape new solutions.<sup>115</sup>



#### 3.2. Choice editing & reward schemes for more circular goods

Local authorities can cooperate with retailers in order to step up dealers’ efforts to promote circular consumption patterns through choice editing and consumer nudging. For instance, a certain proportion of ecolabelled products or products sold in bulk could be targeted over time and local awards established to acknowledge the best retailers.

At the same time, local decision makers can encourage retailers to have fidelity and reward schemes for more circular goods, such as the initiatives Ecopunti and Piazza Verso Rifiuti Zero, presented in the section on food.



**Ecopunti**<sup>117</sup> rewards citizens in 90 Italian regions for taking ‘good actions’ by awarding them discounts in local shops. Points vary, with some focussing on reuse and recycling, while others encourage positive community actions, such as giving blood, hiring books from the local library, volunteering for a local charity, etc. The schemes are sponsored by one or more municipalities, or by a local waste management company, as part of their corporate social responsibility strategy and to foster proper sorting of waste.



The **Piazza Verso Rifiuti Zero**<sup>118</sup> project in the city of Piazza Armerina promotes the voluntary sorting of waste. Collected materials are weighed for points to be exchanged for local products or services. They are also active in energy and water policy, and consider all of them as resources to be used with care.

#### 4. Limits and further investigation

<sup>117</sup> [www.achabgroup.it](http://www.achabgroup.it)

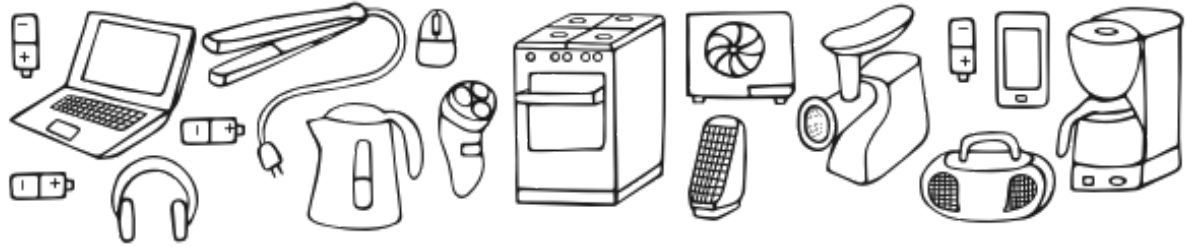
<sup>118</sup> <https://www.facebook.com/piazzaversorifiutizero/?fref=ts>

There are limits to a purely consumer centric point of view. Stimulating only the demand side will definitely not be sufficient and successful. The desired shift in consumption behaviours needs to be complemented with new production and business models which should be further promoted.

Circular consumption patterns should also take into account possible rebound effects, in which resource savings are offset by an increase of consumption, undermining the original purpose of behavioural change<sup>119</sup>. *There are no clearly defined solutions to rebound effect, but we can imagine that if savings made through first behaviours change are re-invested in complementary activities and consumption routes aligned with circular economy approaches, this rebound effect could help create a virtuous circle and continuously trigger new initiatives.*

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<sup>119</sup> A Longer Lifetime for Products: Benefits for Consumers and Companies, Directorate-General for Internal Policy, Study for IMCO Committee, 2016,p60



## **REFERENCES**

Rethink Consumption, Consumers and the future of sustainability, BBMG, GlobeScan, SustainAbility, 2012

A Longer Lifetime for Products: Benefits for Consumers and Companies, Directorate-General for Internal Policy, Study for IMCO Committee, 2016

Segmentation of Green Consumers, Meera R. Mayekar, K. G. Sankaranarayanan, International Journal of Science and Research (IJSR), 2014

Product passports: What's the idea and how can we make it work for a circular economy?, European Environmental Bureau (EEB) Carsten Wachholz and Stephane Ardit, Disruptive Innovation Festival 2015

Sustainable Consumption: Perspectives from Social and Cultural Theory, David Evans and Tim Jackson, RESOLVE Working Paper 05-08

Shifting Mainstream Consumption Patterns a Towards Circular Economy Transition, Ksenia Benifand, Master Thesis in Design in Strategic Foresight & Innovation OCAD University Toronto, Ontario, Canada, April, 2015

La vie share mode d'emploi : consommation, partage et modes de vie collaboratifs, Anne-Sophie Novel, Manifestô, 2013

La Famille (presque) Zero Dechet – Ze guide, Jérémy Pichon et Bénédicte Moret, Broché, 2016

Jahnich M., G. Boulbry, M. Dupre, É. Ferreira, V. Ramirez (2016) ILLC study: The Influence of Lifespan Labelling on Consumers, Brussels: European Economic and Social Committee (EESC) (Ref: CES/CSS/1/2015), ISBN 978-92-830-3067-6. Available online: <http://www.eesc.europa.eu/resources/docs/qe-04-16-076-en-n.pdf>.

Constraints to Resource-Efficient Consumer Behaviour, POLFREE Policy Brief 2, march 2016

Cutting the Crap: How to Increase Resource Efficiency in the European Personal Care Retail Sector, Deutsche Umwelthilfe e.V. Environmental Action Germany, 2016

Intelligent Assets: Unlocking The Circular Economy Potential, Ellen MacArthur Foundation, 2016