

# THE STORY OF RePack

ZERO WASTE CONSUMPTION & PRODUCTION

## # 4

How Zero Waste and online shopping work together? RePack is a closed-loop system that can reduce ecommerce packaging by 96% while providing the same consumer experience as the disposable one. A simple solution to the growing problem of e-commerce waste.



Nowadays people can shop from almost anywhere and order almost anything they want in a matter of minutes (or even seconds) through a couple of clicks. Thanks to online retail, shopping has never been so easy. According to Euromonitor International<sup>1</sup>, **e-commerce is expected to become the largest retail channel in the world by 2021**. The growing e-commerce trend is a result of the quest for convenience pushed by today's busy life. On a report by Eurostat<sup>2</sup>, 69% of internet users in the EU shopped online in 2018.

The practicality of shopping without having to go to the store, has indeed helped many people to save time. However, **the environmental impact of e-commerce is growing, as the current delivery/shipping system**

**generates massive packaging waste.**

Online shopping means a lot of packaging - mostly single-use plastic bubble wrap, styrofoam and massive cardboard boxes. Each product needs packaging in order to be safely delivered to the consumer. According to Eurostat<sup>3</sup>, **paper and cardboard are the main packaging waste materials in the EU**, accounting for 41% (around 35.4 million tonnes in 2016) followed by plastic and glass (16.3 million tonnes each in 2016).

The purpose of packaging in e-commerce is to ensure that the product reaches the buyer safely and serves its intended use.

**But is e-commerce doomed to generate packaging waste forever?**

What if one could ship the packaging back the same way it came?

This is what RePack did. Quoting them in their own words, they came up with: **"a super simple solution to an ever-growing problem"**.

So, let's unwrap and dig into this nice story...

1. <https://blog.euromonitor.com/e-commerce-is-the-fastest-growing-global-retail-channel-through-2022/>  
2. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=E-commerce\\_statistics\\_for\\_individuals&oldid=270353](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=E-commerce_statistics_for_individuals&oldid=270353)  
3. [https://ec.europa.eu/eurostat/statistics-explained/index.php/Packaging\\_waste\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php/Packaging_waste_statistics)



## THE BACKGROUND

Back in 2011 the founders of RePack started a sustainable design agency in Finland to combine sustainability analysis and industrial design. They became aware of the growing packaging waste problem while working on a load carrier project with the Finnish Post office. They spent many hours in their logistics warehouses seeing tons of single-use packaging being delivered, only to be used once and thrown away.

Frustrated by the amount of packaging waste being generated, RePack's current chief designer - Juha Mäkelä - had the idea to **apply the Finnish bottle deposit return system (DRS) to e-commerce packaging.**

Juha Mäkelä has grown up with the reusable bottles systems in Finland. Therefore, he thought that using packaging for online purchases and returning it should be just as simple as a the DRS for bottles. His idea was heavily criticised, but Juha believed in its potential and could not let it go. Juha and the other founders put their heads together to develop an innovative business model which today has become RePack.

## THE FIRST STEPS AND CHALLENGES

The idea was born at the end of 2011, but for two years it was just an idea and during this time the founders were trying to figure out how their dreamed reusable packaging system could work in practice.

Developing the business model was the first big challenge: how to get the packaging back? What would be the logistics: how to set it up? How to scale it up? How to sell and frame it? Where to look to find a market? As regarding the design of the packaging, the challenge was to find the best materials, size and format. How would the packaging look like? These were just some of the questions that they faced to create a unique reusable packaging system.

Therefore, the RePack founders spent two years to develop a functioning solution to e-commerce disposable packaging. RePack had their first real customers in 2013 - a sustainable clothing brand and a Finnish outdoor brand - who tested their very first models.

Although their packaging design did not work really well, they've realised

that the customers loved the idea - so much that they were given a feedback rating of 9.5 out of 10.

The founders then realised that they were on something that resonated with people willing to reduce their environmental impact and looking for more eco-friendly solutions. Thereby, encouraged and triggered by the successful feedback of their first experience, the founders started working again to improve their packaging design.



## UNWRAPPING REPACK'S SYSTEM - HOW DOES IT WORK?

### The package design:

RePack's reusable packages are made of durable and recycled polypropylene and come in three adjustable sizes<sup>4</sup>. **The packages are designed to fold in letter size when empty to be simply returned via a mailbox, anywhere in the world. The packages are made to last at least 20 cycles.**

But RePack is not just a reusable packaging, **it is a service that comprises the packaging delivery and its return through a reward system.**

### The system design:

Once a product is purchased with a webstore that has adhered to the RePack's system, the consumer can opt for the RePack shipping option.

At the time of the purchase the customer will pay a small deposit for the delivery and its return (around €3,50), which will be reimbursed in a form of a discount voucher for the next purchase upon the return of the packaging.

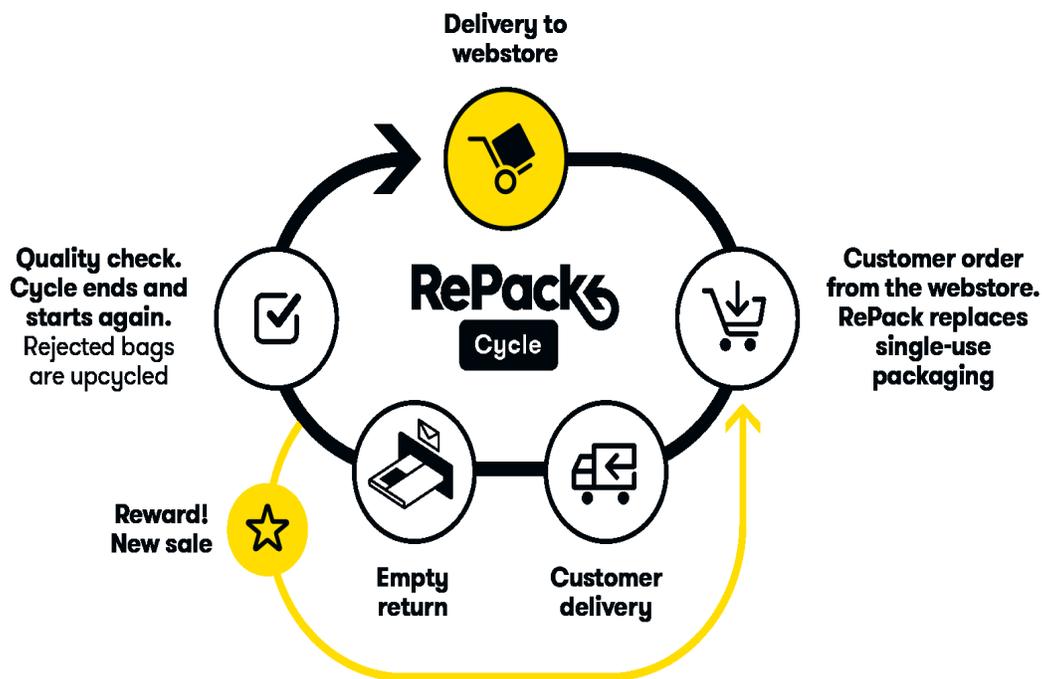
After receiving the delivery with RePack, the seal can be easily peeled off and the empty RePack can be simply folded into letter size and returned to RePack's logistics hub to be reused. The customer just have to drop the RePack into a mail box anywhere in the world, free of charge.

Once the packaging is returned, the customer will receive the rewarding voucher by email to be used upon the next purchase at any RePack webstore. The reward is granted even if the customer wants to return the purchase to the webstore, as

long as the return is done with the RePack. Inside the RePack there is a sticker with a preprinted return address, and they simply have to seal the packaging with that sticker and drop the RePack into a mail box, as usual.

**The real deal about RePack's system is that the cycle of the packaging does not end once it reaches the customer - in contrast with most single-use packaging used for the delivery of goods.** Once RePack gets the packaging back, it will pass through a quality check at RePack's logistics hub for cleaning and redistribution, to be used again. Damaged or rejected bags are upcycled into new products or the material is recycled.

4. Further detail on the packaging can be found at: [https://www.originalrepack.com/files/Package\\_Presentation\\_S+M+L.pdf](https://www.originalrepack.com/files/Package_Presentation_S+M+L.pdf)



## THE RESULTS

**RePack was created with the belief that prevention and reuse are the best options to reduce waste.** Indeed, the founders have successfully managed to achieve the goal of developing a viable solution to e-commerce disposable packaging.

As mentioned, RePack's system is designed to be returned and reused, therefore, it avoids disposable packaging waste every time it is used. As each RePack can be reused on average 20 times, it means that for every RePack used disposable packages are avoided. In other words, **one RePack equals to 20 disposable packages.**

In 2017 around 20.000 RePacks were used, and in 2018, it grew to 30.000. This means that in 2 years they prevented the disposal of 50.000 single use packages. The same RePacks in their next cycles can avoid more single-use packages (on average up to 20 times per package).

Statistics<sup>5</sup> show that **RePack reduces up to 96% of total packaging waste.**

While RePack will turn into waste after the 20th use, disposable packagings cause significant waste after each single use.

In fact, RePack's system has succeeded in providing consumers with an alternative to single-use packaging. **The system is currently working with up to a 80% return rate with around 50 partner webstores in over 10 European countries.**

RePack has not only helped to reduce packaging waste, but also, has reduced the carbon footprint of the sector<sup>6</sup>. Moreover, RePack's system has significantly contributed on the social sustainability aspect, as packages are handled by social workers associations, employing people with disabilities.

Besides the great social and environmental benefits, RePack is also a good choice for businesses. At

the checkout of an online purchase, customers can select whether they want the delivery in RePack or in a disposable one. Therefore, the adoption of RePack's system is cost neutral for the webstores, while ensuring a good marketing for their sustainability statement.

Nevertheless, in order to increase the average order value, some webstores offer free RePack for their most valued customers as an investment on the customer experience, and as a way to build a loyal relationship with them. The reward system is also a way to gain customers loyalty, as it appeals to a wider RePack user base and generates repeat sales. RePack's data shows that up to 60% of RePack vouchers are claimed.

5. Further information available at: [https://www.originalrepack.com/files/RePack\\_%20CO2%20.pdf](https://www.originalrepack.com/files/RePack_%20CO2%20.pdf)

6. Further information available at: [https://www.originalrepack.com/files/Package\\_%20CO2%20.pdf](https://www.originalrepack.com/files/Package_%20CO2%20.pdf)

### Waste per packaging

<b>Reusable RePack M</b>	0,118 kg
<b>Disposable plastic</b>	0,750 kg
<b>Disposable cardboard</b>	0,150 kg

While RePack will turn into waste after the 20<sup>th</sup> use, disposable packagings cause significant waste after each single use.

### Total waste after 20 uses

<b>Reusable RePack M</b>	0,110 kg
<b>Disposable plastic</b>	1,500 kg
<b>Disposable cardboard</b>	3,000 kg

Assumptions:

RePack M weight 118 grams

Disposable plastic 75 grams



## NEXT STEPS AND CHALLENGES

RePack is convinced that their model could be easily replicable in other countries and their plans for the future are promising. They've got positive feedback from all the 50 partners across 10 European countries and now they are looking to scale it up and make it available all around Europe and in the US. Moreover, from all the webstores that have experienced RePack, only a few stopped offering it, mainly because of the easy availability of single-use packaging and the price difference.

Although the social perception of disposable packaging is already changing for the better, **making**

**reusables go mainstream will require a level playing field with disposable packaging, while today the latter doesn't internalise the costs.**

Another challenge for RePack is to get big size partners. Currently they have many small brands and webstores offering the service, which is great - but getting big size partners could help in making a much faster and greater difference on the amount of packaging waste coming from online retail shopping and then break the barrier to scale and replicate reusable packaging systems.

Nevertheless, in spite of the challenges and the competitive

disadvantage with disposable packaging, **RePack's successful story has shown that Zero Waste alternatives are getting their way through. RePack's system is a great example of how a reusable packaging model can work without hampering consumer convenience.** In fact, the new generations, heavy users of online shopping, are paying greater attention to environmental issues and are open to innovative approaches to packaging. Yet, for Zero Waste business models such as RePack to become the norm, public intervention will be needed.



For more information visit:  
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Sources  
[originalrepack.com](http://originalrepack.com)



Zero Waste Europe is the European network of communities, local leaders, businesses, experts, and change agents working towards the elimination of waste in our society.

We empower communities to redesign their relationship with resources, and to adopt smarter lifestyles and sustainable consumption patterns in line with a circular economy.

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