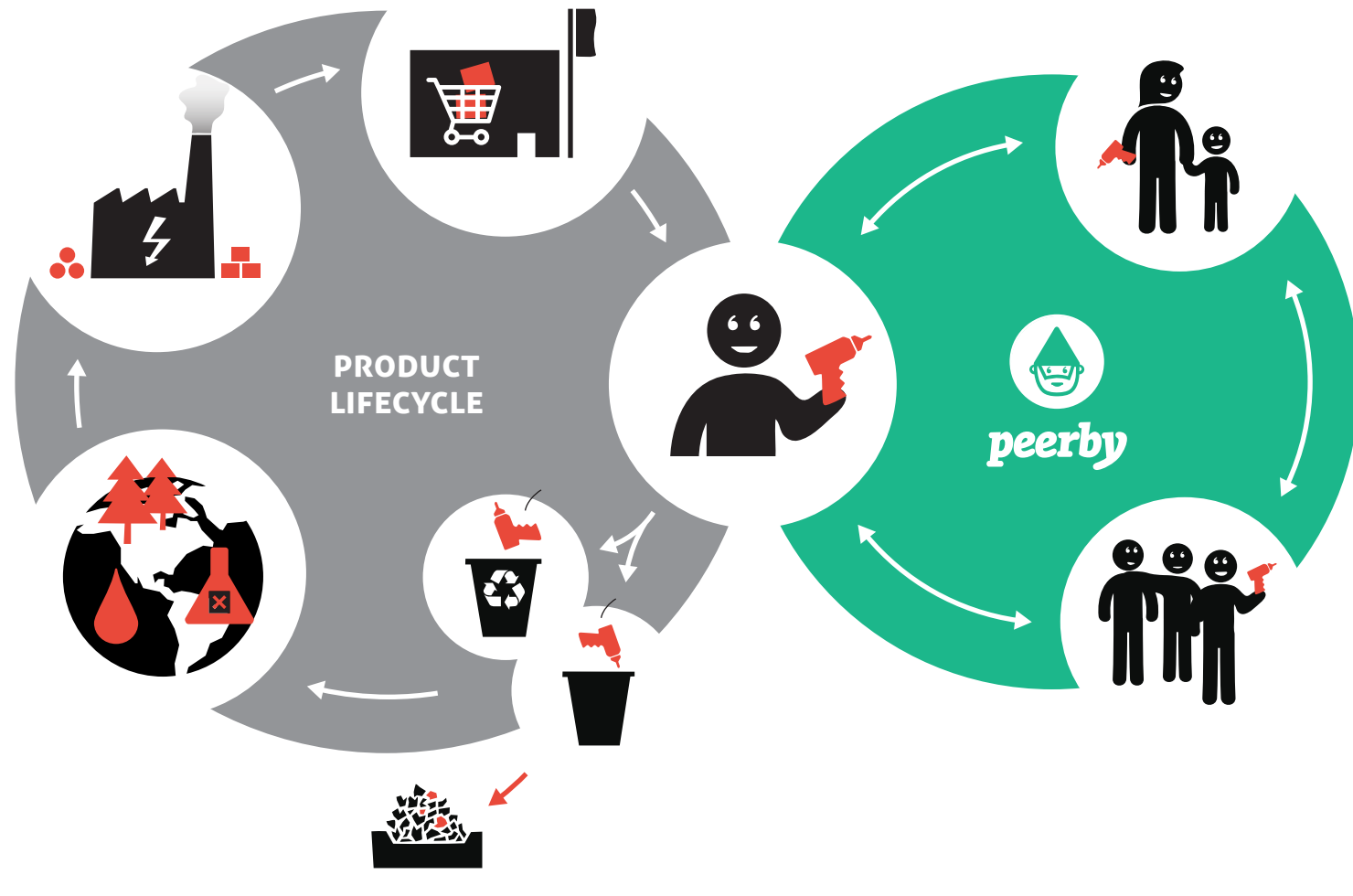


WHY PEERBY MATTERS

We believe Peerby helps move towards a more sustainable society. But what does that mean? And does Peerby truly have a positive impact? To find out, we asked our friends at the sustainability research and innovation firm [Except Integrated Sustainability](#). Below they explain their analysis of Peerby's impact.



THE PRODUCT LIFECYCLE

The impact of a product is the combination of impacts of all the phases of its life, from the extraction of raw materials to manufacturing, shipping to stores, its use and it being thrown away.

EXTENDING THE LIFECYCLE WITH PEERBY

By sharing products with your neighbors with Peerby, the cycle's impact is reduced to only its use-phase, saving a huge amount of resources, and money.

PEERBY CHANGES LIFE CYCLES

THE LIFE OF A PRODUCT

Each phase of a product's life uses resources such as energy, fuel, water, and materials. This has an effect on the environment by polluting and depleting materials, producing CO₂ and other impacts. That's the price we pay for having nice stuff.

But there's something wrong with this life cycle...

Take a look: an average power drill has a lifetime of about 160 operational hours. But did you know that a drill typically only gets used for about ten minutes over its lifespan? That is merely 00.1% of its potential lifespan! (Thackara 2005). The rest of the time it's just collecting dust on the shelf.

This means that all the impact of its life cycle is used for only 10 minutes of drilling. What a waste. What if you could make its unused 99,9% available to your neighborhood?



PEERBY TO THE RESCUE

Your neighbour might also need to drill just a few holes. If he used your power drill instead of buying another one, the both of you just saved an entire power drill from being manufactured, shipped, sold, and transported. A huge saving with little effort.

Imagine all the unnecessary energy, shipping and used materials saved by simply sharing stuff to some of your neighbors. And imagine the money you save if you don't have to buy all those products yourself?

That's what Peerby does: connecting people to have a lasting positive impact, while saving you some cash.



PEERBY'S IMPACT

Peerby has a positive environmental, social, and economic impact, in several ways.

PEERBY'S ENVIRONMENTAL IMPACT

Measuring Peerby's total impact isn't easy, because there's so many different products available on to share on Peerby. Also, not every 'share' has the same characteristics; for example, the positive impact of sharing differs between sharing with your direct neighbour or someone half an hour's drive away. It also depends on whether you take you take your bike or car to pick it up, and many other factors. To give you an idea of Peerby's positive impact, we've made a rough outline of an ordinary vacuum cleaner shared with your neighbors.



In our example we use a typical upright domestic vacuum cleaner.

EXAMPLE: SHARING A VACUUM CLEANER ON PEERBY

Producing a typical household vacuum cleaner, bringing it into your home and disposing it afterward, costs (without using it) about 300 kWh in energy, 19,2 KG of materials (including production waste), 700 liters of water, 55 kg of CO₂ eq, and it costs about 110 €.*.

Each time a vacuum cleaner is bought, this impact happens. So each time a vacuum cleaner is shared, you save all that energy, materials, water, waste and CO₂. The vacuum cleaner also needs to be transported to your home, which will produce extra CO₂. For a vacuum cleaner, you typically shouldn't drive more than a mile. Cars are pretty impactful, so it's best to share with direct neighbors or people just a few blocks away which you can cover by foot or on a bike. Or of course, if you happen to pass anyway on your way somewhere else.

The environmental impact of Peerby is bigger than only CO₂, it also saves water which is typically used a lot in the production of any product and a resource getting increasingly scarce. In addition, waste, both toxic and non-recyclable, are saved, as well as energy and land use for factories and material extraction.

*This does not include CO₂ emissions produced from the store to your home.

POSITIVE IMPACT WITH PEERBY



THE SOCIAL AND ECONOMIC IMPACT OF PEERBY

Next to the positive environmental impact of sharing stuff, there are also other impacts on social and economic level. Peerby brings people closer together, and perhaps you'll meet people you would otherwise never have contact with, which increases social connectivity and generally leads to happier people, safer and more thriving neighborhoods.

Also, instead of buying new products with your hard-earned money, you can save it for things that mean more to you. Sharing with Peerby therefore saves money, and increases the economic strength of your neighborhood. On the other hand, sharing stuff with your neighbours and using it more does increase risk of something happening to it. That's why Peerby is offering insurance to take that risk away. But of course, its better to simply take care of all the stuff.

DETAILED PERFORMANCE INDICATORS

The detailed numbers below are for the entire life cycle of a vacuum cleaner, including its use phase, and are therefore higher.

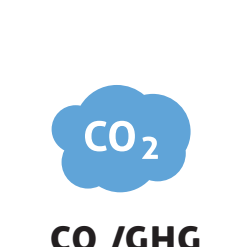


Sharing products avoids, but increases use in all life cycle steps, but increases energy consumption during its use phase. So if you need to buy a product, buy one that is energy efficient. A vacuum cleaner uses about 8000 MJ of energy in its life. That's the same as a 100 Watt lightbulb burning for 2.5 years straight, or if you're using a powerful but efficient LED light, more than a whopping 25 years.



During each stage of the production of products water is consumed for extracting and making materials, cooling, running machines, operations, and other manufacturing operations.

This amount can be staggering. A simple upright domestic vacuum cleaner can use more than 22.000 liters of water in its life cycle. That's about 83 bathtubs filled to the brim.



The use of energy, fuels and transportation produces emissions. CO₂ emissions cause climate change. Other emissions cause acidification and air pollution.

A vacuum cleaner produces the equivalent of about 400 kg of CO₂.



Fuels are used to produce energy, to run machines and to transport products all around the world. Fuels are typically fossil in nature: they are not renewable and add additional CO₂ to the atmosphere. Some can be renewable, but still cause local air pollution and land use. The vacuum cleaner uses about 924 MJ of fuel in its life cycle. That's about 22 liters of gasoline.



Waste is not only generated at the end of a product's life, it happens throughout the whole life cycle. Actually typical production produces many times more waste than the product itself. For the Vacuum cleaner this amounts to about 20 kg of waste.



Between each stage of production and sales, products are transported all over the world. Some products are even transported twice around the world before it gets to our stores. Even as waste it is transported around. Transport uses energy and fuel, but also causes air, ships, trucks and cars, and causes road pollution.

The assessment of the transport miles of a vacuum cleaner are still in progress.



The extraction of materials, building factories, roads for transportation, stores etc all consume land. This land is then no longer available for wildlife and people to live on. Land is one of the most scarce resources we have.

Land use is extra important because every area of land used for something cannot be used for something else through recycling. Double land use is rare, and hardly present in industries, such as those that produce vacuum cleaners.



Each time a product is shared a connection is made. This brings people closer together and increases social connectivity in neighborhoods. It also increases awareness about sharing and caring for our environment.

Peerby has, in total, connected more than XXX people, and counting.