





WASTE IN AMSTERDAM

A BRIEF SUMMARY OF **AMSTERDAM'S WASTE SITUATION**

INTRODUCTION

AN INTERNATIONAL HUB

As small as it may be, the Netherlands has been a powerful trading nation for centuries. Today, Amsterdam is seen as an international hub for creativity, tech and finance, in a country which increasingly operates within global value chains. The Netherlands is called 'a distribution country' for a reason: large sums of money are involved in the import and export of goods and e-commerce is booming. **But the long chains that characterize this international trading system, combined with efficiency and speed, often results in high amounts of overproduction and waste.**

Within this system, multinationals and big brand owners seem to have the most control. Because clothing, goods and food are produced on such a large scale, big companies have a cost advantage over small entrepreneurs. This makes it difficult for local designers and producers with more sustainable initiatives to get their foot in the door. **Instead, the Netherlands is outsourcing the production of almost everything (except food) in exchange for low costs, resulting in goods and clothing of increasingly poor quality, that are not designed to last, and that quickly end up as waste.**



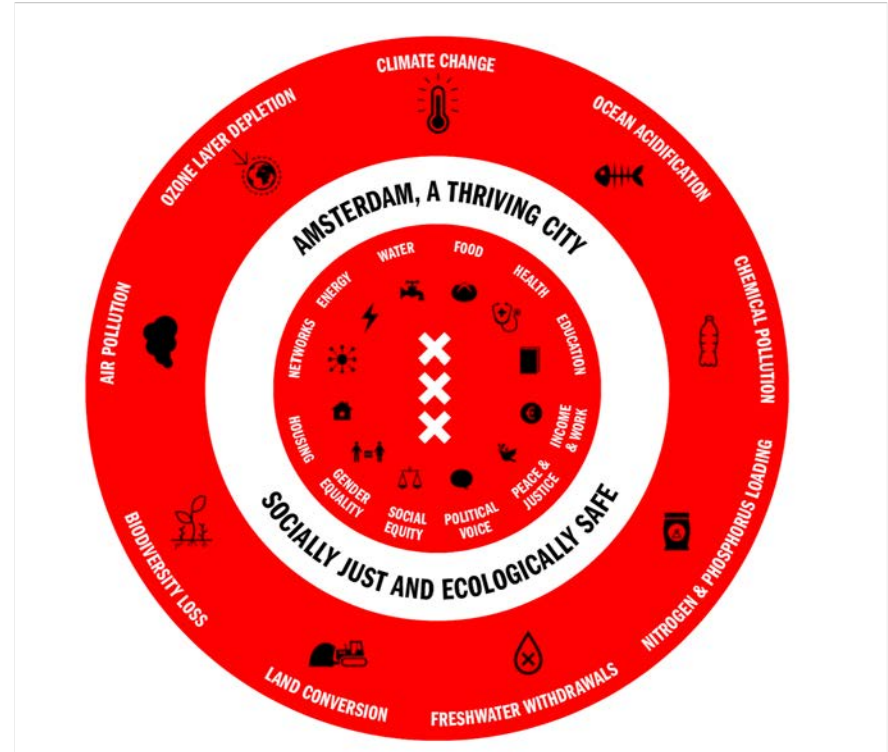
A BRIEF SUMMARY OF AMSTERDAM'S WASTE SITUATION

AMSTERDAM CIRCULAR BY 2050

Amsterdam has great circular ambitions. The city council has recently adopted a circular economy policy and created a Circular Strategy for the years 2020-2025. **The ultimate goal is to halve the use of new raw materials by 2030 and to achieve a fully circular city by 2050.**

What would this look like? To begin with, a circular city would demand a smarter approach to how scarce raw materials are extracted, transformed into products and then consumed. On its journey to become fully circular by 2050, the City of Amsterdam is focusing on 3 value chains: Food and organic waste streams, consumer goods and sustainable building. **The City of Amsterdam has embraced Kate Raworth's 'Doughnut' model as a guiding principle for its economic and social policies.** It is one of the very first in the world to do so, together with Philadelphia and Portland in the US.

Still, for many people in the Netherlands, sustainability is perceived as something that is expensive and difficult. A sustainable lifestyle only seems to be available to a certain group of people. **Therefore accessibility to sustainability must be seen as a social as well as an economic issue;** something the Doughnut model also takes into account.



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POLICY ON WASTE AND RAW MATERIALS

As part of its circular strategy, Amsterdam wants to become a **waste-free city** with clean streets and squares. The municipality is taking a number of measures to achieve this, including a better separation of waste for the maximum reuse of raw materials, and the prevention of waste, so that as little as possible is created. To highlight a few measures:

- **Plastic waste:** From 2021 Amsterdammers no longer have to separate plastic waste. This will be done mechanically at the city's waste processing facilities.
- **Organic waste:** After years of lagging behind, the city is increasing its efforts to collect food and garden waste. It is now looking at implementing different approaches per neighbourhood and in collaboration with residents.
- **Textile waste:** The municipality is planning to place more containers to collect old clothing and shoes around the city. In addition, the city is looking for ways to collect 'indoor' textiles (like working clothes) in collaboration with various parties.

Of course, to achieve a waste-free Amsterdam, governmental measures are not enough. It also requires the active participation of residents: starting with a change in people's attitudes to waste, so that they see it not as something worthless, but as a valuable resource. Unfortunately, the downside of having such a seamless waste processing system, is that people have no idea how much is being produced, let alone what happens with it. **The problem here is that there doesn't seem to be a problem.** How can we make waste more urgent, by making it more visible?





SALE

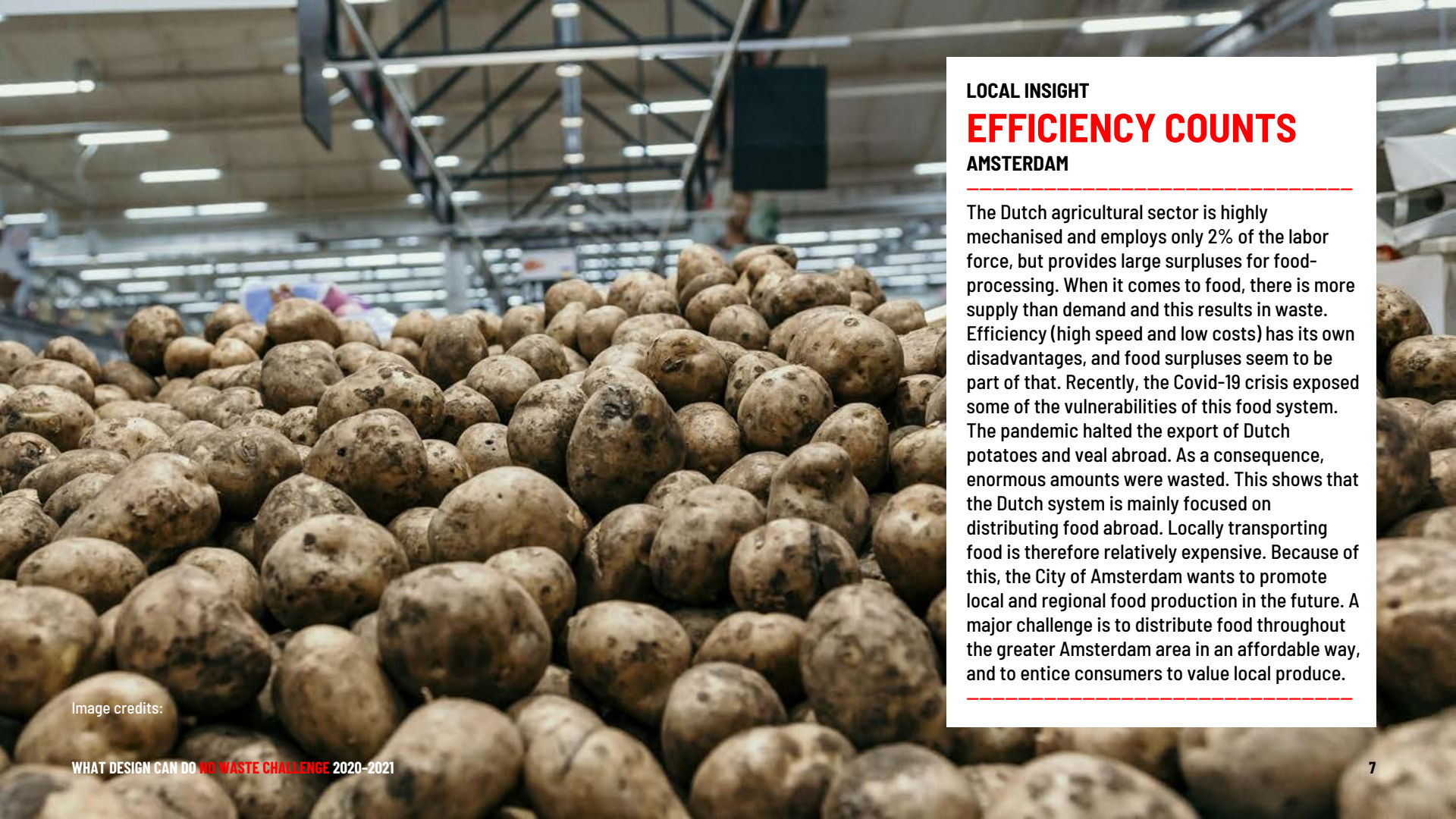
LOCAL INSIGHT

THRIFTY PEOPLE

AMSTERDAM

The Dutch are known to be thrifty people (or stingy, depending on your perspective). One thing is for sure: they love their sales and discounts, and often see saving money as more rewarding than spending it. Unfortunately, this also means that they want to pay as little as possible for goods, which perpetuates the production, distribution and marketing of cheap products. Also, Dutch consumers have the dubious honor of being the ones that send the most online purchases back. Here, the fashion industry takes the cake for having the highest number of returns. To make matters worse, the majority of these returned items are usually burned instead of resold.

At the same time, sustainable goods are perceived as expensive (which is true in most cases) and therefore are considered inaccessible to people with a lower income. And yet, durable goods, and buying less in general, actually fits the frugal nature of the Dutch very well.



LOCAL INSIGHT

EFFICIENCY COUNTS

AMSTERDAM

The Dutch agricultural sector is highly mechanised and employs only 2% of the labor force, but provides large surpluses for food-processing. When it comes to food, there is more supply than demand and this results in waste. Efficiency (high speed and low costs) has its own disadvantages, and food surpluses seem to be part of that. Recently, the Covid-19 crisis exposed some of the vulnerabilities of this food system. The pandemic halted the export of Dutch potatoes and veal abroad. As a consequence, enormous amounts were wasted. This shows that the Dutch system is mainly focused on distributing food abroad. Locally transporting food is therefore relatively expensive. Because of this, the City of Amsterdam wants to promote local and regional food production in the future. A major challenge is to distribute food throughout the greater Amsterdam area in an affordable way, and to entice consumers to value local produce.

Image credits:



**WHERE DESIGN CAN
MAKE A DIFFERENCE
IN AMSTERDAM**

OPPORTUNITIES FOR DESIGN AMSTERDAM AREA



How can we use fewer natural resources and consume more mindfully?

We have highlighted some key opportunities, but there are plenty more! Refer to the global brief for further inspiration.

1. CHOOSING QUALITY OVER PRICE

Dutch culture is economical, sometimes to a fault. They want to pay as little as possible for goods, which perpetuates the production, distribution and marketing of cheap products. **How can we design campaigns and programmes that encourage Amsterdammers to choose quality and durability over price?** For instance by strengthening the emotional value of products, raising awareness for the concept of 'true pricing,' or telling the stories behind both cheap and quality goods.

2. SUSTAINABILITY FOR ALL

Sustainable goods are perceived as expensive, and therefore are often passed over by people with a lower income. Yet, durable goods, and buying less in general, actually fits the frugal nature of the Dutch very well. **How can we design products and services to make a sustainable lifestyle accessible and attractive to every Amsterdammer?**

3. BETTER MATCH SUPPLY AND DEMAND

Efficiency (with a focus on high speed and low cost) is the focus in food production, and in other industries such as online fashion. The result is large surpluses that go to waste. **How can we design programmes and services to better match supply and demand for food and fashion?** And by doing so, help to minimize overproduction?

OPPORTUNITIES FOR DESIGN

AMSTERDAM AREA



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4 SHORT FOOD CHAINS

The City of Amsterdam wants to stimulate short food chains that provide a robust sustainable food system. **How can we design campaigns and services to persuade Amsterdammers to consume more locally produced food? And how can we entice more local production and distribution of food?** For instance, by branding local food differently.

5. ONLINE SHOPPING FRENZY

Because we don't see the consequences of our online shopping behaviour, we almost always underestimate them. **How can we create campaigns, interventions and services to minimize the excessive returning behaviour of online consumers in the the Netherlands?** And by doing so, prevent the unnecessary transportation and destruction of returned goods?



KOPEN LENEN INBRENGEN

VINTAGE, SECOND HAND
ECO LABELS & UPCOMING DESIGNERS

Image credits: LENA Fashion Library

WHAT DESIGN CAN DO **NO WASTE CHALLENGE 2020-2021**

CASE

LENA

SERVICE DESIGN

[LENA](#) is a fashion library in Amsterdam, which offers its members the possibility to rent clothes, shoes and accessories instead of buying them. Concerned about the polluting fashion industry and how fast fashion creates enormous amounts of waste, the founders hope to offer an alternative to throw-away fashion.



CASE

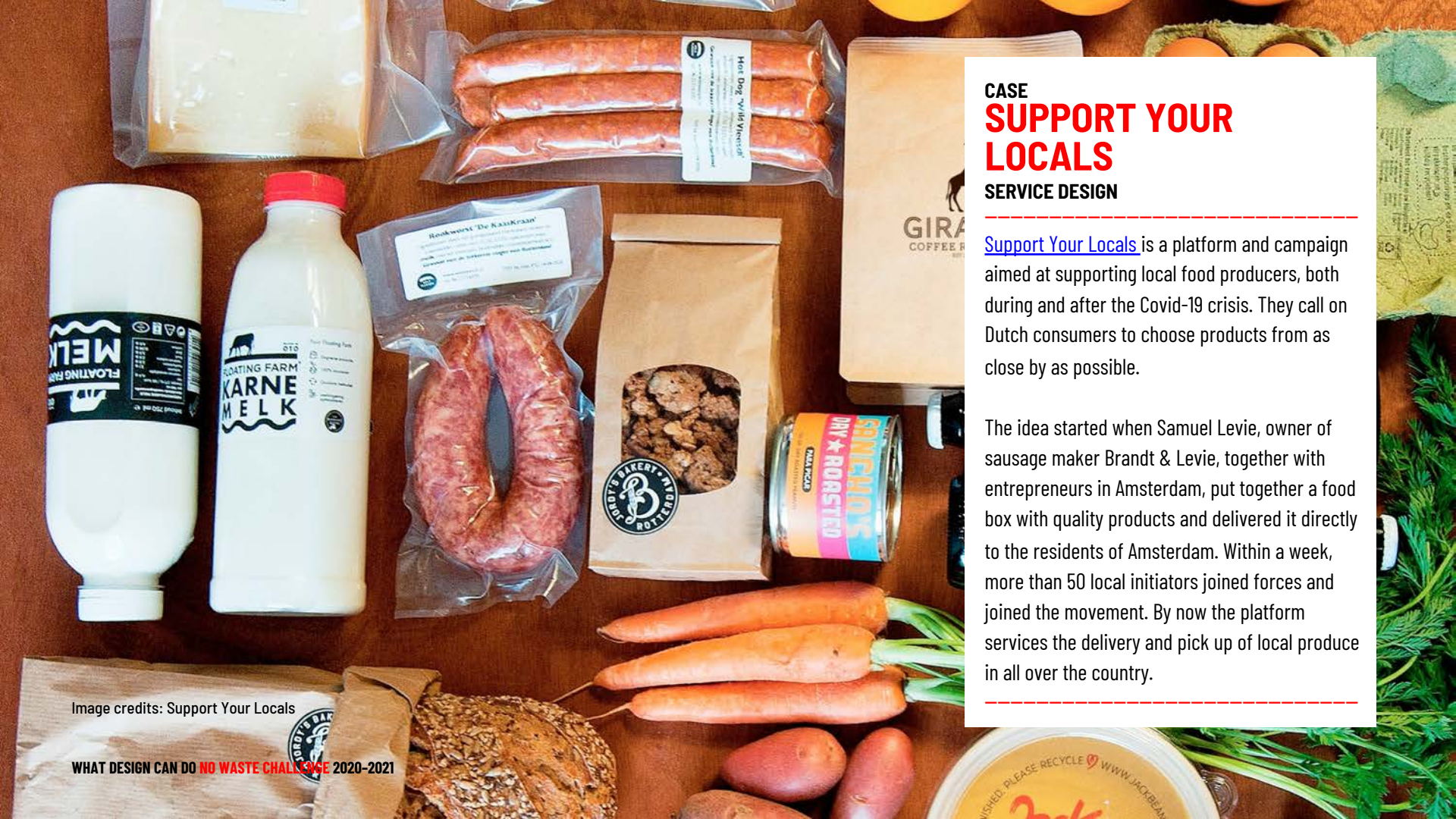
REPAIR CAFE

SERVICE DESIGN

Repair Cafés are free meeting places and they're all about repairing things (together). In the place where a Repair Café is located, you'll find tools and materials to help you make any repairs you need. On clothes, furniture, electrical appliances, bicycles, crockery, appliances, toys – you name it. You'll also find expert volunteers, with repair skills in all kinds of fields. Visitors bring their broken items from home, and work on them together with specialists and peers from the community. The first Repair Café opened in Amsterdam in 2009, and now there are more than 2,000 locations in 35 countries.

[Learn More →](#)

Image credits:



CASE **SUPPORT YOUR LOCALS** SERVICE DESIGN

[Support Your Locals](#) is a platform and campaign aimed at supporting local food producers, both during and after the Covid-19 crisis. They call on Dutch consumers to choose products from as close by as possible.

The idea started when Samuel Levie, owner of sausage maker Brandt & Levie, together with entrepreneurs in Amsterdam, put together a food box with quality products and delivered it directly to the residents of Amsterdam. Within a week, more than 50 local initiators joined forces and joined the movement. By now the platform services the delivery and pick up of local produce in all over the country.

Image credits: Support Your Locals

WHAT DESIGN CAN DO **NO WASTE CHALLENGE** 2020-2021

OPPORTUNITIES FOR DESIGN AMSTERDAM AREA



How can we make products and materials that are kept in use or regenerate natural systems?

We have highlighted some key opportunities, but there are plenty more! Refer to the global brief for further inspiration.

1. DESIGN TO RECYCLE

Most products are not designed with recycling in mind, which makes it hard or even impossible to extract materials that can be used to manufacture new products. This applies to electronic devices, plastics, textiles, furniture and many other consumer goods. **How can we design products in a way that makes the recovery and recycling of materials easier?**

2. INGRAIN A CULTURE OF REPAIR

Modern products are not made to be repaired. They are too cheap, too complex or too closed, which makes them hard to disassemble and replace parts. This applies especially to electric and electronic devices, but also to clothing and furniture. **How can we design products that are simpler and easier to repair? And how can we design programmes and services that encourage consumers and (small) businesses to take pride in repairing products?**

3. LOCAL PRODUCTION OF TEXTILES

Amsterdam is widely considered as the 'jeans capital of the world', with renowned brands like G-Star, Denham, Kuyichi, Mud Jeans and Denim City all based in the city. Combining this heritage with its circular ambitions, the Metropolitan Area of Amsterdam sees many opportunities to redesign the textile chain. **How can we stimulate the local design and production of textiles and clothing?** Consider the social aspect too – for example, by retraining people who lost their jobs due to the Covid-19 crisis.

OPPORTUNITIES FOR DESIGN AMSTERDAM AREA



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4. TAKE ON SINGLE-USE PLASTICS

From 3 July 2021 the EU is banning single use plastics such as straws, cutlery, cups and plates. This asks for rapid innovation and a shift in thinking about disposable products. **How can we design sustainable or biodegradable alternatives for single-use plastics? And change attitudes towards the use of disposable items all together?**

5. TAKE ON (PLASTIC) PACKAGING

Plastic packaging is harder to ban as it's interwoven with nearly everything we buy. How can we reduce the use of plastic packaging? For instance by **designing programmes and campaigns to make consumers more aware of the impact of plastic packaging**. Or by helping **brands to take responsibility for their packaging waste**. And of course: **how can we design more sustainable packaging systems to replace the current polluting ones?** Also consider forms of unnecessary packaging, like those used in the transportation of goods.



CASE

STONECYCLING

MATERIAL DESIGN

[StoneCycling](#) transforms waste into unique building materials. They do so by experimenting with cutting-edge new technologies, creating different types of building materials and systems that can be disassembled at the end of their lifespan.

StoneCycling was conceived at the Design Academy in Eindhoven, by Tom van Soest. He focused on upcycling waste he found in vacant buildings awaiting demolition. Tom began grinding, crushing, and mixing this waste in his homemade industrial blender. After many, many trials he found a way to create new materials that were both resilient and appealing. By now you can find his WasteBasedBricks® all over the world in the façades, wall cladding and flooring of high-end, sustainable architectural projects.

Image credits: Stonecycling



Image credits: Fairphone

WHAT DESIGN CAN DO **NO WASTE CHALLENGE** 2020-2021

CASE

FAIRPHONE

PRODUCT DESIGN

Fairphone is a social enterprise company which aims to develop smartphones that are designed and produced with minimal environmental impact. Unlike so many other electronic companies, their products are designed to last, thanks to their world-leading modular and repairable design. The company was founded by Dutch designer Bas van Abel in 2013 and has recently launched their third model. The [Fairphone](#) is sold across Europe and is supported by all the major telecom companies.



CASE

UNPLASTIC

PRODUCT DESIGN

[UnPlastic](#), developed by Rotterdam-based company Outlander Materials, offers a compostable alternative to single-use plastic packaging. It is made from food industry sources, by-products and brewery waste. Because of this, it never breaks down into micro- or nano-plastics and doesn't release toxins into the environment. What makes UnPlastic a genuine alternative and fit for commercial use, are its properties: flexible, lightweight, transparent, colourless and odourless. It also provides an excellent barrier against fats, oils and oxygen, helping to preserve food products.

Image credits: Outlander Materials



CASE

EVOLVE

PRODUCT DESIGN

In the Netherlands alone, around 1.5 million mattresses are discarded every year. Auping, a Dutch manufacturer of beds and mattresses, has created [Evolve](#), the world's first circular mattress. It is made only of steel and polyester. All materials can be used again and again for a new mattress. With this, Auping closes the cycle and contributes to a world in which nothing is wasted, but in which everything is reused for the next generation.

The City of Amsterdam is also working on programmes and facilities to collect and recycle mattresses.

Image credits: Auping

OPPORTUNITIES FOR DESIGN AMSTERDAM AREA



How can we dispose of goods more responsibly and treat waste as a resource?

We have highlighted some key opportunities, but there are plenty more! Refer to the global brief for further inspiration.

1. COLLECTING PLASTIC WASTE

From 2021, Amsterdammers no longer have to separate their plastic waste at home. Mechanical separation of plastic in the factory, so-called post-separation, now works just as well. This is of course a major innovation, yet it does not prevent plastic litter from ending up in the streets, parks, canals and eventually in the oceans. **How can we design programmes and interventions that engage citizens in collecting and processing plastic litter?**

2. COLLECTING TEXTILE WASTE

The municipality is planning to place more containers to collect old clothing and shoes. However, due to the low quality of the disposed textiles, the market for export to developing countries is stagnating. **How can we design programmes and services that help separate textiles that need to be shredded from those that can be given a second life?**

3. COLLECTING ORGANIC WASTE

The City of Amsterdam is finally taking action on organic waste, and planning to investigate in which neighbourhoods and in what ways organic waste can be collected separately. This is a significant step, as food and garden waste can be turned into good compost, energy and bio materials. **How can we raise awareness for the potential of organic waste? Can we involve residents in the co-design of new ways to collect and process this form of waste?**

OPPORTUNITIES FOR DESIGN

AMSTERDAM AREA



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4. TAKING ON RESIDUAL WASTE

The City of Amsterdam has outlined a clear policy for collecting and processing different waste streams. However, residual waste - which is normally disposed of in the grey wheelie bin or garbage bag, remains a challenge. This includes, for example: diapers, cat litter and coffee cups. **How can we design programmes and services to reduce the amount of residual waste?** The municipality is eager to find innovative solutions for this problem.

5. TAKING ON BULKY WASTE

Too often, Amsterdammers leave their waste next to their designated underground containers. Not only does this pollute the street, but it also makes it harder to empty the containers. **How can we co-design spatial interventions and programmes to give people more ownership of their streets and neighbourhoods so that they dump less waste?**

6. GETTING MORE OUT OF WASTE COLLECTION CENTRES

In the coming years, the municipality plans to expand the function of the city's Waste Collection Centres, focusing on reuse. For instance, by making room at new recycling points for a thrift store, repair café, second-hand hardware store, and so on. **How can we build on these plans and design more (or better) services to offer citizens maximum value (for money)?**



CASE

CONTAINER GARDENS

SOCIAL & SPATIAL DESIGN

In the summer of 2020, miniature gardens were placed around underground waste containers in Amsterdam. This was done to prevent people from dumping garbage and bulky waste next to the containers. The experiment consists of seventeen of such container gardens in different city districts. After a trial period, the municipality will decide whether to continue and expand this intervention.

In any case the timing is perfect: Since the Covid-19 crisis, more Amsterdammers have been working from home, cleaning up and throwing things out. This experiment builds on similar successful initiatives by residents in different neighbourhoods and is a perfect example of community-based innovation.

Image credits: Jakob van Vliet for Parool



Image credits: The Plastic Whale Foundation

WHAT DESIGN CAN DO **NO WASTE CHALLENGE** 2020-2021

CASE

PLASTIC WHALE

SOCIAL DESIGN & PRODUCT DESIGN

[The Plastic Whale Foundation](#), founded in 2011, strives to keep Amsterdam's waterways free of plastic. The organisation takes tourists, school children and businesses on plastic fishing trips in boats made from plastic fished out of the city's famous canals. In turn, the plastic they fish out of the water is used to make new boats and circular furniture. So far the Amsterdam organisation has a fleet of ten boats and now also offers tours in the port city of Rotterdam.

The Plastic Whale Foundation wants to have an international impact and has forged a partnership with SweepSmart in Bangalore, India, which collects and recycles waste to create local jobs with decent pay and conditions and reduce plastic waste at landfill sites.



CASE

HACKED BY

FASHION DESIGN

Hacked By___ uses residual materials, unsold and over-produced garments from the fashion industry as resource.

Together with the brand's network of social production partners, the collection is locally produced in the Netherlands in a fair and responsible manner.

[Learn more ->](#)

Image credits: Hacked By

REFERENCES/LEARN MORE

SOURCES AND FURTHER RESEARCH

Here are the main sources used for creating this briefing:

Policy and ambitions of the City of Amsterdam

- [Circulair strategy](#) of the City of Amsterdam.
- [Concept uitvoeringsprogramma afval en grondstoffen](#) City of Amsterdam

Food productions in The Netherlands

- Article [Naar een kringlooplandbouw](#) in Groene Amsterdammer about Dutch food industry.
- Podcast [Het Voedsel Kabinet](#) about food in The Netherlands

Returning online purchases

VPRO Tegenlicht about what happens when products are returned after online shopping: [Op volle retouren](#).

Fast Fashion in The Netherlands

[Fast Fashion Onderzoek](#) commissioned by Het Ministerie van Infrastructuur en Waterstaat.

Dutch plastic waste

Article [Plasticafval: hoe een Nederlands dropzakje kon eindigen in een Turkse berm](#) in NRC about how plastic waste from The Netherlands ends up in Turkey