

# Product lifetime extension - Real-life Case Studies

GERAÇÃO  
ECOTRÔNICOS



**Business strategy:** Repair and recovery **Initiative:** Items received from user's disposal or need for repair are fully recovered and returned to the market **Social relevance:** Capacitate young people in vulnerable situations and introduce them to the market / Improve waste treatment infrastructure, enabling people to deal with e-waste in proper ways **Results:** The strategy generates an average amount of 1 ton of materials per month, that can be used as raw material or be recycled **Barriers:** Irregular demand from consumers and their preference for new products / Regulation and documentation issues / Limited clientele (lack of efficient marketing service)

**Business strategy:** Remanufacturing **Initiative:** Improve products and optimizes their efficiency by repairing or replacing components to offer same-as-new products and satisfy the customers' needs **Innovative business model:** Pump system focused on the efficient use of resources and the waste reduction of materials that are still in good condition from mining industry / Embbed circular economy principles in their strategy and design thinking **Results:** Remanufacturing reduces the emissions of GHG by 60%, avoids 70% of waste generation and lowers costs of production by 30%, compared to manufacturing **Barriers:** Acceptance of a new business model that is still not yet well known and competition with global and bigger companies / Requires reverse logistics and remanufacturing infrastructure



NEPTUNO  
PUMPS



RETALHAR



**Business strategy:** Upcycling **Initiative:** Receive uniforms from large companies and offer them textile recycling and upcycling, providing raw material to produce new items **Social impact business:** Avoid waste generation by transforming the fabric into donations to charity entities and people in vulnerable situations / Employ seamstresses from cooperatives **Results:** 63,237 kg of fabric transformed, equivalent to 160,000 uniforms, 473 m³ not occupied in landfills and 929.581 tons of CO<sub>2</sub>eq avoided emissions **Barriers:** Lack of legal incentives to adequate waste disposal from textile industry / Sometimes the waste amount exceed their transformation capacity

**Business strategy:** Upcycling **Initiative:** Combine fine design with upcycling to produce furniture at lower environmental costs and in line with sustainable production and consumption **Business commercial strategy:** Being based in Germany, the company is able to access a market that is more accustomed with finding alternative ways to solve the waste generation problem, since Germany is a leader when it comes to re-using waste **Results:** 3,000 pieces sold in 8 years and it helped to increase awareness of upcycling amongst people both in Germany and Senegal **Barriers:** The distance between Senegal and Germany / Lack of awareness about upcycling in Senegal and government encouragement



SWANE-  
DESIGN



OLX



**Business strategy:** Second hand market **Initiative:** Online second-hand marketplace where selling products meets the need to earn extra money and also represents savings to those who need to purchase more affordable items **Business model:** Enable people to sell products they no longer need and to purchase second-hand items, allowing savings and re-using products **Helps to build a more collaborative society:** It provides the opportunity to raise extra money for those who sell the products, while generates savings for those who can purchase more affordable products **Results:** In Brazil, 5.7 million tons of GHG were avoided in 2017 due to this type of trade, equivalent to emissions of 22 million sofas production **Barriers:** Emotional attachment of consumers to their goods / The mainstream second-hand market in Brazil is still restricted to a few, often more expensive items

**Business strategy:** Remanufacturing **Initiative:** Exchange model: when a product needs to be replaced, a dealer is called to retrieve the non-functional item and replace it by a remanufactured product **Innovative business model:** Pioneerism in an innovative and attractive business model in financial and practical ways / Communicate how business models benefits consumers and provide solutions that lead to more sustainable production and consumption models **Results:** Financial gain for consumers due to its lower operation costs for providing same-as-new performance, and offer more repairing options **Barriers:** Lack of legislation that recognizes remanufactured products (especially in developing regions)



CATERPILLAR



REFAZENDA



**Business strategy:** Upcycling **Initiative:** Through upcycling, the company adds value to products by using patchworks from fabric leftovers as raw material for the design of new items **Social impact business:** Work with traditional lacemakers community and develop local economies / Higher durability than the average fashion market, creating emotional attachment to the pieces **Results:** Received the 'Zero Waste Award', for reducing the amount of solid waste in their activities to zero, due to patchworks' reuse and upcycling **Barriers:** Brand with high value on consumers' perception, but lower sales than expected

These cases form part of the project 'Product Lifetime Extension'. The full case studies and background material are available on the [Product Lifetime Extension Hub](#). The aim is to inspire and encourage organisations to shift to more circular models by improving their businesses towards extending a product's lifetime.



Conscious consumption  
for a sustainable future

