

Area of interest Children’s clothing exchange.

About the company Armadio Verde [Green Wardrobe], the first website for the exchange and purchase of clothes for 0-16 year-olds, was founded in 2011 and is an ideal example of the philosophy of the Sharing Economy. The company’s activities are based around a platform for trading in used children’s clothing, a sector in which demand is constant due to the ever changing requirements of growing children. Today Armadio Verde is a rapidly growing company backed by leading investment funds and headed by a team of professionals.

Relevant business model

Sustainable inputs	End of life	Life Extension	Sharing platforms	Product as service
--------------------	-------------	----------------	--------------------------	--------------------

Business requirement and proposed solution Armadio Verde is one of the first companies in Italy in the clothing industry to have focussed its business on a model for sharing and exchanging clothes, in line with one of the mainstays of the circular economy. In the children’s clothing sector consumers pay great attention when purchasing items, especially when it comes to factors such as the choice of the material. The cost of buying clothes for growing children can significantly impact on families’ finances. Garments are sometimes worn just a few times before the child grows out of them.

Selected solution and details Armadio Verde has managed to turn a problem into a business opportunity with benefits for the environment and families’ finances. The model is very simple, it is based on the principle of a clothes exchange, to which anyone can send clothes for 0 to 16 year-olds that are no longer worn. The clothes must be in good condition and washed. At this point, Armadio Verde’s specialised staff check and verify the condition of the garments, assign labels showing information about the brand, size and material, then photograph them one by one before finally assigning each approved item ‘star credits’ (the ad hoc currency used on the website). Having obtained the star credits it is then possible to purchase garments at a cost of five euros for each item. The ‘new’ piece of clothing is chosen online on the Armadio Verde website

from a catalogue that for 2017 contains about 65.000 different items. Furthermore, Armadio Verde donates the clothes that for various reasons cannot be shared on the platform, to a non-profit association that is certified to distribute them to disadvantaged children. There are an estimated 200 such items each day.

The Armadio Verde model is growing strongly, demonstrating the country's interest in the sharing model: 9,000 pieces of clothing were exchanged on the platform in 2015 and it is estimated that this number will reach 220,000 in 2019.

Main benefits

The question of what happens to used clothing is a a topic of international debate. It is estimated that in Europe only 20% of all clothing is recovered. This means that the remaining 80% ends up as landfill or fuel to generate energy. International research and numerous studies have demonstrated that often clothing items are worn only once or twice and in many cases we dispose of clothes that are still in excellent condition only because they are no longer fashionable. In this regard, the activity of Armadio Verde is an excellent expression of the concept of the circular economy as it extends the life cycle of children's clothes, thus reducing the production of waste. The environmental benefits are mainly based on the amount of material resources saved:

- 1.8 tonnes in 2015
- 5.3 tonnes in 2016
- 10 tonnes in 2017
- an estimated 20.5 tonnes in 2018
- an estimated 44 tonnes in 2019

The data concerning the savings of material resources should also take into account the fact that the demand for the exchange of children's clothes is mainly geared towards garments made of cotton which on average account for 70% of the Armadio Verde offer. The production of cotton material, both its cultivation and processing, has a notable environmental impact, therefore, reducing the need to produce cotton offers further benefits for the environment. The remaining 30% of the Armadio Verde garments are made of polyester (10%), nylon (4%), velvet (3%), wool (2%) and other materials such as viscose, chenille, cashmere, lycra, linen, silk, etc. Furthermore, clothes that cannot be considered for exchange due to minor defects but which are still wearable, are donated to charity. Each day 300 items of clothing are donated and in 2017 a total volume of 21.9 tonnes of clothes were distributed in this way, thus further reducing the impact on the environment.

The Enel logo is displayed in white lowercase letters on a green background that transitions from a dark green on the left to a light green on the right.

armadioverde

Potential for roll out and development

The Armadio Verde project is a replicable model and, more importantly, it can be extended to other types of garments such as those for adults. On an international level there are already commercial companies that facilitate the sharing of jeans, shoes and other types of clothes.

Information on the Circularity Index.

We have developed a calculation model, called **CirculAbility Model** ©, which returns a synthetic index, a value indicating the degree of circularity of a certain product/service, called circularity index or Circular Index (CI).

In this case we considered the life cycle of a garment from production to disposal. The data shown refer to a pair of jeans and originate from sector articles on the internet (if not directly supplied by Armadio Verde). Armadio Verde affects exclusively the extension of the product's useful life, and one year was considered for BAU (business as usual – children clothes that are probably not worn for two seasons due to the child's growth), a 2nd year for reuse by Armadio Verde customers, 3rd year for donation by Armadio Verde to a non-profit organisation. At the end of the third year, it is assumed that the garment is destined to be rejected. Considering these hypotheses, the circularity of garments handled by Armadio Verde ranges from 0% (used for a season and then destined to waste) to over 33%.

[Scopri di più sul CirculAbility Model](#) ©