

## **Executive Summary**

Atmos was a concept created camping and outdoor supply brand, based off of similar brands such as Mountain Equipment Co-op. As the brand values sustainability and a love for nature, the packaging created had to consider all kinds of sustainable production. This includes the use of Kraft paper, removing plastic from the packaging, and using vegetable based inks. Overall, the project was an exploration of the variety of sustainable methods that are available for packaging.

## **About**

Across the world, the topic of sustainability is becoming more and more prominent. Ever since the Industrial Revolution, beginning the rise of machinery and greenhouse gases, the average temperature of the globe has been slowly increasing. This climate change can lead to changes in weather, cause flooding, and “turn some currently fertile areas into deserts” (Keating, 2018). Plastic pollution, as well as other trash pileups have also come into the public eye in a big way recently, with the banning of plastic straws and plastic shopping bags in many areas of the country. This plastic can end up in our oceans, breaking down and becoming smaller than the eye can see. These are called microplastics, and “researchers have found about 1.9 million bits of microplastic in one square mile” (Campbell, 2019). In response to these changes in the environment, many brands are changing their business practices, switching to renewable energy sources, changing methods of production and adjusting their packaging to become more sustainable. While often this can be labelled as greenwashing, which is marketing products to seem sustainable when they are not, there is truly a rise in smaller brands

creating only sustainable products. Some larger brands are getting on board as well, but it can be difficult for large, established corporations to suddenly change everything about the way they run their businesses for the good of the planet.

With this concept of eco-friendliness, love for nature and a passion for the outdoors, the concept of Atmos Outdoor Supply was created. Atmos is a camping and outdoor supply brand modelled off the business model of companies such as Mountain Equipment Co-op (MEC) and Sail. Like these two companies, one of the core brand values of Atmos was to be sustainable. As MEC states, “We work to make and market our products sustainably. We strive to build and operate our facilities with minimum ecological impact” (Mountain Equipment Co-operative, 2019). Taking this into consideration, the creation of Atmos’ brand packaging could be made with the environment first and foremost in mind.

Similar to MEC and Sail, Atmos was meant to have its own in-house brand of products in addition to the products sold by other brands. The concept for the entire packaging line was created through three packaging examples, seen below:

## Atmos Socks



Atmos Clothing Tags



Box for Atmos Headlamp



## **Challenges**

Most packaging today, even when it comes to mostly sustainable brands such as MEC, contains large amounts of paper, plastic and harmful chemicals. Much of this packaging is nearly impossible to separate and recycle properly. This results in much more landfill waste than intended. Industry standard practices do not consider the environmental impact they are having by using virgin paper and petroleum-based inks. Extensive research had to be done to find the best, cheapest, most renewable processes for creating print materials. While they are out there, finding the perfect materials to use was an initial challenge, especially as the materials used could possibly influence the design outcome.

## **Successes**

The first ingredient for making Atmos' packaging as sustainable as possible, Kraft paper, also influenced the overall design direction of the packaging. Kraft paper is made similarly to other papers, as it too is made from converting wood into wood pulp, and then chemically processing it into paper. What makes Kraft paper better than standard paper products, however, is that it can use any type of wood. This includes bamboo, which grows very quickly and thus reproduces faster than other woody plants. One of the most important factors that makes Kraft paper so sustainable is that "[...] nearly all the chemicals used in the process are recovered and reused, it is a self-sustaining method. The main byproducts which are not recycled are turpentine and tall oil, which are used for other manufacturing purposes" (Pochini, 2018). Luckily, Kraft paper is actually cheaper to produce, is light, and has a naturally rustic look. This texture and



colour were perfect for Atmos' packaging, as the natural, down-to-earth look was both sustainable and visually appealing. Existing brands such as Unwrapped Life package entirely with Kraft paper, even down to the tape sealing their boxes shut. This is done to cut down on plastic waste, which as stated before can end up in oceans and threaten ocean wildlife. Atmos' packaging is also intended to be plastic free. Any openings in the packaging are left uncovered, and the product is secured from the inside. This provides a clear view into the box without the need for plastic.

Another sustainable method that Atmos would employ for their packaging would be in the inks that would be used. Many inks used in printing processes are made out of volatile organic compounds (VOCs), which are composed of petroleum. Unbeknownst to many people, the chemicals used in the production and application of these inks "evaporate at normal indoor air temperatures and their greenhouse effect contributes to global warming. The European Commission reports that offset printing consumes around three million tons of hydrocarbon-based inks and chemicals every year" (Bamboolnk, 2019). Furthermore, the petroleum used in some inks is a non-renewable substance. A good alternative to these petroleum based inks is actually none other than vegetable oils, which grow quickly and are renewable. More than just being better for the environment, the vapours from vegetable bases inks are far better than VOCs for lung health. In fact, "Vegetable-based inks are preferred for food packaging or anything that might come in contact with food" (Bamboolnk, 2019).

The processes that would be used for creating Atmos' packaging are nothing new. These are methods that are already well established amongst those who use sustainable production in their packaging, and are methods that should truthfully be

implemented whenever possible. The environment is not improving, and we as designers need to be careful about the physical designs we create. Every little bit counts, and one by one we can change the industry standards to those that support the environment.

## Works Cited

- Bambooink. (2019, March 03). Eco-friendly Ink: Vegetable Based and VOC Free | Printing. Retrieved April 7, 2019, from <https://bambooink.com/printing/eco-friendly-ink/>
- Campbell J. Plastic pollution. Salem Press Encyclopedia of Science. 2019. <https://search.ebscohost.com/login.aspx?direct=true&db=ers&AN=87323342&site=eds-live&scope=site>. Accessed April 16, 2019.
- Keating, C. (2018). Global Warming. Salem Press Encyclopedia of Science. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&db=ers&AN=88953012&site=eds-live&scope=site>
- McKenzie, H. (2019, March 14). Eco-friendly Packaging | Thoughts from an E-commerce Company Passionate about Zero-Waste. Retrieved from <https://unwrappedlife.com/blogs/blog/eco-friendly-packaging>
- Mountain Equipment Co-operative. (2019). MEC Mission and values. Retrieved April 16, 2019, from <https://www.mec.ca/en/explore/mission-and-values>
- Pochini, K. (2018, August 10). What is Kraft Paper and What Makes it so Popular? Retrieved April 7, 2019, from <https://www.jampaper.com/blog/what-is-kraft-paper/>