

# Stallar Skate & Snow



A small business'  
involvement in healthier  
environment products  
and practices.

**White Paper**



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## FOREWORD

Skateboarding and snowboarding are more than a sport - they have evolved to a way of life, a journey of understanding oneself, of conquering fears, and developing mastery. Progression against the anti-establishment catapulted the industry into the Olympics and yearly sports network competitions. Millions of kids and young adults start every year giving youth to the industry. Throughout the 1980's, skateboards changed shape and materials until settling on the tried and true 7 ply Canadian maple. Due to overseas production deck prices have dropped dramatically. Small brands can now design and produce quality decks to compete with large, established brands. Snowboards continue to evolve with better materials, designs and use. Their construction helps beginners not catch an edge, experts traverse new terrain and athletes compete better.

As riders push the limits of the sport, brands must push the industry to better efficiency, sustainable materials, and education around climate change. As Lake Tahoe endures a late start to the 2011/2012 winter season the inability to snowboard stems from a larger problem. The action sports community has the pull to change the industry and become leaders in using sustainable wood, non-toxic and biodegradable glue, recycled steel and better product packaging.

Becoming an advocate for healthy change keeps the industry alive. If a small brand can create sustainability and viability in the industry there is no excuse for other brands to continue plunging the Earth's resources. This White Paper will outline how Stallar Skate & Snow can separate itself from the competition in board production. As the company continues to evolve this White Paper will become a living document to maintaining social responsibility.

While Stallar Skate & Snow has always tried to be socially responsible by offering affordable products, sustainable production and community involvement, producing the ideas outlined in this paper will truly set the company, and its mission, apart.



Stallar Lufrano  
Owner of Stallar Skate & Snow



# EXECUTIVE SUMMARY

## Social Responsibility is Vital to Stallar Skate & Snow

Socially responsible actions are not new to Stallar Skate & Snow. While the company is small, it aims to take on big projects throughout the Carson City, Reno and Lake Tahoe area. The company's founding goal was to produce products at a fair so any child or teenager could participate. With the extreme price of lift tickets, resort food, and fuel; equipment cost should not be the only reason a person cannot get on the hill or to the skate park. Our goal is to bring the price of equipment back to a reasonable level and help those who couldn't otherwise afford it.

Other contributions include skate and snowboard donations to bring in participants for fundraisers such as *Sierra Nevada Journeys* and *For Pet's Sake*. Stallar Skate & Snow products are auctioned off to fund those various projects. I also participated in an environmental and economic development roundtable in South Lake Tahoe. My enthusiasm was well received and I was asked to speak about stewardship at the Lake Tahoe Summit with various California and Nevada government officials.



While I feel there is still much more to do, these are big contributions for a small, one-person company. Many businesses run on a win or lose basis. Our philosophy is that we all win or we all lose; life, business and Earth are all connected.

## Needs and Opportunities

Many problems plague the action sports community. Rapidly changing climate such as wind, intense snow fall or heat, and lack of precipitation can decrease participation in all sports. Throughout the industry there has been a lax attitude in how products are made and discarded. The snow and skate industry will be dramatically affected if change is not made. Regardless of where the past blame lies there is a need to enact the revolutionary mindset that developed the sports in the first place.

The United States economy will prosper if we keep jobs in America and decrease overseas operations. With the unemployment rate hovering around 9% the need to employ willing and able Americans is top priority. With changing operations to acquire raw materials from U.S. factories and manufacturing products domestically there is a greater assurance that products are made fairly and stimulate the dire economic situation. The current economic state has also led to children not being able to participate in certain activities due to cost. This hurts our local economy as parents are restructuring vacations and low-income children are at a greater participation disadvantage.

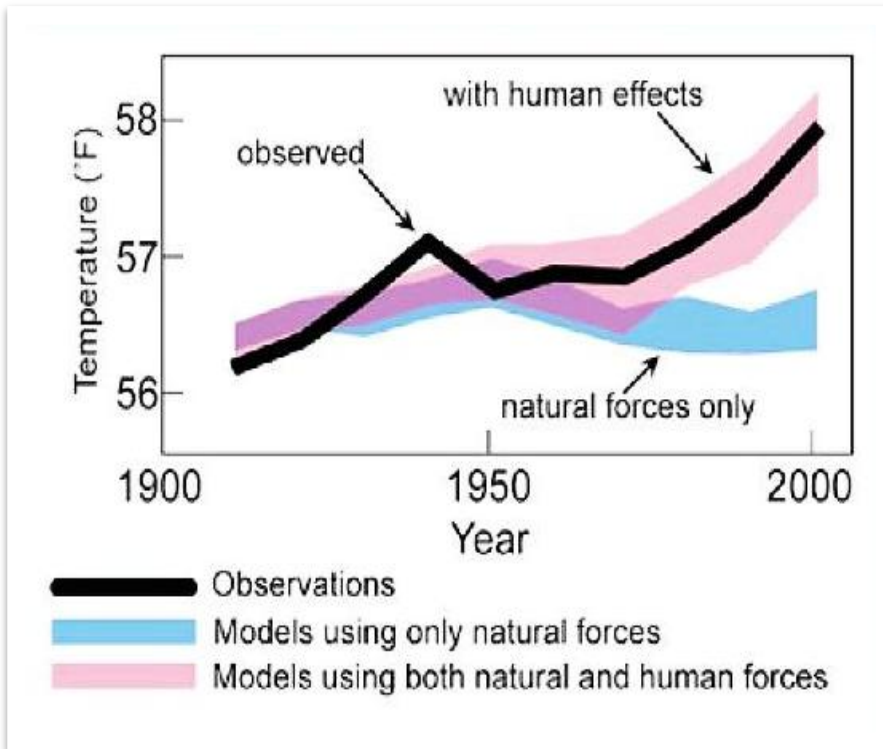


Making sustainable snowboard products is difficult. Not only do they need to function, they need to look good. In fact, the skate and snowboard industry has increased interest to the point that fashion, who's who, and competitions have taken over the deeper meaning of the sport. This means more people want to participate at a significantly reduced cost including shipping and environmental toll. Due to severe weather conditions we need to ask ourselves, "should we engage in making our world the best planet, or do we let conditions affect our ability to skate and snowboard anywhere in the world?" We will not be able to pass on to our children our love of sports if we neglect to take care of our environmental contribution. With over eight million participants in the 2009/2010 season ski resorts, equipment companies, clothing companies, skiers and snowboarders have the power and resources to better the planet.

# OUR FOSSIL FUEL CONTRIBUTION

## Carbon Dioxide (CO<sup>2</sup>)

### Separating Human and Natural Influence on Climate



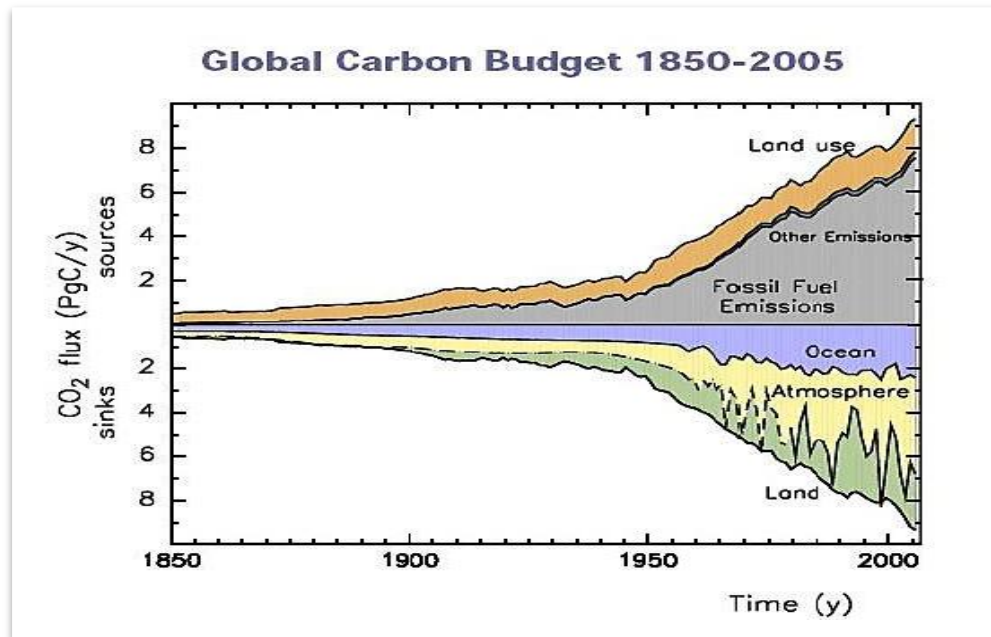
Visit [GlobalChange.Gov](http://GlobalChange.Gov) for more information about the effects of fossil fuels, climate change and human's contribution.

It is widely known that carbon dioxide (CO<sup>2</sup>) is the main cause of global warming and climate change. Burning coal, deforestation and transportation emissions that pollute the atmosphere with CO<sup>2</sup> have increased by a third since the beginning of the Industrial Revolution ([climate.NASA.gov](http://climate.NASA.gov)). "With [the world's] population growing at an alarming rate, the demand for more cars and consumer goods means that we are increasing the use of fossil fuels for transportation and manufacturing. Our consumption is outpacing ways to mitigate the effects, with no end in sight to our massive consumer culture" ([PlanetSave.com](http://PlanetSave.com)).

"The consequences of changing the natural atmospheric greenhouse are difficult to predict, but certain effects seem likely. The Earth will become warmer... leading to more evaporation and precipitation. A stronger greenhouse effect will warm the oceans and partially melt glaciers and other ice, increasing sea level. Crops and other plants may respond favorably to increased atmospheric CO<sup>2</sup>, growing more vigorously and using water more efficiently. At the same time, higher temperatures and shifting climate patterns may change the areas where crops grow best and affect the makeup of natural plant communities" ([climate.NASA.gov](http://climate.NASA.gov)).

Climate-related changes are already observed in the United States and its coastal waters. These include increases in heavy downpours, rising temperature and sea level, rapidly retreating glaciers, thawing permafrost, lengthening growing seasons, lengthening ice-free seasons in the ocean, on lakes and rivers, alterations in river flows, and earlier snowmelt. These changes are projected to grow. ([Globalchange.gov](http://Globalchange.gov), p. 27). Global Carbon Fund's 2010 data shows that emissions rose 5.9% with 91% from fossil fuels and cement, and 9% from land use changes such as fires and construction ([co2now.org](http://co2now.org)).

Global Carbon Project also notes that 50% of fossil fuels enter the atmosphere, while 26% returns to the land and 24% affects the oceans. The chart below is a pictorial of the “sources” of emissions along with the “sink” in natural resources.



Different modes of transportation and how their emissions contribute to carbon dioxide.

Source: NTM Sweden

## CURRENT STATE OF STALLAR PRODUCTS

Skateboards, because of their lower manufacturing cost, are now in their third year of production. New designs are created each winter season and made available to customers in the spring. Stallar Skate & Snow has also partnered with Eternal Board Shop in Reno to help move skateboards and gain visibility.

Snowboards were produced for one year. Due to manufacturing issues, Stallar Skate & Snow sued the Southern California manufacturer for faulty snowboards and incomplete orders. Due to delayed production it has been difficult to sell the snowboards. Once a suitable manufacturer is found Stallar Skate & Snow can resume production.

## STALLAR SKATEBOARD DECKS

### Components and Production

#### Maple Hardwood

The most important aspect of skateboard construction is the wood; most skate decks are made with 7 plies of Canadian maple. While other woods are extremely renewable - such as bamboo - shipping bamboo from China still has drastic carbon dioxide implications. Hard maple, if farmed and shipped sustainably in the U.S., is the best option. Maple trees grow back from the stump making them self-sustaining (ColumbiaForestProducts.com). Certified sustainable maple farmers can be found through

Forest Stewardship Council's (FSC) website. FSC is an "an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests" (fscus.org). Since their inception, FSC has been a driving force in finding and developing sustainable forests and logging techniques.



The Collins Company and their 160 year history have developed its three United States locations to provide a natural habitat to wildlife as well as a variety of naturally grown trees. They maintain a self-sustaining forest containing more wood today than they did over a hundred years ago. They are home to many animals including bald eagles, black bears, wild turkeys, and endangered trout. They are enriched by meadows, springs, creeks, rivers, and lakes, and grow trees from sunshine, water, and natural soil nutrients. Logging is not allowed in rivers, streams, creeks or wetlands (CollinCo.com).

Collins was half a century ahead of the rest of the forest products industry in implementing sustainable practices to protect the integrity of the total forest ecosystem. Its maple is farmed in Pennsylvania and strategically cut to maximize the benefit of the tree. Collins is able to cut the wood to the specific shape and thickness for the manufacturer, therefore eliminating additional manufacturing machinery and production costs (CollinsCo.com). Shipping maple domestically reduces carbon emissions by half compared to shipping bamboo from China or Taiwan (adb.org, pg 19 and carbonfund.org).

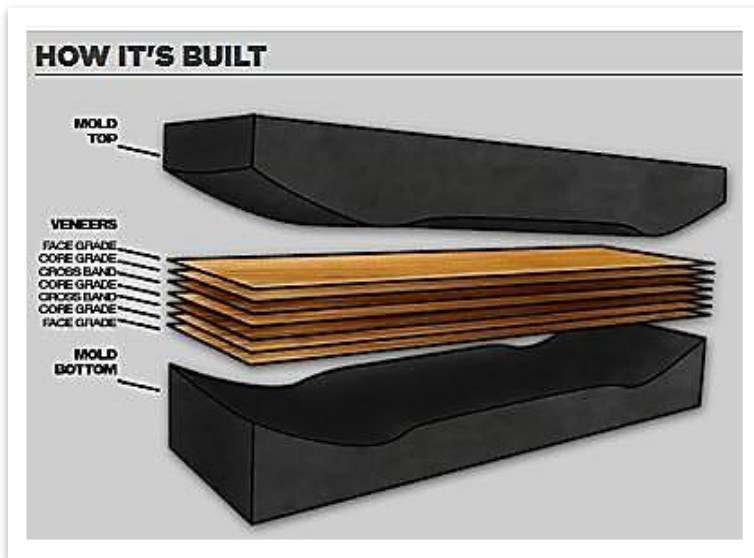
## Glue

Glue holds each ply together and bad glue can completely diminish the product, your reputation, and the hard work invested in the brand. National Casein product PC2365 is a lightweight, water resistant glue that can be cold-pressed. Cold pressing skateboards ensures that the deck does not prematurely warp or delaminate in a hot or cold climate. PC2365 is specifically engineered to withstand fluctuations in temperatures, contains zero ozone depleting substances and is very low in volatile organic compound content which can lead to compounding long-term health effects. The glue has a short shelf life (six months) and biodegrades when not in use. It can be burned or recycled into paper, particle board or fuel. The glue is also non-toxic and safe for indoor working conditions and long-term exposure (White, nationalcasein.com).

## Deck Screen Printing

Water based inks have become an industry standard. The ink has less chemical properties and is easily broken down in recycling, therefore leading to less environmental impact. TW Graphics' water based inks are made in the United States and are "some of the highest performance inks within the screen printing industry." Their printing machinery is fast and efficient, and offer an array of printing improvements and adhesion capabilities with remarkable outdoor durability (twgraphics.com).

## United States Manufacturing



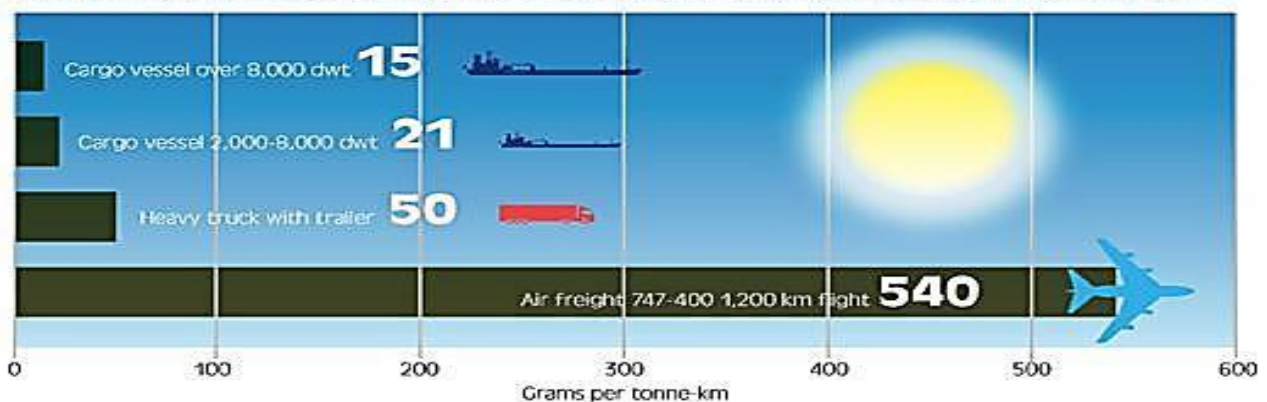
Skateboard molds have evolved over the years. The traditional press is two shaped blocks of cement. Recently a company discovered adding magnesium oxide and water to other raw chemicals, including carbon dioxide, creates a carbon negative agent in the cement. “For every ton of Vlasopoulos’ cement produced, one-tenth of a ton of carbon dioxide could be absorbed” (Smithsonianmag.com).

Previously, Stallar Skate & Snow used a Colorado company to produce skateboard decks. Blank maple products were

shipped from China based on size and quantity needed, Stallar Skate & Snow designs would be screen printed on each deck and then shipped to Carson City, Nevada. While this supply chain helped lower the production cost during the start-up phase, Stallar Skate & Snow is prepared to pay slightly more per deck to ensure that the maple wood, glue, and dyes come from an American manufacturing facility.

The American skateboard manufacturer will also be held to high standards in efficiency and waste. We expect the location to use solar power, non-polluting machinery, and strive for zero waste. Shipping from the manufacturing facility to Stallar Skate & Snow in Nevada will significantly decrease the carbon emissions compared to ordering blank decks from China. Using the carbon calculator for businesses at ClimateCare.org carbon emissions from domestic shipping, as compared to overseas shipping, is decreased by two-thirds. Travel and fleet are currently the largest contributors to carbon emissions from Stallar Skate & Snow. Since skateboard products are ordered multiple times throughout the year manufacturing in the United States decreases our carbon dioxide emissions and helps combat global warming.

### Comparison of CO<sub>2</sub> emissions between different modes of transport



Source: NTM Sweden

# STALLAR SNOWBOARDS

## Components and Production

Snowboard production - while similar to skateboards in the use of sustainable wood, non-toxic biodegradable glue and manufacturing standards - have more variations when it comes to components and machinery.

### Wood

The Collins Company's Oregon and California forests offer a diverse selection ranging from aspen, poplar, maple, birch and a hybrid poplar named Pacific Arbus. Diverse wood cores will eliminate the "cookie-cutter" nature of most small original equipment manufacturing (OEM) factories in America. Like promotional items, a snowboard is built with the same raw materials but different top sheet designs are applied. It boils down to which company has the best marketing campaign. Stallar Skate & Snow was involved in the board-making decision process and included exported bamboo cores making "cookie-cutter" boards a non-issue during its first production ([illicitsnowboarding.com](http://illicitsnowboarding.com)).

The Collins Company will cut the sheets to specific thickness allowing for expert precision from industry leaders. Having a wide-range of wood cores will help create snowboards that maximize a riders experience on the mountain. For example certain woods are softer than others and lighter in weight. This will help riders in competitions or riders that are heavier set. The opposite such as tree riding, back country exploration, and lighter-weight individuals may prefer aspen or maple.



### Glue

National Casein PC2365 will apply to snowboard construction as well because of its water resistant nature. Glue strength and proper layer clamping are imperative to the longevity and overall condition of the snowboard. Again because of the glue's non-toxic and biodegradable properties it is the best choice to hold all the components together.

### Steel Edges

While steel edges are a small component to the overall snowboard production it is critical to the rider and the Earth's resources. Steel is incredibly abundant and present in everyday life. Recycling occurs by melting and reprocessing it in to a new shape or thickness. According to the Steel Recycling Institute, steel can be infinitely broken down without a loss in performance. Using recycled steel from mills across the United States not only reduces waste and carbon dioxide it is also a "big part of creating a green

energy infrastructure.” In the last two decades there has been a 30% decrease in energy consumption and almost a 35% carbon dioxide decrease from shipping.

### Laminate Designs

Most top sheets used in snowboard production are shipped from Italy. However, Action Sport Technology, located in Sun Valley, California, prints top sheets and base graphics using water-based inks and ships them to the manufacturer. Regardless of manufacturing location, top sheet and fiberglass shipping from California, as compared to Italy, will dramatically decrease the company’s carbon dioxide contribution (snowboardmaterials.com).

### United States Manufacturing



Like skateboard manufacturing, snowboard production needs to take place in the United States. There are various factories around the United States including Mervin Manufacturing in Washington and Venture in Colorado. They have become the industry leaders in creating sustainable boards with FSC certified wood, water-based printing, recycling excess material and using solar power. Unfortunately, both of these companies do not produce for small brands. By using Mervin and Venture as a benchmark in selecting the right manufacturing plant we can begin to work with small OEM plants to better their operations and environmental standards.

## EXCESS WASTE

### Packaging and Shipping

Within the last 5 years plastic grocery bags are being banned from large cities throughout the country. The ban has been fueled by the bags inability to decompose, its high toxicity levels, and its ability to enter water sources. Because it takes centuries to decompose, plastic needs to be eliminated from all Stallar Skate & Snow operations. Currently skateboards are shrink-wrapped in a thin plastic at the manufacturing plant. When shipped in cardboard boxes the thin plastic does not protect against nicks and scratches. The plastic also tears when removing skateboards from the box. Snowboards are wrapped in a slightly thicker plastic to prevent scratching. The plastic wrap is of zero use after shipping.

Developing a shipping bag for both skateboards and snowboards from recycled polyethylene terephthalate (PET) plastics will significantly decrease plastic consumption and waste (rewarestore.com). The bags should also have dual purposes in travel, storage, and coverage during resort setup. Creating a bag that can be reused throughout the life of the board is pivotal to being an environmental leader in the industry.

Shipping each board in a durable fabric bag not only prevents product damage and decreases plastic; it also decreases the amount of filler in the shipping containers. The boards are better protected in cloth

bags so there is no use for paper or packing peanuts. This also manages weight for better efficiency in packaging and shipping costs.

### Shipping from Asia: Carbon Emissions

Summary Emissions Results ( 24.46 tonnes )

company name	Stallar Skate & Snow
contact e-mail	stallar@stallar.com
your total emissions are	24.46 tonnes
to offset this CO2 will cost	£ 183.45 total cost per tonne includes VAT @ 0 %

[What you will receive](#) [Where the money goes](#) [The CC Promise](#)

### Domestic Shipping in the United States: Carbon Emissions

Summary Emissions Results ( 8.21 tonnes )

company name	Stallar Skate Snow
contact e-mail	stallar@stallar.com
your total emissions are	8.21 tonnes
to offset this CO2 will cost	£ 75.00 total cost per tonne includes VAT @ 0 %

[What you will receive](#) [Where the money goes](#) [The CC Promise](#)

## PRODUCT RECYCLING

### Skateboards

Due to the bio-degradable nature of the glue, skateboards and its layers of maple can be broken down for fuel, recycled into paper or turned into particle board. According to Earth 911 “wood is the only 100 percent renewable, recyclable, reusable and biodegradable resource we have.” Using Full Circle Compost in Minden, Nevada is not only helpful because of proximity to Stallar Skate & Snow, it builds relationships with local, entrepreneurial companies engaged in environmental services. Partnering with Full Circle Compost, Inc. continues to facilitate a “relationship between agriculture, forestry, and the urban community.” Since the compost facility strives for the best performance in renewable farming practices, Stallar Skate & Snow can continue the cradle-to-cradle process by using old skateboards as fertilizer and wood chips for gardens.

### Snowboards

Ski swaps are a vital part to saving during the ski season. With rising resort, gas and food costs, saving on equipment can offset these high costs. Most ski swaps take place in the fall each season. This means most participants with old equipment to sell have held on to it throughout the summer. We can offset

the attic space by offering donation centers in late spring and early summer. The Joe Crowley Student Union at the University of Nevada, Reno campus allows for companies to set up a booth outside of the student union. This space can be used to collect donated items. In the fall additional donation centers can be set up at ski swaps. Many individuals will sell their old gear at a discounted price and depending on the condition it might not sell. Stallar Skate & Snow can accept donations of that left over and discarded equipment.

Donated snowboards can be reused as equipment for under privileged families if the product is in good condition. Partnership with a local ski or cross country resort would have to facilitate the ability to use the donated equipment for low-income families. Unless there is a want from the resort to participate the boards will sit in storage unused. Selecting families would be assisted through Goodwill or another other low-income assistance program.

### Restructuring snowboards

Reeski.com creates furniture, coat racks, clocks and other items out of used skis and snowboards. They are then sold online. This type of recycling can be done by a local shop and then partnering with ski resorts, restaurants and parks in the area can help distribute the products and alleviate high shipping costs.

## BRINGING PRODUCTS TO MARKET

### Certifications

A great way for Stallar Skate & Snow to distinguish itself from the competition is to certify the American raw materials and manufacturing practices. Each certification brings the customer closer to a viable and sustaining American company. It allows for full disclosure of the practices Stallar Skate & Snow engages in and leaves out any ambiguity about the company's mission and vision towards social responsibility.

### Forest Stewardship Council

Since Stallar Skate & Snow will only use wood certified by Forest Stewardship Council (FSC), advertising the FSC logo on the boards will create brand recognition and awareness to uncertified products. FSC has a distinct logo that can be developed in to sticker form and applied to all products.

### Made in America

Another great way to identify the brand and signal American made products is to label each product with a "Made in America" logo. While the logo application is short and easy to process, the Federal Trade Commission has the ability to audit the supply chain at any time. Following strict practices in implementing only American raw materials will ensure that Stallar Skate & Snow is open to periodic audits ([madeintheusabrand.com](http://madeintheusabrand.com)).



## Sticker Promotion

Custom Sticker Makers (CSM) has been printing Stallar stickers since 2007 and is one of the most environmentally friendly sticker producers on the internet. “All CSM stickers are produced with new, state-of-the-art technology that utilizes Eco-Solvent inks” to prevent volatile organic compound (VOC) content. The company also “recycles all vinyl scrap and paper from every order, recycles all ink cartridges, prints on thin paper backing, packaging materials are reused and whenever possible, work to meet all production and resource needs locally” (customstickermakers.com). They are the preferred choice in developing the stickers to promote the environmental sustainability of Stallar Skate & Snow products.

## Marketing

Stallar Skate & Snow will begin to aggressively enter the California market starting spring 2012. The company must develop a product guide to describe the environmental features and durability of the new products. Skate and snowboard products will be priced 15% higher than past products due to American manufacturing. The price increase is relatively small compared to the decrease in carbon dioxide, toxicity, wood extraction, recycling efforts and plastic reduction. California has become the leader in environmentally sustainable efforts and is first to push new legislation to combat against climate change and bad business practices. Its residents are environmentally savvy and will purchase products that have the same values.

Showcasing the raw materials, manufacturing efforts and good labor practices in independent skate and snowboard shops will highlight the brand, as well as support the local economy.

## ENVIRONMENTAL SUSTAINABILITY IS ESSENTIAL

As stressed earlier, humans are taking from the earth at an alarming rate and not giving back. We tirelessly mine, bulldoze and strip the land of its resources. Action sports are about enjoying the environment, Mother Nature or manmade. While a handful of companies strive for sustainability in their products there needs to be an incredible movement for all action sports products to give back to the Earth. I believe that if a small skate and snowboard equipment company can achieve environmental sustainability then any action sports company can.

In using limited resources we can show how to create better skateboards and snowboards. This includes sustainably creating products, decreasing toxins used in production, decreasing packaging and shipping, and endorsing recycling. We are fortunate that skateboards and snowboards do not contribute to pollution or use energy after being sold.

Stallar Skate & Snow strives to educate and develop partnerships with manufacturing companies, together becoming environmentally sustainable. We need to become advocates for the planet if we want to continue using our mountains, snow and clean air. We can no longer wait, hope and pray that someone or something else will fix the problem for us.

## ABOUT STALLAR SKATE & SNOW



Stallar Lufrano developed a passion for entrepreneurship after attending a required course at Sierra Nevada College, in Incline Village. After recognizing that she was not reaching her full potential, Stallar transferred to the entrepreneurship program at San Francisco State University. While sitting in the Oakland airport waiting to fly to Seattle to snowboard, she read a few chapters of “What Color Is Your Parachute?” Stallar quickly jotted down notes and a few weeks later Stallar Skate & Snow was formed. She spent the last year in the undergraduate program developing the company, making contacts and understanding the inner workings of the action sports industry.

After college graduation, Stallar moved to Whistler, British Columbia to research designs, manufacturers and just enjoy what snowboarding had to offer. After returning from Whistler in April 2008, production began on skateboards and snowboards. Stallar has been conscious about the company’s footprint on the Earth. Her roots stemmed from enjoying the clean Lake Tahoe water and fresh mountain air. Social responsibility also played a part. Throughout high school Stallar enjoyed skateboarding on a daily basis, but the steep resort tickets and rental cost made snowboarding financially out of reach. This became a very important aspect in the decision to start the company. By developing a unique chain of production and distribution, Stallar Skate & Snow can offer quality products at a lower price than the competition; therefore offsetting the ballooning ski resort costs.

From there the company strategically engaged in producing goods made in the United States and not overseas. With the company’s small order of products it was able to meet the domestic production goal with snowboards, but not with skateboards. In developing a socially responsible strategic plan, the cradle to cradle mentality will sustain the company and the natural resources used to create its products.

Stallar Skate & Snow

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