

A Submission to the 2010 Climate Leadership Challenge Claus Moberg, Jami Morton and Matt Luedke 3.25.10



# **Table of Contents**

1. Executive Summary	3
2. Business Description and Vision	4
2.1 Mission Statement	4
2.2 Company Vision	5
2.2.1 Our Assets	5
2.2.2 Guiding Principles	5
3. Definition of the Market	6
3.1 Target Market #1: Foodies	
3.2 Target Market #2: Corporate Food Producers	
3.3 Target Market #3: Institutional Food Service Providers	
4. Description of SnowShoe LLC Products and Services	7
4.1 The SnowShoe Databases	
4.1.1 The SnowShoe Foodie Database	
4.1.2 The SnowShoe Consumer Behavior Database	9
4.2 The SnowShoe iPhone Application	9
4.2.1 Step 1: Grab A Cart	
4.2.2 Step 2: Search The Shelves	
4.2.3 Step 3: Check Your Cart	
4.2.4 Step 4: Take Your Receipt	
4.3 The SnowShoe Basecamp	11
5. Environmental Management and Results	12
5.1 Positive Social Impacts	12
5.2 Negative Social Impacts	12
5.3 Positive Environmental Impacts	
5.4 Negative Environmental Impacts	13
6. Budget and Financial Feasibility	13
6.1 Action-Ready Solution Award Budget	
6.2 Innovative Solution Award Budget	
7. Organizational Structure	15
7.1 Chief Executive Officer - Claus Moberg	
7.2 Chief Financial Officer - Jami Morton	
7.3 Chief Operating Officer - Matt Luedke	
8. Marketing and Sales Strategy	18
9. Projected Timeline	19
Appendices	21
Appendix A: SnowShoe LLC projected 3-year income statement	
Appendix B: Cash flow projection	
Appendix C: Projected net and gross sales and carbon emissions impact	
Appendix D: YouTube video description	
Appendix E: External contributor bios	
Appendix F: Acknowledgements	29



# 1. Executive Summary

Snowshoes reduce the depth of your footprints, and make it easier to overcome the deep, difficult conditions that would otherwise prevent you from getting to where you want to go. Our company, SnowShoe LLC, will reduce our customers' ecological footprints and increase operating efficiency in the food retail and food services sectors.

The main driver of our business will be the **SnowShoe Foodie Database**. The database contains all the information necessary to calculate the carbon footprint of a food product (i.e. ingredients lists, locations of manufacture, packaging materials, etc.). This information will be distributed to SnowShoe LLC customers via the **SnowShoe iPhone App** (as well as applications (apps) for other smartphone platforms and a mobile device-enabled website). Having point-of-sale access to such information will enable SnowShoe App users to minimize the direct climate impact of their purchases by choosing food items with low carbon footprints. SnowShoe App users will be able to further reduce their climate impact by purchasing carbon emission offsets directly through the SnowShoe smartphone apps. We will also incorporate a full range of web2.0 (blogging, twitter, facebook, etc.) mechanisms, in concert with a traditional website, to increase user engagement in SnowShoe LLC activities.

SnowShoe LLC will also use these point-of-sale user interface programs to **collect data about consumer behavior and preferences**, which we will then use as the basis for a corporate food manufacture/distribution and event services consulting firm.

**SnowShoe LLC will raise revenue** through several different activities. We will charge a small fee for the iPhone app. We will also raise revenue by selling advertising space on the SnowShoe user interfaces (our apps and website). Finally, we will generate additional revenue through consulting activity based on our unique data resources.

Using a relatively conservative approach to calculating our potential market size and company growth, we forecast SnowShoe LLC to be cashflow-positive within one year of capitalization. Further, we forecast **significant financial profits within 2-3 years** of that time.

We believe SnowShoe LLC is a very unique opportunity. By leveraging the extremely generous and useful resources of the Climate Leadership Challenge against the skills, knowledge and foresight of the SnowShoe LLC team, we have the ability to make a significant impact on global climate stability while simultaneously growing our business into a successful entrepreneurial venture.

SnowShoe LLC Page 3 of 29



# 2. Business Description and Vision

**Everyone cares about what they eat.** This fact has made food one of humanity's most universal obsessions. The human diet is an amalgam of our individual tastes, preferences, resources, wants, and desires; a function not only of where we live, but where we have come from and where we are going.

"We will be known forever by the tracks we leave behind."

-Native American proverb and SnowShoe LLC Corporate byline

In our society, chefs are celebrities; their cooking, must-see T.V. We order steaks from Omaha while wooing our partners with the finest Flemish confections. Food literature dominates our bestseller lists – from the *South Beach Diet* to *The Omnivore's Dilemma*. If someone has an idea that will make our food better, we will not just listen, **but we will pay for the privilege**.

Our food obsession has transformed the economics of food into a **massive global marketplace**. This is exhibited by the mere fact that Belgian chocolates and Great Plains red meat are sold in supermarkets from Seattle to Miami. More and more, food consumers the world over are realizing that the truth of "you are what you eat" extends not just to waist lines and energy levels, but to waste disposal and energy markets, too.

The modern "foodie" cares about more than just the quality of their ingredients. Ideal produce is both fresh and local, organics are worth the extra money, and many claim fair trade coffee somehow tastes better.

Even though modern food consumers have demonstrated marked dedication to buying food that is both good for the body and good for the planet, it is currently extremely difficult to determine the specific history of any particular food item. A conscientious customer simply cannot determine where their bread was baked, how far their raspberries have traveled, or how much pollution was emitted in the canning of their favorite soup. To do so would require intricate calculations and interminable Internet data mining. Even if a customer were willing to overcome these steep barriers, it would be **impossible** to do so while in the grocery store – the location of most purchase decisions.

#### 2.1 Mission Statement

Our company, SnowShoe LLC, will give our customers the food sustainability information they need, where and when they need it. We will do the hard work of quantifying the carbon footprint of foods people eat every day. Furthermore, we will concentrate and evaluate information about how those foods were made. All of this information will be delivered to the customer's smart phone (or other internet device) in the grocery store aisle. We will thus enable our customers to choose

SnowShoe LLC Page 4 of 29



foods that are both healthy and sustainable, and the result of our actions will be lower carbon emissions, lower transportation energy expenditures, healthier people and healthier ecosystems.

The actions of SnowShoe LLC are not motivated by charity. Rather, the company will derive significant revenue from three areas of its operation: sales of the smartphone application itself, sales of advertising space on the application and the company website, and through consulting activities based on our food information database and on consumer behavior data collected through the smartphone applications.

### 2.2 Company Vision

Our company will gain competitive advantage by strategically leveraging our unique assets via SnowShoe LLC's explicitly stated guiding principles.

#### 2.2.1 Our Assets

- **Information/Data:** The success of SnowShoe LLC will draw most directly from the company's information assets. Customers will come to SnowShoe because they know that we will have the best information available about every item on their grocer's shelves. Therefore, our primary measure of company success will be the size and scope of our data.
- **Customer Base:** SnowShoe LLC will generate financial profits from the unique and valuable relationship we have with our customers. As their partner in the store, we will give them the information they need to make sustainable food purchase decisions. In return, our customers will give us both access to data about their purchases and the opportunity to present our partner's marketing materials at the point of sale.
- **Employees**: Dedicated, impassioned partners will be the catalyst of growth and profitability for SnowShoe LLC. Our current and future employees must be smart enough to effectively build and market both our data and customer base so as to maximize both environmental and financial results.

### 2.2.2 Guiding Principles

We will accomplish our mission through dedicated adherence to three guiding principles:

- 1) **Data**: Missing data translates directly into missing customers. All data is valuable. There is no such thing as too much data, only poor data organization and presentation.
- 2) **Transparency**: Perfect data does not exist, but communicating our data coverage and quality allows our customers to make informed decisions and builds trust. It is vitally important that we communicate both what we know and how we plan to use it.

SnowShoe LLC Page 5 of 29



3) **Networking**: Our satisfied customers are vital assets – the growth of our company will be rooted in their engagement. We will only be profitable if our customers see us as a useful, informative and fun partner in their grocery shopping experience.

### 3. Definition of the Market

**SnowShoe LLC is not** *just* a **smartphone application**, or database, or even a consulting firm specializing in sustainable food. SnowShoe LLC is not *just* the best available consumer resource for determining the carbon impact of food. **SnowShoe LLC represents an entire movement** centered on societal and environmental food sustainability information. Through SnowShoe LLC's portfolio of products and services, we will aggressively court three main market audiences: foodies, corporate food producers, and institutional food providers.

# 3.1 Target Market #1: Foodies

The most visible products offered by SnowShoe LLC will be our smartphone apps. Initially we will focus our efforts on a single platform: Apple's iPhone.

Apple is projected to have 60 million active iPhone users in the United States by July of 2013<sup>1</sup>. 70% of these consumers will be in the main age bracket that has exhibited exuberant interest in downloading and using iPhone apps (i.e. persons between the ages of 19 and 54)<sup>2</sup>. If we assume that the SnowShoe iPhone App will appeal to 30% of these users as a result of socioeconomic status and political beliefs, we estimate that the total potential market for the SnowShoe App will be 12.6 million customers in the United States by the summer of 2013.

SnowShoe LLC has convened a focus group consisting of members of our target audience (i.e. tech-savy, environmentally conscious persons between the age of 19 and 54) to assess the current accessibility of food sustainability and climate impact information. We have compiled a representative sample of responses to our focus group questions in a short video, described in Appendix D, and posted to YouTube<sup>3</sup>.

### 3.2 Target Market #2: Corporate Food Producers

By collecting and aggregating extensive, exclusive data on the in-store behavior and purchasing habits of environmentally-conscious consumers, SnowShoe LLC will be able to provide forward-thinking food producers with an unprecedented marketing resource. Further, SnowShoe LLC will be able to sell advertising opportunities to these food producers. Through our iPhone app, we will present these clients'

SnowShoe LLC Page 6 of 29

<sup>&</sup>lt;sup>1</sup> http://brainstormtech.blogs.fortune.cnn.com/2009/12/18/where-in-the-world-are-apples-78-million-handsets/, accessed on 3/20/10

<sup>&</sup>lt;sup>2</sup> http://techcrunchies.com/age-demographics-of-iphone-users/, accessed on 3/19/10

<sup>&</sup>lt;sup>3</sup> http://www.youtube.com/watch?v=0rX26RWo9F0



marketing materials to food consumers while they are shopping in the grocery store. We will even be able to tailor the presentation of advertisements to the individual behavior of each consumer.

Corporate interest in sustainable foods is increasing, and for good reason. Gross sales of organic food products exceeded \$13.8 billion dollars in 2006 alone. Kraft®, Dole®, Campbell's Soups®, and Tyson® are just a few of the multinational corporations that have entered the organic marketplace in recent years. We anticipate this market will continue to grow, and that these corporate entities will be interested both in our data and in advertising through our user products. This will be especially true as consumer interest shifts from organics alone to include carbon footprints and climate impacts.

### 3.3 Target Market #3: Institutional Food Service Providers

From college cafeterias to state fairs, it is becoming increasingly important for those who feed the masses to understand and reduce their significant ecological footprints. SnowShoe LLC will have the knowledge and experience needed to help these institutions reduce costs and greenhouse gas emissions while increasing the nutritional value and perceived quality of their products. A great example of an institution that could make use of SnowShoe LLC consulting services is found at Duke University, where the campus food service spends over \$2 million dollars per year, almost 40% of their operating budget, on the procurement of food from local/sustainable farms.<sup>5</sup> As other institutions seek to implement similar programs, SnowShoe LLC will be there to provide valuable information and advice on the sustainability and climate impact of major food product producers.

# 4. Description of SnowShoe LLC Products and Services

SnowShoe LLC products and services fall into four main categories:

- 1 The SnowShoe Databases
- 2 The SnowShoe iPhone Application
- 3 The SnowShoe Base Camp webpage

The following sections will further describe these four categories.

#### 4.1 The SnowShoe Databases

SnowShoe LLC's first guiding principle is that extensive data coverage is critical to the company's success. Providing useful, relevant information to our consumer base promotes awareness of social and environmental issues, and enables them to make effective purchasing decisions. Meanwhile, food producers need to identify the

SnowShoe LLC Page 7 of 29

<sup>&</sup>lt;sup>4</sup> Knudson, W. (2008) The Organic Food Market, *The Strategic Marketing Institute Working Paper*, Michigan State University. East Lansing, MI.

<sup>5</sup> http://www.aashe.org/resources/profiles/2009/duke-university accessed on 3/24/2010



factors that drive consumer choices in order to maximize sales and profits.

SnowShoe LLC will provide two platforms that increase interaction between food consumers and food producers: the **Foodie Database** and the **Consumer Behavior Database**. SnowShoe LLC has already begun construction of the databases, and considers their constant need for updates and development to be a key goal of the organization.

#### 4.1.1 The SnowShoe Foodie Database

Our goal is for the SnowShoe Foodie Database to include comprehensive information on every food product available in grocery stores, nationwide.

This is a lot of information to process! Much of this information is currently available to the consumer, but is not in a format conducive to quantitative comparison between different food products, especially while in the store.

Nonetheless, much of this data is available. SnowShoe data assimilation specialists will systematically comb the shelves of grocery stores, entering all published data from food product packages into our database. For most products, this action alone will provide us with the location of manufacture and/or distribution, ingredient list, and packaging material. The SnowShoe team will then fill in any missing information using Internet searches (e.g. Wikipedia, company websites), by interfacing with

Table 1: The SnowShoe Foodie Database				
	Category	Example		
1	Brand	Campbell's		
2	Name	Tomato Soup		
3	Category	Canned Goods		
4	Weight	305g		
5	SKU	051000166791		
6	MSRP	\$1.50		
7	Company	Camden, NJ,		
	Location	08103-1701		
8	Location of	39°56′20″N,		
	Manufacture	75°06′27″W		
9	Method of	Ground Freight		
	Transport			
10	Religious	None		
	Compliance			
11	Fair Trade?	No		
12	% Organic	0%		
	Ingredients			
13	Packaging	Steel Can		
	Material			
15	Pre-Manufacturer	Not yet		
	Greenhouse Gas	calculated		
	Emissions			
	Footprint			
14	Ingredients List	Water, Tomato		
		Paste, High		
		Fructose Corn		
		Syrup, Wheat		
		Flower, Water,		
		Salt, Ascorbic		
		Acid, Citric Acid		

**Note:** database will also contain all published nutritional information

retail partners (e.g. getting distributor location lists from a local grocery store), and/or by contact with the food producers themselves. Finally, by cross-referencing product ingredient lists with global databases containing information on the location of food inputs (e.g. maps of grain production) and with statistics on agricultural greenhouse gas emissions, we will be able to provide a rough estimate of the carbon footprint attributable to food production before it reaches the final

SnowShoe LLC Page 8 of 29



published distributor. Table 1 lists an example entry for a single food product (in this case, a 12 oz. can of Campbell's Tomato Soup). All of this information in this table was gleaned directly from the can label and/or the Cambell's Soup corporate website.

### 4.1.2 The SnowShoe Consumer Behavior Database

When consumers consider purchasing a food item, use our iPhone app to calculate that item's carbon footprint, but end up choosing another item, the SnowShoe Consumer Behavior Database will record that decision. This is just one of several unique data types that SnowShoe LLC will be able to market to food producers and advertisers. Over time, the database will expand by marking the items compared to the items ultimately purchased for each consumer, for each region, and for the entire country.

This service will help producers identify what customers want and need. For example, the producer of an item that is considered but not purchased would otherwise be unsure of the consumer's decision-making process, unable to distinguish among purchases based on price, nutritional content, carbon footprint, or any factor. But now, by noting which information types are frequently requested by a consumer, and how several items compare based on this information, the SnowShoe Consumer Behavior Database can help producers focus on the most beneficial areas of product improvement.

It is important to note that no personally-identifiable information will be available on this database. In accordance with our second guiding principle - transparency, consumers will be notified of the SnowShoe LLC Consumer Behavior Database and its use of their data in the SnowShoe iPhone App Terms and Conditions Document.

### 4.2 The SnowShoe iPhone Application

Equally important to the aggregation of information is its dissemination. For SnowShoe LLC, **the principal form of interaction with our information will be through the SnowShoe iPhone App.** Two-way communication facilitated by the SnowShoe iPhone App significantly addresses the second SnowShoe LLC asset category: the expansion and active involvement of our user base.

The iPhone app will use the powerful, user-friendly iPhone interface to quickly provide and process data for consumers. This app will be the first step toward making our database accessible and we will develop similar apps for other mobile media devices in the future. In the meantime, SnowShoe LLC's mobile-enabled website can be accessed by any smartphone or similar device, allowing the customer full access to SnowShoe application functionality.

The following is a brief description of the SnowShoe iPhone App's function and structure:

SnowShoe LLC Page 9 of 29



When the user launches the application, they will be greeted by the Home Screen, which displays the user's running average of " $CO_2$  per \$," based on previous shopping sessions. It also displays the averages for their region (for example, "Madison, WI area") and the nation as a whole. Any of these 3 averages can be chosen to show their progression over time in a line graph.

The rest of the SnowShoe LLC views are modeled after the actual grocery shopping experience:

#### **4.2.1 Step 1: Grab A Cart**

To begin a new shopping session, the user either chooses their current store from a list of "Favorite Stores," or chooses "New Store" to activate the iPhone's Core Location framework (GPS) to take latitude and longitude data, finding the store closest to their current position. This location is used to calculate distances and carbon footprints.

### 4.2.2 Step 2: Search The Shelves

Most of the user's time will be spent in this view. Here, the user can make use of the iPhone's camera imaging technology to scan food item barcodes, or choose an item from a list of "Favorites Items."

The SnowShoe iPhone App will calculate a total carbon footprint by adding location specific transport-related carbon emissions to the SnowShoe Foodie Database's value for pre-producer carbon emissions. To quantify the transport-related emissions, we will use an algorithm to calculate the road distance between the iPhone's current GPS-derived location (i.e. the location of the grocery store) and the distribution location for each food product in our database. The final transport greenhouse gas emission estimate will be derived by multiplying this distance by the average fuel economy of the US freight truck fleet and scaling by the product weight.

The user will always have four options after finding an item's information:

- 1) **Toss In The Cart** the user specifies a quantity and places in the cart.
- 2) **Hold To Compare** the user holds up to 5 items to potentially place in the cart later.
- 3) **Find Similar** display where the current item ranks in terms of carbon footprint in the range of similar items, and identify the "best in category" for the food type in question.
- 4) **Put Back On The Shelf** the user decides not to buy the item.

The navigation of these options is made simple by the touchscreen capabilities of the iPhone. For example, placing an item into the cart or back onto the shelf is as easy as dragging the item's picture onto the corresponding icon.

SnowShoe LLC Page 10 of 29



Note that not all items in a store may be included in the SnowShoe Foodie Database, meaning that the application will not be able to process these items. Though our team is committed to developing the database as comprehensively as possible, such situations are inevitable. By sending in SKU photos that do not register, users can provide helpful feedback to help guide SnowShoe Foodie Database expansion efforts where they are most necessary. The SnowShoe team is also investigating the possibility of incorporating a user-supplied data entry protocol (thus enabling users to provide data through he iPhone app to the SnowShoe Foodie Database), though this program function has not yet been fully planned or developed.

### 4.2.3 Step 3: Check Your Cart

At any time, the user can review the current contents of their "shopping cart" by touching the cart icon. Items can be removed and quantities can be changed to match the user's actual cart.

## 4.2.4 Step 4: Take Your Receipt

Once the user has completed shopping and is ready to checkout, they are given several activity options. Note: this step is designed to provide information and entertainment to help our customers pass time while waiting in the checkout line at their grocery store.

First, the user can review the  $CO_2$  per \$ value for their current purchases. As with the Home Screen, this value can be easily compared with the user's past shopping sessions, as well as with regional and national data.

The user is the presented with the option to buy carbon offsets directly through the SnowShoe iPhone App. SnowShoe LLC is committed to stepping beyond a simple transaction-based model by enabling users to take further action. SnowShoe will sell carbon offsets without retail markup and we will implement an internal program to audit carbon offset providers and make sure our user's investments are actually translated into real world carbon emission reductions.

Finally, the user can also publish their carbon footprint data to the SnowShoe Base Camp on Facebook or on Twitter.

# 4.3 The SnowShoe Basecamp

SnowShoe LLC's third guiding principle, that of developing **network connections**, means that a vibrant community is a key ingredient of our long-term success. The **SnowShoe Base Camp**, **comprised of a traditional website and several web2.0 user interfaces (e.g. Twitter Feeds, a Facebook page, Blogs, etc.)**, **serves as the central home for discussion**, **collaboration**, and **exploration of food sustainability**.

SnowShoe LLC Page 11 of 29



The website will be updated regularly with the latest news and opinions on food sustainability and other important environmental issues, and will be open to comment from SnowShoe users. Keeping the community updated and directly connected with the actions of SnowShoe LLC directly serves our second guiding principle: transparency.

Among the numerous ways in which the SnowShoe Basecamp will encourage user involvement and community building are the following:

- A space for members to show their creativity with a local food recipe section.
- "Cooking tutorial" video contests using only local ingredients.
- Twitter updates highlighting customers who exhibit markedly reduced carbon footprints for a given time period.

Lastly, the website will announce the progress of SnowShoe LLC in terms of  $CO_2$  emissions mitigated - either through sustainable buying practices or carbon offsets through the app.

# 5. Environmental Management and Results

SnowShoe LLC's vision is one of environmental, social, and economic health. As such, it is important to assess not only the financial future of the organization, but also the positive and negative impacts that SnowShoe LLC will have on the environment and society.

The chief environmental benefits of SnowShoe LLC have been quantified using a metric of  $CO_2$ -equivalent reduction (outlined in Appendix C). All other environmental benefits and social benefits have been listed as qualitative factors.

# **5.1 Positive Social Impacts**

SnowShoe LLC intends to:

- increase consumer awareness of buying habits.
- increase awareness of Fair Trade products.
- influence consumer nutrition habits, promoting healthy and local foods.
- provide a connection between food consumers and producers.
- create an online community to share information and organize.
- increase consumer awareness of climate change and its social impacts.

### **5.2 Negative Social Impacts**

SnowShoe LLC may be unable to avoid:

- marginally reducing consumer privacy.
- increasing reliance on cell phones and technology.
- quantifying food on a limiting metric that may not apply for all users.

### **5.3 Positive Environmental Impacts**

SnowShoe LLC intends to:

SnowShoe LLC Page 12 of 29



- change consumer behavior to favor low-carbon foods<sup>6</sup>.
- implement a convenient and relevant carbon offset program.
- increase sustainable practices amongst food producers.
- increase awareness of climate change.
- purchase carbon offsets to mitigate our direct carbon footprint (i.e. the emissions emanating from the day-to-day operations of SnowShoe LLC).

# **5.4 Negative Environmental Impacts**

SnowShoe LLC may be unable to avoid:

- database server and computing energy-related impacts on the environment that are not accounted for in our carbon offset purchases (e.g. emissions of non-greenhouse gas air pollutants).
- general negative environmental externalities that are not directly quantifiable.
- Increasing the number of toxic iPhone batteries and other sources of "ewaste."

# 6. Budget and Financial Feasibility

# **6.1 Action-Ready Solution Award Budget**

If SnowShoe LLC receives the Action-Ready Solution grand prize, we plan to accept all benefits offered in conjunction with that title: the \$50,000 in startup funding, the \$5,000 in promotional trip funding, and the 12 month office space lease at the University Research Park's Metro Innovation Center (MIC).

SnowShoe LLC will use the MIC as our base of operations for the first year. The benefits of this location are numerous and extremely significant. Through the MIC, SnowShoe LLC will have access to a 1GB data connection, cooled server room, and professional Internet technology support. We would not be able to afford these resources on the open market, and, therefore, the office space included in the Action-Ready Solution grand prize is a critical part of our proposed operation.

Of the \$50,000 in startup funding, we plan to gift \$34,657 to the University of Wisconsin-Madison Foundation to fund a 12-month 60% project assistantship (PA). Matt Luedke will accept this PA position in September 2010, and would work as a PA assigned to SnowShoe LLC through August of 2011. Hiring Matt through a PA appointment allows SnowShoe LLC to offer him an extremely competitive benefits package at dramatically reduced costs, when compared to similar packages currently available to small businesses through the open market.

SnowShoe LLC Page 13 of 29

<sup>&</sup>lt;sup>6</sup> See Appendix C for a complete quantification of SnowShoe LLC's impact on carbon emissions



The rest of the funds will be allocated in the following manner: iPhones to be used in application development, hiring a subcontractor to help Matt with programming the iPhone app, and a hand held scanner to expedite data entry.

- Approximately \$10,000 will be allotted toward a computer server and hardware to host the SnowShoe databases.
- Approximately \$5,000 will be used to hire a subcontractor to help program the iPhone app.
- \$800 will be used to purchase a hand held bar code scanner to expedite development of the SnowShoe LLC database.
- \$500 will go towards hiring a lawyer to draft the SnowShoe iPhone App Terms and Conditions.
- \$5,000 will be used to fund a promotional trip.

The SnowShoe LLC income statement (Appendix A), cash flow statement (Appendix B), and sales projection (Appendix C) are calculated assuming that we can reach 5% market penetration amongst our core audience (the 30% most-environmental iPhone owners within the age range of 19-54 y.o.) within three years of operation. All growth statistics assume an exponential growth curve that reaches this goal (i.e. 630,000 total iPhone app sales) by June of 2013. Please note: an exponential growth curve dictates that app sales in years one and two of operation are dramatically lower than those in the final year, and, thus, a more linear growth curve would have a positive impact on our monthly cash flow and yearly income statements. We believe that the herein assumed exponential growth curve represents a low-bound on the full range of growth trajectories that still have SnowShoe LLC reaching the June 2013 total sales target.

While we anticipate that SnowShoe LLC will be able to fully implement the activities outlined in this proposal with the CLC Action-Ready Award as our only non-revenue start-up funding, SnowShoe LLC would benefit from other outside funding opportunities. This would allow us to hire a subcontractor to assist with more of the application programming or to accelerate the release of SnowShoe apps for non-iPhone smartphone architectures. Other possible uses of additional start-up revenue include increased traveling for database development and increased advertising expenditures. We appreciate that winning the CLC Action-Ready Award will bestow significant publicity upon our nascent company, and would only serve to enhance our ability to secure additional start-up capital.

### **6.2 Innovative Solution Award Budget**

If SnowShoe LLC wins the one of the Most Innovative prizes we would each purchase an iPhone and then divide the rest of the money equally to help pay each member for the time that we plan to continue working on the project. It is still our goal to build the iPhone app and databases, and we have decided to continue to

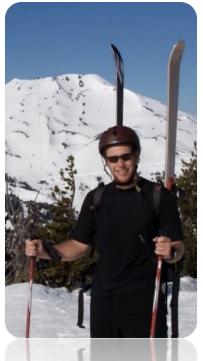
SnowShoe LLC Page 14 of 29



work on the SnowShoe movement regardless of CLC funding level. We will also pursue additional sources of funding.

We are aware of other companies that market point-of-sale smart phone apps, but none that track carbon emissions.<sup>7,8</sup> Most of these apps are designed to inform customers of food recalls or to provide nutritional information. In Europe there are several large food databases created to track source information. These databases were designed in response to European food scandals that took place in the 1990s (e.g. mad cow disease), and they are now used to improve the efficiency of food distribution networks and to increase food production safety.<sup>9,10</sup> Although these databases and iPhone apps may, at first glance, seem similar to ours, SnowShoe LLC fills a large void not currently satisfied by other available smartphone products.

**SnowShoe plans to be a first-mover in our specific market niche.** First-mover status will give us a head start in the construction of our database resources and, therefore, provide an important barrier to entry for any potential competitors.



# 7. Organizational Structure

SnowShoe LLC seeks to create a culture of collaboration, both through the external activities of the organization and its internal structure. The SnowShoe LLC team, comprised of Claus Moberg, Jami Morton, and Matt Luedke, met on the UW-Madison campus in the Nelson Institute's Center for Sustainability and the Global Environment (SAGE). While having different geographic and academic backgrounds, they found that their shared passion for environmental sustainability led to effective teamwork. The CLC competition became an ideal place to put this collaboration to work.

# 7.1 Chief Executive Officer - Claus Moberg

Claus has a marked affinity for interdisciplinary collaboration and entrepreneurial enterprise. This is exhibited both through his formal academic development and in the activities he pursues during his free time.

Claus is currently an M.S. Candidate in the Department of Atmospheric and Oceanic Sciences at the University of Wisconsin. His research uses advanced

SnowShoe LLC Page 15 of 29

<sup>&</sup>lt;sup>7</sup> http://www.goodguide.com/ Accessed March 6, 2010

<sup>8</sup>http://www.readwriteweb.com/archives/ibm debuts food traceability iphone app.php Accessed March 10, 2010

<sup>&</sup>lt;sup>9</sup> http://www.tracetracker.com/ Accessed March 1, 2010

<sup>&</sup>lt;sup>10</sup> http://www.foodtraceability.eu/page/home Accessed February 27, 2010



computer modeling techniques to examine the interface between regional- and global-scale air pollution and associated impacts on human welfare. Unlike most atmospheric scientists, however, Claus' undergraduate degrees were conducted in the social sciences: he majored in Political Science and completed an individual major entitled "Politics, Economics and Environmental Studies" at the University of Wisconsin-Madison, in the spring of 2007.

Claus has pursued many extracurricular opportunities that have advanced his unique personal skill set. Perhaps most relevant to SnowShoe LLC was his participation in the 2008 Wisconsin Entrepreneurial Bootcamp. This seven day intensive learning opportunity is designed to expose science and technology graduate students to the principles of business management and entrepreneurial science. Further, in the summers of 1999, 2000 and 2001, Claus participated in an internship with the Hurricane Research Department of the Atlantic Oceanographic and Meteorological Laboratory where he took part in hurricane reconnaissance flights. He has also interned in the office of the Hon. Jennifer Schilling, a Wisconsin State Representative, was the chair of the University of Wisconsin chapter of the

Sierra Student Coalition and was a founding member of the Madison Clean Energy Coalition. Through these and other possitions, he has gained extensive knowledge of energy systems infrastructure, event planning, logistical organization, statistical evaluation and data management.

Born in the mountains of North Carolina and raised in the suburbs of Washington DC, Claus currently lives in Madison with his wife, Christine, and their two dogs. He enjoys ice hockey, cycling, skiing, mountaineering, kayaking and anything else that can be done in the outdoors.

#### 7.2 Chief Financial Officer - Jami Morton

When Jami is not cooking in her kitchen or at the local farmers market she is at the UW-Madison completing her M.S. in Environment and Resources. She transferred from Duke University in fall 2009 to focus her studies on air quality and climate change. Her current research project is to advance scientific understanding of the mercury chemical cycle while using the EPA's Community Multiscale Air Quality

(CMAQ) model. Jami received a B.S. in Chemistry and a minor in Environmental Engineering and Sciences at Colorado School of Mines in 2008. It was her extensive research background that aided her to explore current smart phone applications and other food databases, allowing for SnowShoe LLC to develop a more comprehensive product.

SnowShoe LLC Page 16 of 29



As an undergrad, Jami participated in many extracurricular organizations while supervising the monthly budget for two distinguished clubs. She also was a student intern for two years at the National Renewable Energy Laboratory (NREL) in their Transportation Department. It was at NREL where she was exposed to cutting-edge research relating to biofuels, and started to recognize how environmental policy can be shaped by scientific research.

It is because of Jami's love of fresh and local food that she became excited about SnowShoe LLC and the CLC competition. It is her organization skills and creative thinking that has added value to SnowShoe LLC's development. She also contributed to the financial feasibility of the company and constructed a yearly budget for

SnowShoe LLC. In Jami's spare time not only does she enjoy cooking and baking, but she takes pleasure in reading, running around Madison, and is about to start gardening for the first time!

# 7.3 Chief Operating Officer - Matt Luedke

Matt is a first-year graduate student in Civil and Environmental Engineering (CEE) at UW-Madison. His undergraduate studies were at the University of Illinois at Urbana-Champaign (UIUC), graduating in 2009 with a major in Industrial and Entrepreneurial Systems Engineering (IESE) and minor in Business Administration. The systemsthinking approach he developed in that program was helpful while constructing the SnowShoe LLC product plans, including the logical framework for the SnowShoe iPhone App.

Matt was also a summer intern with the Illinois Environmental Protection Agency (IEPA) in 2008 and 2009, in the Office of Pollution Prevention. Here he was able to see the interaction between government and business actors, and the importance of using adaptable incentives to encourage sustainable change while making important information accessible to all stakeholders. This focus on incentives, information, and accessibility are all central to SnowShoe LLC's mission.

He combines this practical knowledge with important leadership experience from advising a residence hall for two years at UIUC. He went beyond the standard job responsibilities by founding and running a residence hall-based environmental justice student group. His community organizing, social marketing, and management experience with this student group will be helpful to effectively market SnowShoe LLC and maintain its focus on environmental and social sustainability. He also enjoys writing music and hopes to let his creative side contribute to marketing

SnowShoe LLC Page 17 of 29



and advertising efforts such as the SnowShoe LLC YouTube Video (described in Appendix D).

# 8. Marketing and Sales Strategy

As stated earlier, SnowShoe LLC's first guiding principle is data. Any potential environmental or social benefits would be forfeit if the information remains unused. To ensure widespread dissemination of information, the SnowShoe LLC team will pursue an energetic and diverse marketing approach.

The simplest form of marketing will be SnowShoe LLC's advertisements. SnowShoe LLC's primary merchandising logo is a negative image composition of a snowshoe depicted such that the positive image is an ear of corn. We believe this is an effective communication of our company's core beliefs as it highlights both the "footprint" and "food" aspects of our business niche. The SnowShoe byline is a Native American proverb: "We will be known forever by the tracks we leave behind."

It is our perception that the target market (18-54 year olds) for SnowShoe LLC has grown weary of products advertised in a "billboard" manner, especially in the age of social technology. In other words, a simple one-way, advertising-only marketing scheme will not be successful. While name recognition will certainly be served by buying ad space on popular online social networks such as Twitter and Facebook, user feedback and community involvement will be an even greater focus. Remember that SnowShoe LLC's vision is to not just be a product, or even just a solution,

but to be an entire movement.

Geographically, SnowShoe LLC is currently based in Madison, WI. The marketing and database development efforts will begin there, and will expand to other "campustown" communities across the Midwest such as Champaign, IL and Ann Arbor, MI.

SnowShoe LLC's first marketing activity will be to begin a healthy conversation with campus and community environmental groups, presenting the importance of SnowShoe LLC in a way that resonates with their community goals and values. The social and environmental sustainability goals of the SnowShoe LLC movement are well aligned with these groups, and product demonstrations to these groups could spur a strong word-of-mouth campaign.

At the same time, SnowShoe LLC will communicate with the local food producer community, establishing contacts and showing how SnowShoe LLC can help them

SnowShoe LLC Page 18 of 29



position themselves to gain market share with a well-informed consumer base. We will give food producers a space to describe the environmental benefits of their practices on our SnowShoe Base Camp website, and will display the importance of the SnowShoe Consumer Behavior Database.

Next, SnowShoe LLC will begin partnerships with several Madison-area grocery stores. Some stores may allow us to hold product demonstrations in their stores, videos of which will be posted on the SnowShoe Base Camp website. This will not only help us increase brand awareness, but will enhance the store's image among our online users. We also plan to develop an in-store advertisement displaying the SnowShoe LLC logo and informing customers that this particular store has been fully entered in our SnowShoe Foodie Database. This will increase awareness of our movement and also encourage current members to regularly shop at that store.

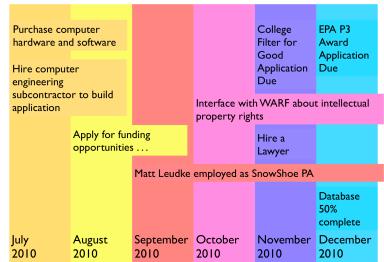
As described earlier, the SnowShoe Base Camp web presence will encourage discussion and foster food sustainability accountability among SnowShoe users. Members can choose to follow SnowShoe LLC on Twitter, which will periodically update with database expansions, cumulative carbon footprint reductions by the SnowShoe LLC movement, and other food sustainability news.

On the Facebook page and website, the SnowShoe LLC team will host contests for user creations such as "Local Recipe Cook-off" videos, environmental photography, and even "Environmental Detective Work" (i.e. finding where a community's waste is sent, where and how a particular product is made, how many plastic bags a particular store uses, etc.) The goal of these contests is to spur user action and creativity in a direction towards which the users already lean but need extra incentives.

# 9. Projected Timeline

We anticipate significant growth for SnowShoe LLC in the first year of operation (July 2010-June 2011).

July, 2010: We would like to have CLC funding awarded to SnowShoe LLC sometime between June and July. We will have several major expenditures for July and August of 2010. These



include the purchase of a database server and associated software, computer licenses and fees, as well as the hiring of a subcontractor to help construct the iPhone app. The summer of 2010 will be primarily used for developing the food

SnowShoe LLC Page 19 of 29



database and building the iPhone app. We also plan to spend time applying for outside funding opportunities, as we anticipate costly expenses during the first year of operation with few revenue streams.

**September, 2010:** SnowShoe LLC plans to gift, to the University of Wisconsin Foundation, funds sufficient to support Matt Luedke as a 60% project assistant (PA) assigned to work with SnowShoe LLC in all business and development capacities. Matt will be the primary person in charge of programming the iPhone app and building the database for the period of August 2010 through August of 2011.

**October, 2010**: The board members of SnowShoe LLC will consult with the Wisconsin Alumni Research Foundation (WARF) about protecting our intellectual property rights, including the patentability of both the iPhone app and the databases, as well as copyright and trademark rights for our corporate identity.

**November, 2010:** Prior to the release of our first product, we plan to hire a lawyer to draft the Terms and Conditions document that will distributed with the iPhone app.

**December, 2010:** It is our hope to have more than 50% of the database constructed

Matt Leudke employed as SnowShoe PA Interface with WARF about intellectual property rights Lauch **iPhone** Арр Marketing & continued development of SnowShoe iPhone App 7th Annual Burrill Develop SnowShoe fresh produce Clean Tech competition database Summit in business Palm Launch & promote plan due Springs, CA SnowShoe Consulting Business January February March April May lune 2011 2011 2011 2011 2011 2011

by the end of the year, with packaged goods being our first priority.

January, 2011: We plan to launch the SnowShoe LLC iPhone app on Ianuary 1. 2011. Initial advertising initiatives will focus on social networking, web2.0. word-of-mouth promotion. Also in January, we plan to send Matt Luedke to the 7th Annual Clean Tech Summit to gain insightful information for our business and to promote our product and

ever-growing database.

**April, 2011:** By the spring of 2011, we will begin assembling the fresh produce section of the SnowShoe LLC database. We expect that defining the carbon footprint for grocery store produce will be challenging and thus we plan to continue work on this task throughout 2011 and beyond.

**May 2011:** Toward the end of our first year of operation, and once the SnowShoe LLC database is sufficiently comprehensive, we anticipate launching a corporate food sustainability and institutional food consulting enterprise

SnowShoe LLC Page 20 of 29



# **Appendices**

# **Appendix A: SnowShoe LLC projected 3-year income statement**

SnowShoe LLC	•		
2010-2011	Year 1	Year 2	Year 3
Income Statement	(July 2010-	(July 2011-	(July 2012-
	June 2011)	June 2012)	June 2013)
Revenues			
CLC income w/o interest Traveling funds from	50,000	0	0
CLC	5,000	0	0
Revenue from app	57	5,474	529,969
Advertisement sells	95	10,258	994,098
Grants	0	50,000	0
Database consulting	10,000	60,000	75,000
Total Revenues	65,152	125,732	1,599,067
Expenses			
Gift to university for		_	
Matt's PA	34,657	0	0
Salary	0	55,000	150,000
Subcontractor fees app Marketing/advertisement	5,000	3,000	2,000
activities Taveling for	0	7,000	20,000
conferences- CLC funds	5,000	10,000	40,000
Computers/ hardware Software + online	10,000	5,000	20,000
security software	0	4,000	6,000
Legal fees - lawyer	500	5,000	5,000
Insurance	0	2,000	10,000
Repairs and Maintaince	0	1,500	3,500
iPhones	3,880	3,880	3,880
traveling for database	0	10,000	10,000
Training fees	0	500	0
Internet service fee	0	7,200	14,400
Utilities	0	2,400	6,000
Miscellaneous	0	3,000	3,000
Hand held scanner	800	800	800
<b>Total Expenses</b> Net income before	59,837	120,280	294,580
income taxes	5,315	5,452	1,304,487
Income taxes	2,126	2,181	45,270
Net income	3,189	3,271	1,259,217

SnowShoe LLC Page 21 of 29



#### **Income Statement Explanation:**

Note: the calculations employed in the SnowShoe LLC financial documents here presented are conservative in nature. We consider these numbers to be the lower bound on projected SnowShoe LLC revenue for all cases wherein the company achieves its stated growth milestones. It is likely that actual month-to-month income would be higher (as a result of a flatter, less exponential user growth rate), so long as all growth milestones are, in fact, achieved. In the event that SnowShoe LLC does not meet our specific growth milestones, both monthly and end-of-year revenues would obviously be lower than shown in this forecast.

#### **Revenues:**

- CLC income w/o interest: We anticipate receiving the full \$50,000 Most Action-Ready award
- **Traveling funds from CLC:** We will take advantage of the \$5000 in additional travel funding allotted through the CLC Most Action-Ready Award. These funds will support Matt Luedke's attendance at the 7th Annual Clean Tech Summit in Palm Springs, CA.
- Revenue from app sales: As is outlined in appendix C, we have forecast an exponential growth curve that has SnowShoe LLC reach 630,000 app sales by June of 2013. As a result of this exponential growth rate, actual app sales in the first year are quite small relative to the substantial growth shown in year three. The 630,000-sale figure is equal to 5% of the total expected size of our target audience in June of 2013. Apps will be sold at a price of \$1 per download, with 30% of gross sales revenue kept by Apple Inc for sales through the Apple App Store.<sup>7</sup>
- **Advertisement sales:** We have estimated total revenue from advertising sales to be \$1/month/real user. The quantity of real users (i.e. users who actively utilize the app on a regular basis) is defined here as the total cumulative SnowShoe iPhone App sales in a given month, reduced by 50% to account for user attrition.
- **Grants:** SnowShoe LLC will actively pursue other green business plan competition funds and other similar "angel gifts." To maintain the conservative nature of the herein projected financial statistics, we do not anticipate receiving any additional finance-free funds in our first year of operation, though we do include an additional \$50,000 in funding for our second year.
- Database Consulting: We are quite certain that SnowShoe LLC will be able to translate the
  significant value of our food sustainability data resources into real financial benefits through
  the consulting activities described in this proposal. We have, therefore, estimated annually
  increasing revenues from these activities, though the exact nature of the individual
  consulting agreements (e.g. payment plans and terms of service) have, obviously, yet to be
  defined

### **Expenses:**

- **Gift to University Foundation to fund 60% PA appointment:** These funds will provide Matt Luedke's tuition, salary and benefits package for the 2010-2011 academic school year (Aug 2010-Aug 2011).
- **Salary:** as a result of funding Matt through a PA, we have no salary expenses in the first year. We anticipate hiring one full time and one half-time employee in our second year of operation, and, in our third year of operation, hiring three full-time employees.
- **Subcontractor fees:** We will use \$5000 of the CLC award, in the first year, to hire a subcontractor to build significant portions of the SnowShoe iPhone App. We anticipate decreasing subcontractor costs as SnowShoe LLC internal programming capacity is built through hiring new employees in years two and three.

SnowShoe LLC Page 22 of 29

 $<sup>^7\,</sup>http://blogs.wsj.com/digits/2009/07/02/just-how-successful-is-the-iphone-app-store/tab/article/ Accessed March 23, 2003$ 



- Marketing/advertising activities: The first year of the SnowShoe LLC budget does not
  provide room for significant advertising-explicit expenditures. However, we anticipate
  receiving significant publicity from winning the CLC competition, and through nontraditional "free marketing" pathways (e.g. word of mouth and participation in web2.0
  community building activities).<sup>8 9</sup>
- Traveling for conferences: As is stated above, we will accept the \$5000 in CLC travel funds to support Matt Luedke's attendance at the 7th Annual Clean Tech Conference in Palm Springs, CA. We anticipate sending a larger presence to such conferences and publicity opportunities in future years, with such traveling expenditures roughly scaled to SnowShoe LLC's revenue growth.
- **Computers hardware:** We anticipate spending \$10,000 on computer technology in the first year, and that the capacity attained at this time will last, with small modifications, through year two. We therefore have relatively low computer expenditures forecast for year two, with a second round of major capital investment forecast for year three of SnowShoe LLC operation to account for exponential growth of our user base.
- **Software and Internet technology security:** We expect these costs to grow in proportion to the size of our user base, and that some of the services provided by the MIC will offset these costs in SnowShoe LLC's first year.
- **Legal fees:** In the first year, we will hire a lawyer to draft the SnowShoe iPhone App Terms and Conditions document. In subsequent years, as SnowShoe LLC grows into a larger company, we anticipate increases in our legal expenditures for tax processing and reporting, as well as for other assorted legal requirements.
- **Insurance:** We do not anticipate insuring any aspects of SnowShoe LLC activity or capital in the first year of operation, though we will insure our capital investments in subsequent years and in accordance with the size of these investments.
- **Repairs and maintenance:** As SnowShoe LLC capital investments age, we have forecast increasing repair and maintenance costs. These funds will be set aside as a "rainy day fund" in the event that actual repair and maintenance costs are lower than predicted.
- **iPhones:** Each of the three SnowShoe LLC partners will be granted a company iPhone to use in iPhone app development and database construction activities.
- Traveling for database: Initial database construction will focus on comprehensive coverage for food items sold in Madison, WI. As coverage in the southern Wisconsin region increases in years two and three, we will begin to venture into additional geographic markets, thus necessitating travel expenditures to allow for data entry of local and regional food items.
- **Training fees:** We have allotted a small amount of money to fund employee enrollment in a training course in year two.
- **Internet service fees:** Due to the excellent internet service provided a the MIC office space, we are fortunate to not require additional expenditure of internet service during year one of operation. Subsequent years, however, will see our internet service expenditures increase in proportion to database and app user activity.
- **Utilities:** Again, due to the support provided by the MIC, we do not forecast utility expenditures in our income statement for year one.
- **Miscellaneous:** we will maintain a reserve petty cash fund in years two and three to provide financial flexibility and account for unforeseen expenses.
- **Hand held scanner:** we will purchase one hand-held bar code scanner in each year of our operation.

SnowShoe LLC Page 23 of 29

\_\_\_

<sup>8 &</sup>lt;a href="http://www.mobilemarketingwatch.com/free-iphone-apps-ad-revenue-still-steadily-increasing/">http://www.mobilemarketingwatch.com/free-iphone-apps-ad-revenue-still-steadily-increasing/</a> Accessed March 23, 2003

<sup>9</sup> http://techcrunch.com/2009/05/06/just-how-much-money-can-free-iphone-apps-make-quite-a-bit/Accessed March 23, 2003