GreenTecLab

Empowerment for 'green' start-ups for climate protection and sustainability

"Simply Green – a biofuel Company" – Case Study

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Module 9 – Case Study Part II: How to create a business? Providing Information

Annex 2

Case Study of

Simply Green® a biofuels company

Sources: ***Sustainable Business Cases*** *and* ***Simply Green***

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INTRODUCTION TO SIMPLY GREEN

This case provides the example of a start-up sustainable business venture. Its purpose is to provide the reader with a detailed look at the challenges of entrepreneurship and of small company management in a sustainable business enterprise. Readers should consider this case in the context of the triple bottom line—people, profit, and planet.

Simply Green Biofuels (http://www.simplygreenbiofuels.com) offers green alternatives to home heating, diesel, and marine fuelling in the seacoast New Hampshire and southern Maine area. The company's flagship biofuel[1] blends can be used without any changes to a customer's heating system or motor vehicle engine.

In four years, from 2007 to 2011, the company grew its customer base to more than 1,400 customers and, according to Biofuels Digest, established itself as one of the leading companies in the bioenergy sector nationally. Its founder, Andrew Kellar, was named one the "25 Leaders for the Next 25 Years" by *BusinessNH Magazine* in 2009.

The company's biofuels are locally sourced from waste vegetable oil (WVO). Typically, WVO is collected as recycled vegetable oils from restaurants and distributors. Once it's refined into a petroleum-like fuel, it is combined with traditional petroleum products to make biofuel blends.

The company offers a bio heating oil product called BioHeat and biodiesel for motor vehicle use in three different blends. The only difference between BioHeat fuel and biodiesel motor engine biofuel is that BioHeat is blended with heating oil, and biodiesel is blended with diesel fuel. The blends and their environmental attributes and benefits are as follows:

- B5. B5 is a blend of 5% biofuel and 95% heating oil or diesel fuel. By using B5, the typical consumer will reduce their CO_2 emissions by 4% or the equivalent of planting fifty-two trees.
- B20. This blend contains 20% biofuel and 80% heating oil or diesel fuel. By using B20, the typical consumer will reduce their CO_2 emissions by 16% or the equivalent of planting 192 trees.
- B100. This blend contains 100% biofuel and no heating oil or diesel fuel. In its purest form, biofuel is a highly solvent product that breaks down any petroleum residue (e.g., sludge) that has built up in a system over time.

Every heating and motor vehicle manufacturer has endorsed the use of B5. However, Simply Green states that after B5 has been run for a sufficient amount of time (typically after a couple deliveries), customers may be able to "bump up" to a B20 blend.

Note

Biofuels Contribution to Reduction of Greenhouse Gas

Biofuels offer the potential to reduce greenhouse gas (GHG) emissions because the carbon in the plant matter from which biofuels are produced comes from the carbon dioxide absorbed by the plants from the atmosphere during their lifetime. This is in contrast to the carbon in fossil fuels, which has been sequestered underground for millions of years and is released into the atmosphere as carbon dioxide when the fuels are burnt. Biofuels can lead to significant GHG emissions savings compared to fossil fuels.

[1] A fuel source generated from a renewable, biological source, such as corn, soybeans, or algae.

One might think that Simply Green started partly out of necessity and partly out of Andrew Kellar's passion and concern for the environment. Andrew Kellar identified an opportunity—a market niche that was not being filled—and he developed a business to meet that opportunity. But that is not how he or Simply Green got started. In 2003, Simply Green was founded by Andrew as an erosion control and hydro-seeding business. It was a seasonal business that fit well with Andrew's preferred lifestyle. It enabled him to pursue his passion for outdoor activities, including surfing in Mexico with his wife during the cold winter seasons in New Hampshire. His passion for the environment started when he was young. In addition to surfing as a youth, he was constantly doing activities to help protect the environment, including beach clean-ups and recycling.

As Simply Green's hydro-seeding business grew, the company required additional trucks and equipment, which, in turn, required the use of more and more diesel fuel. Andrew, with his love for the outdoors, became increasingly concerned about the negative environmental impact of his company's use of diesel. This concern led Andrew to investigate alternatives. Were there options for fuel that could still power his business but reduce his negative impact?

Andrew had heard of people collecting grease from McDonald's or other fast food restaurants and then using it to power their motor vehicles. This intrigued him and he started to see if there was a biofuel alternative to power the vehicles and equipment for his business.

Starting in 2006, Andrew started looking into the biodiesel market more deeply. At the time, there was limited availability in northern New England. He could only locate two gas stations that provided biodiesel, one that was somewhat close to his operating area and one that was two hours away. Also there was only one home heating fuel provider in the area that offered biodiesel, but it was not their main focus; instead, it was a specialty product that they offered.

For Andrew, a personal change was one of the major factors that convinced him to move forward into biofuels. Andrew and his wife, Ginger, received a phone call from the Florida Department of Children and Families. There were three young children that were in need of a home who were relatives of the Kellars. The Kellars took the children in. Andrew's new parenting role and responsibility got him to think about how he could positively impact society and the earth and also how he was going to help support the three new additions to the family. This convinced him to start the business.

As Andrew describes, fate may have had a hand in the situation: "What really kicked me over was that phone call. The phone call that we were going to be parents instantly… And, call it fate, call it whatever you want, but I had just finished doing a hydro seeding job for this one customer and I was researching online where the supply sources were and it said, for more information on our biodiesel, contact Tim Keaveney. And I looked down, this one evening, and there was a check from Tim K for the hydro seeding I just did."

THE CHALLENGES AND OVERCOMING THEM

After Andrew's first meeting with Tim Keaveney, he realized quickly that he was facing several different challenges. The first—entering an established, mature[2] home heating oil industry—was going to be extremely difficult. Tim told Andrew, "Nobody starts a fuel business these days. I mean,

[2] An industry that has been in existence for a long period of time featuring many competitors and relatively low profit margins

the youngest fuel company in this area is 10 or 12 years old." Fuel distribution to homes was a challenging industry to get into because traditionally they were multigenerational businesses with very loyal customers. There was no easy solution to this challenge. Andrew was simply willing to take a leap of faith and try to help transform the industry by offering a new product into the marketplace.

Not only was Andrew entering a mature industry, but he was entering an industry that he had no experience in. While his hydro-seeding business had provided him with experience in a service-based industry and experience running a business, he did not have experience in fuel procurement and delivery. Another challenge was capital. Any new business or business expansion faces this challenge—access to adequate capital. Simply Green was better positioned, in terms of financial position, than many other new businesses. Its new business expansion could be in part self-funded.

Andrew Kellar, unlike many other entrepreneurs, was fortunate to have the hydro-seeding business, which, at the time, was one of the largest in the region and was generating positive net revenue of approximately $100,000 annually.

Note

Self-Funding a Business Start-Up

Self-funding involves funding a venture through savings accumulated on one's own or in a previous business. It can also include taking on personal debt through bank loans or loans from friends and family and use of personal lines of credit.

Simply Green started the biofuel home heating side of the business in April 2007. To most fuel providers, this would have seemed to be the worst time of year to start because it was toward the end of the heating season in the Northeast. But for Simply Green it made sense because the company had the ability to softly test the market through early adopter customers and learn from that experience. Andrew's plan was to capture some revenue from the heating season market, go into the summer time, quickly re-evaluate what was working and what needed improvement, and then move on into the next heating season.

This soft market entry[3] approach also helped with another challenge—educating their potential customers about their product and value proposition[4]. Simply Green used different types of marketing and public relations[5] to educate the public about their unique product offering. As Andrew describes it, "We were not concerned with going to any type of event. We didn't care if it was a first graders' classroom that we were going to, we would go in and talk. We would go to every place we had an opportunity to talk about biofuel and our services. And looking back now, the irony of that is where people remembered seeing us, and hearing us, were in some of those obscure places that you wouldn't have normally thought from a marketing standpoint that people would remember you and actually make a decision to buy your product or service."

[3] An approach for entering a new market by testing the market on a small scale, learning from the experience, and adjusting business approach prior to a wide-scale market entry

[4] A business or marketing statement that summarizes why a consumer should buy a product or use a service

[5] The practice of managing communication between an organization and its public

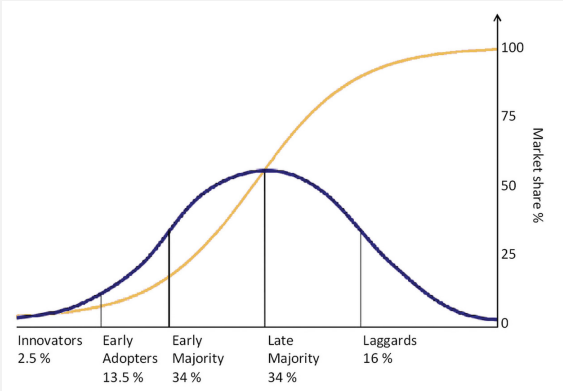
Note

Early Adopters of Products

An early adopter is a person who embraces new technology before most other people do. Early adopters tend to buy new products sooner than most others.

According to a theory called diffusion of innovations, formulated by Everett Rogers, early adopters make up 13.5% of the population. Early adopters, while eager to explore new products, are not the first to buy a new offering.

That role, according to Rogers, is played by a small minority just under 3% of people called innovators. Laggards are at the other end of the spectrum. They are reluctant to embrace new technology because of disinterest, financial constraints, or fear.



Source: Wikimedia, http://upload.wikimedia.org/wikipedia/commons/0/0f/Diffusionofideas.PNG

Note

Value Proposition for a Business

A value proposition is a business or marketing statement that summarizes why a consumer should buy a product or use a service. The statement should be able to convince a potential consumer that one particular product or service will add more value or better solve a problem than other offerings.

Another challenge was the licensing and the regulatory process of entering the highly regulated fuel industry. While Simply Green was providing biofuel, it was a blended product and it had conventional fuel in it so the company had to be regulated just like any other heating oil or diesel provider. (See Appendix 2 for a brief description of Biofuels) Simply Green had to learn about and undertake many different types of licensing including at the state level, for hazardous material, and from the US Department of Transportation.

Simply Green already had experience with the US Department of Transportation (USDOT) licensing as they had just completed a vehicle audit. Andrew was already familiar with the licensing process, and the USDOT official who was involved with the audit made the audit more of an educational audit. During an audit, as Andrew was considering biofuel sales, the USDOT official was so intrigued by the potential Simply Green entry into biofuel provision that he became a customer and also then became an adviser to the company.

The lesson for Andrew was the importance of relations, contacts, and broader social networks for developing business opportunities. As Andrew describes it, “It was important not to be afraid to ask people that might know somebody or that might have an in with somebody that might have the information we were looking for.”

GETTING THE BUSINESS OFF THE GROUND

When Simply Green’s biofuel business commenced in April 2007, Andrew started with family and friends as his first customers. Some of the other initial customers came from contacts from the hydro-seeding side of Simply Green’s business, including the USDOT official.

In the first six months, Simply Green expanded its customer base to fifty. Building from the first season’s customer base was mostly about education, getting potential customers familiar with Simply Green biofuel products; getting people to understand what biofuels were, its environmental benefits, and how it was easy to use; and convincing them that it was not going to negatively impact their vehicles or their homes. With outreach and education, people started to learn, develop interest, and trust and started to tell their friends. Some took the leap of faith and signed on to try BioHeat.

In its second year, Simply Green grew quickly. It started to grow fast, in part, because of the increased concern about the human influence on climate change after the 2006 release of the movie An Inconvenient Truth. As Andrew describes it, “When we were talking to potential customers about the environmental impact of different fuel options, people were seeing it on the big screen. It just helped pave the path a little bit easier for us to get down the education road. And we quickly started to see an increase in our customer base.”

Simply Green was entering an established market for fuel that had certain characteristics that the company had to understand and figure how to effectively compete in the context of these characteristics. While most of the competition was based on price, it was also subject to strong customer loyalty to dealers who had been delivering their fuel for a long time. A larger dealer might be making $0.60 a gallon over wholesale, versus $0.40 a gallon for a smaller establishment. Simply Green usually came in anywhere in the middle of these, as it was unknown whether customers would pay a premium for a more environmentally friendly product.

Simply Green pegged their price to range from $0.05 to $0.10 on either side of the conventional competition. And in addition to being able to address their customers’ environmental concerns, a benefit Simply Green’s product had over the conventional competition was that it burned cleaner in furnaces and car engines. It helped the system: either the engine in the vehicle or the heating system in the home or workplace. It allowed engines and furnaces to clean themselves, as the biofuel acted as a natural solvent. And this lowered the customer’s maintenance cost, extended the life of the furnace or engine, and increased the burning efficiency of the furnace or engine by about 5%. So any relatively small price premium for Simply Green biofuels could pay for itself.

In the first full year, Simply Green grew the customer base to about five hundred customers. In addition, Simply Green continued to engage in creative marketing and outreach. One of the best examples of this was Andrew making cold (unsolicited and without any prior connection) phone calls to music industry performers touring in the region whose fans and the performers themselves were expressing concerns about the environmental footprints of their performance tours. For Andrew this was fun and exciting. He was able to connect with Guster, Dave Matthews, Jack Johnson, and Farm Aid.

In May 2007, as Andrew describes it, "I saw that the band Guster was coming to this area. And I knew that they were pretty environmentally concerned with how they set up their concerts. So I put a call into this organization that was managing their concert venues, called Reverb. And the woman who runs it was the wife of one of the band members. Long story short, she and I grew up in the same town, and we didn't realize, she was friends with my best friend's older brother." Again, Andrew was able to make a personal connection and turn social networking into a business benefit.

The Reverb[6] representative (http://www.reverb.org/about) was very excited that Simply Green could deliver the biodiesel directly to Guster's tour entourage. So Andrew brought the truck filled with biodiesel to their location and filled their tour buses and their tractor trailers. Guster's handlers took a photo of the tour bus being filled from a Simply Green biofuels truck and the photo went viral in many publications and the Internet, the biggest publication being an issue of *Rolling Stone*.

After Guster, Simply Green fuelled the tour buses for Dave Mathews, John Mayer, the Beastie Boys, Farm Aid, Kelly Clarkson, the Blue Man Group, Sheryl Crow, Willie Nelson, Jack Johnson, Phish, Coldplay, Maroon 5, and Styx.

This instantly gave Simply Green higher credibility and visibility. The perception of the fuel industry in general was the delivery driver that would come to clients' home. And that same company came to those clients' home every year. But Simply Green was trying to change the standard practice. They wanted it to become something different. They wanted to enable the public to be able to make a purchase motivated by environmental concerns and to have that be "hip and cool." And once they got the *Rolling Stone* exposure, that credibility and market buzz carried through into their local press. A lot of local press started picking up on what Simply Green was trying to do.

As Andrew describes it, "That's really what impacted our business the most…the amount of public relations that we got from *Rolling Stone* and some of these really fun events, that may not even been the best business decision because we might have driven to the southern part of Massachusetts to deliver 500 gallons of fuel and we might not have covered the cost of getting there and the driver's time. But what that and similar efforts did for us was continually got us in the press. If it wasn't every week, it was probably every other week, or a couple times a month, a few times a month. And then people started to read about us, and that's where the phone calls started to come in. We started to get up the education curve with our potential customers, the credible component to hearing it or reading it in the newspaper, started to multiply, and we really start to see the business pick up."

It was not just the cover of *Rolling Stone*. Simply Green used community engagement and its commitment to serving the community to reach out to potential customers, to get noticed, and to establish its market presence. In April 2008, the company created a not-for-profit subsidiary, the Green Alliance, in the greater seacoast of New Hampshire area as a public relations and marketing division to educate the community on "being green."

Simply Green also used its commitment to serve the community to build its customer base. In February 2008, the company serviced former Veilleux, Peron Fuel, and Price Rite customers after the companies stopped delivering fuel and went out of business in the middle of winter. For this, Andrew Kellar and the Simply Green team won the Environmental Hero award in Maine. Again in May 2008, Simply Green helped out households in need, offering special pricing for Rye Fuel customers that were unable to get deliveries of their prebuy fuel at the end of the heating season. And in July 2008, when fuel prices were peaking at $4 a gallon, Simply Green offered discount prices to large groups, such as neighbourhoods, town co-ops, and employees of local businesses.

[6] Reverb is a non-profit organization which is helping the Music Industry "Go Green"

STAFFING THE BUSINESS

From April 2007 to the end of the year, Andrew operated as a solo entrepreneur and employee. In January 2008, Simply Green added its first employee. Staffing increased steadily along with customers and revenue growing to ten employees in April 2009 and seventeen employees in April 2010. The first hires were fuel truck drivers who became the public face of the company. As Andrew describes it, "We wanted each of our drivers to be the face of the company and be able to educate and handle any onsite customer service concerns. We also wanted them to have a clean and friendly demeanour. We were fortunate to find just the right mix of drivers that supported the brand and our mission."

Simply Green then added to its marketing staff for customer outreach and acquiring new customers. The last area Simply Green added to was operations staff. Operations managed customer relationships after deliveries occurred and also managed the internal relationships of the employees. Simply Green was able to find all their employees, with only two exceptions, through referrals by staff members. Recruited employees wanted to work for a socially and environmentally responsible company that was contributing to the community that they all lived in.

GROWING THE BUSINESS

In the fall of 2008, Simply Green expanded and diversified, adding a biodiesel division, opening up a gas station, and starting to do research into third-generation biofuels with scientists at the University of New Hampshire.

The gas station was a first of its kind. The station located at a busy intersection in Dover, New Hampshire, sold biofuel for automobiles and also included a "congreenience" store. The concept behind the "congreenience" store was to be a traditional convenience store with a green twist to it. The store had solar panels on the roof, used bamboo flooring, and sold local food. About 75% of all the products in the store came from within a one hundred mile radius, to support the local economy and local vendors. The station had two different types of biodiesel available at the pump, gasoline, which had a 10% blend of bio (ethanol), and a fully biofuel product.

With the station, Simply Green had the ability to further promote the sustainability mission and commitment of the company. The station became a highly visible showplace for Simply Green to educate more customers. There were more than one hundred people at the station every day and about 50% were new to the store, looking to fuel up their vehicles or get a cup of coffee, and thousands of others drove by every day. So that was an opportunity, every day, to educate.

Source: Simply Green.

With the "congreenience" store, community outreach, and other efforts, Simply Green's customer base continued to grow at a steady pace. By April 2009, Simply Green had one thousand customers. And by September 2009, as Andrew describes it, "We were creeping towards profitability."

THE KEYS TO SUCCESS

Critical to the company's success was its filling of a market niche, focus on core products, and effective messaging and education. Customers could simply, with no or minimal extra cost and very little risk, reduce their carbon footprint[7] and feel good about it by buying Simply Green biofuel.

An important factor in Simply Green's success was the highly creative and energetic market outreach led personally by the founding entrepreneur himself. The educational outreach took the approach that all events and opportunities to get the word out about Simply Green and biofuels were worthwhile.

[7] A carbon footprint is defined as: The total amount of greenhouse gases produced to directly and indirectly support human activities, usually expressed in equivalent tons of carbon dioxide (CO_2). In other words: When we drive a car, the engine burns fuel which creates a certain amount of CO_2, depending on its fuel consumption and the driving distance. When we heat our house with oil, gas or coal, then we also generate CO_2. Even if we heat our house with electricity, the generation of the electrical power may also have emitted a certain amount of CO_2. When we buy food and goods, the production of the food and goods also emitted some quantities of CO_2.
Our carbon footprint is the sum of all emissions of CO_2, which were induced by our activities in a given time frame. Usually a carbon footprint is calculated for the time period of a year.

Underpinning it all was the consistent and persistent branding. The branding was about being a sustainable business with a triple bottom line that included concern for the planet and people and was focused on helping customers act on their own concerns about the environment. This was sincere and it came off as such, and customers responded positively. As Andrew describes it, "We were really concerned about how we came across to our customers. We wanted to be as authentic and as transparent about our own practices, so that way our customers felt as though they were buying something from somebody, from a company that truly cared about the environment. We practiced what we were preaching. We were out there at events. We were supporting other businesses that were doing the right thing."

WHY NO PROFITS?

By September 2011, the company had 1,500 heating oil customers and was delivering about a million gallons a year of biodiesel. Customers were concentrated in the seacoast of New Hampshire into southern Maine and down into north-eastern Massachusetts. Simply Green's market share[8] within the heating oil industry was 10% to 12% and had grown fast, especially given the traditional customer to dealer relationship and that their product was a new one. Total revenue at the end of 2011 was more than $4 million. Of the total revenue, 60% to 70% was BioHeat and 20% to 30% biodiesel and the balance was the congreenience store (see details as follows).

By many measures, Simply Green could be characterized as successful. Then why, after four years, was it still operating in the red—that is, losing money? One factor was volatile oil prices and changing overall economic conditions. For example, in its second year (winter of 2008) the start-up company was negatively impacted by the unanticipated $4 a gallon oil. As is standard industry practice, Simply Green pre-bought ahead of the peak heating season from their wholesale fuel suppliers for a select percentage of their customers that wanted to pre-buy their fuel.

Simply Green was contractually obligated to pick up those gallons at the fixed price. Historically, there would be some fluctuation in those prices versus what the retail spot pricing would be. But never was there such an exaggerated difference where a customer who had pre-bought would then call another company to get fuel from them because the market price was so much lower than the pre-buy price they had locked in.

Many Simply Green customers locked the price at $4.50 a gallon, and then that winter, heating oil plummeted to $2. Simply Green could not force customers to take the fuel and they had not required their customers to commit to buying a minimum amount of fuel. Some Simply Green customers may have went to another oil dealer to get fuel at its market price, some may have just turned their heat way down and put on a sweater to reduce their oil consumption, and some people may have burned more wood. The loss between what Simply Green had paid for the peak price oil and what it could eventually sell ended up being more than $300,000.

This forced Andrew Kellar to take on two silent business partners[9]. The partners took a 30% equity position in the company and contributed $150,000 to the business. Taking on the partners provided Simply Green with the financial resources that Andrew did not have and did not have access to. The business partners, however, did not have as much of an interest as Andrew in community engagement and the partners shifted the focus more toward the single bottom line of profitability.

[8] Percentage of a defined market (in terms of total revenue or total number of customers) captured by a service or product provider

[9] A partner that contributes capital to a business but that is not involved in day-to-day operations

The partners had a commitment to the environment and were conscientious of how they operated in the community; however, these were not as much in the forefront of their efforts according to Andrew Kellar. As Andrew describes it, "I get that in businesses sometimes you're forced to get to a place where you really have to focus more on the main bottom line, until you can get to a place where you can have the luxury of expanding that."

Note

Equity Interest in a Business

An equity interest is an ownership interest in a business entity. Shareholders in a publically traded company have equity interest; their purchase of shares of stock in the corporation gives them a share of the ownership of the business. Private equity is a broad term that refers to any type of equity investment in an asset in which the equity is not freely tradable on a public stock market. Categories of private equity investment include business partnership investments, leveraged buyouts, venture capital, and angel investing.

Source: Simply Green.

LIMITS OF ALWAYS FOCUSING ON DOING THE RIGHT THING

Andrew Kellar's priority to always do the right thing for the environment and people had implications. As Andrew describes it, "I think my biggest mistake was I stayed so focused on the environmental and social mission of Simply Green, that I failed to stay focused equally on the fundamentals of the business. And the fundamental are the numbers, the profits and the losses and the working capital to operate the business. I didn't do my homework. I didn't have the resources that I needed to effectively sustain the business."

Note

Working Capital and Keeping the Business On-going

Working capital measures how much in liquid (readily available) financial assets an organization has available to fund and build its operation. The number can be positive or negative, depending on how much the organization is growing relative to revenue collection and the debt the organization is carrying. In general, companies that have a lot of working capital will be more successful since they can expand and improve their operations. Companies with negative working capital may lack the funds necessary for growth.

In particular Andrew neglected his need for capital and adequate cash resources (cash flow). He did not adequately anticipate the implications of different potential scenarios beyond his control, such as what if oil went to $4 and then down to $2 or by growing to one thousand customers, how was he going to manage $300,000 in accounts receivable over thirty days? He did not think through these potential scenarios, and he did not have the adequate financial resources on hand when these happened. What he needed to have done was in the early stages have a detailed business plan with "what ifs" for different scenarios and identify risks in his operations.

For Simply Green and any other company in the energy business, price volatility is one of the biggest risks. This is a particularly significant challenge for start-up and small companies with limited financial resources and little operating reserves. This challenge also has a potential upside for Simply Green and the renewable energy and energy efficiency industries. For example, as fuel prices were rising rapidly again in the early spring of 2011, this again raised awareness about alternative energy, which can be a positive factor for the biofuel industry. But the volatility—the up and down of oil prices—as was experienced in 2008 and again in 2011, makes it a challenging operating environment for new energy companies trying to change the industry and customer preferences.

The final challenge was personal for the entrepreneur. Life became "too crazy," as Andrew put it, and it became increasingly difficult to satisfy both his personal and professional lives. They were no longer aligned for Andrew.

The craziness of being an entrepreneur for Andrew included being responsible for 1,500 customers who could call at any time and responsible for drivers on the road twenty hours out of the day delivering customers their fuel. He had taken only one vacation during the four years of his business start-up. And even on the very occasional days off, there was always something that had to be taken care of. As Andrew describes it, "Being the owner, you can have amazing people around you, and most time, they can take care of most of it, but there's always something that comes through that you need to take care of. And that was the craziness, that being pulled in a lot of different directions. At times, when as a young father, you might normally like to be home, going to a baseball game with your son, going to different events with your kids, that wasn't an option."

CONCLUSION

Focusing on the core business that drives the bottom line, which for Simply Green is getting the most amount of renewable fuel out onto the market, continues to be an exciting opportunity for Simply Green. In 2011, the company's focus was on developing a marketing plan to get Simply Green out to the next group of customers beyond the early adopters to the early and late majority customers. Coming up with a strong marketing plan allowed Simply Green to attract that next ring of customers. The growth potential is significant, particularly since more than two-thirds of the population in Simply Green's service territory use heating oil to heat their homes, and a large percentage of commercial vehicles use conventional diesel fuel.

The Entrepreneur's Life Takes a Different Turn

In mid-2010, Andrew Kellar began to realize that, as an entrepreneur, his key strengths were in the creative development end, and he left Simply Green to pursue other opportunities.

As Andrew describes it, "There are some people that are meant to be operators of business long term, and there are people that are meant to be in start-ups, in the craziness of everything that has to do with starting up a business…I realized that that was where my strength was.

While there wasn't a lot of challenge left for me, there was still plenty of challenges for Simply Green in the long term, managing a business with 1,500 customers, and trucks on the road 20 hours out of the day. That skill set was not where I saw my strengths. So it was time for me to make a change. It was time for me to look to my business partners to take over the business.

I felt that Simply Green had helped me to define a new industry in this small community and helped me to do something really special and something unique.

While I thought Simply Green was bringing me closer to being that person I wanted to be, and that businessman I wanted to be, it wasn't allowing me to have a balance between being an entrepreneur and other things. I wanted to move on to a different working environment, where I could leverage all the experience that I had gained over those four years.

Between the highs and the lows, and all of the excitement and challenges that we had, I felt that was something that needed to be shared with other entrepreneurs. And I really, really enjoyed being in this kind of green, or now called clean-tech sector, that I wanted to reach out to other younger entrepreneurs that were in that same market, and try to give back to them."

After leaving Simply Green, Andrew became an entrepreneur in residence at the University of New Hampshire's Green Launching Pad (GLP) program (http://greenlaunchingpad.org). The GLP is a business accelerator program focused on assisting new and growing business in renewable energy and energy efficiency. In that role, Andrew is assisting sustainability-focused businesses in their start-up and early growth phases. He also became an advisor and engaged in development efforts for Revolution Energy (http://www.rev-en.com/company/about-us). Revolution Energy was a company that the GLP helped launch in 2010. The company assists in the financing of renewable energy projects with a focus on municipalities, schools, and colleges. Based on this work and his experience with Simply Green, Andrew was selected as a Mel King Community Fellow at MIT in 2012 (http://web.mit.edu/colab/people-mel-king-community-fellows.html). All of these allow Andrew to help others learn from his experience with Simply Green and enable him to continue to act on his commitment to sustainability.

Postscript: What Would Andrew Kellar Want Readers to Know?

For Andrew, the next generation has the opportunity to focus on learning from his successes and mistakes and those of others in the first generation of sustainability entrepreneurs. What he suggests to readers interested in being sustainable business entrepreneurs is to:

- take advantage of the resources available to learn all you can about sustainability science, engineering, and business;
- try to get an internship with a local sustainable business;
- on your own or with a friend, try out a small sustainability project idea at your school and in communities.

As Andrew describes it, "There are a lot of great opportunities for young students, at the undergrad level up to the MBA level, to get involved in different way in sustainable businesses… (and) they're not just stuffing envelopes. They're actually getting involved with these businesses. We used to bring

in interns, and we had our interns do a lot of in-depth work. It wasn't mindless work, it was actually in-depth market analysis."

KEY TAKEAWAYS

- Success in sustainable business entrepreneurship requires commitment to sustainability and problem solving, creativity, innovation, and "day-to-day" business management skills.
- The entrepreneur, Andrew Kellar, started the company out of concern for the environment and for future generations.
- The entrepreneur entered a mature industry with no experience but with a new product.
- The entrepreneur used personal contacts, relations, and social networks to gather useful information and resources.
- The start-up successfully employed creative marketing and low cost public relations to grow the company, appealing to the public's concern for the environment.
- The company was environmentally and socially focused but had to also focus on core business fundamentals, such as effective management of liquid, or cash, resources and strong customer service to be successful.
- Simply Green focused on the people and planet side of the triple bottom line and had to learn over time how to more effectively manage to achieve the profit side of the triple bottom line.
- The sustainable business founder lacked business training and skills that could have helped him to maintain ownership of the business. Commitment to and passion for sustainability are important and so are financial and other management skills.

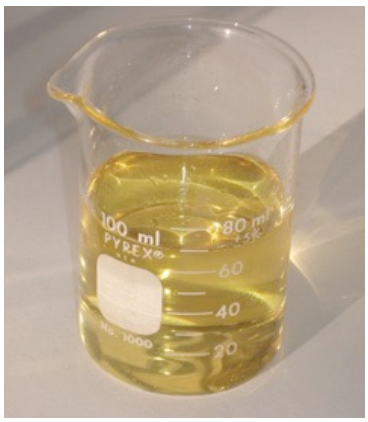
APPENDIX 1: SIMPLY GREEN TIMELINE

- April 12, 2007. First delivery of BioHeat and biodiesel by Simply Green.
- May 2007. First delivery to Guster and Reverb, spurring a flood of fuelling services for musicians, which included Dave Mathews, John Mayer, the Beastie Boys, Farm Aid, Kelly Clarkson, the Blue Man Group, Sheryl Crow, Willie Nelson, Jack Johnson, Phish, Coldplay, Maroon 5, and Styx.
- June and July 2007. Simply Green finds its way into *Rolling Stone* and *Billboard*.
- December 2007. Simply Green is featured in Sundance Film Channel's "Big Ideas for a Small Planet" with Guster and Reverb.
- January 2008. Simply Green hires its first employee.
- February 2008. Simply Green bails out former Veilleux, Peron Fuel, and Price Rite customers when the companies leave customers out in the cold after they allegedly stopped delivering fuel and went out of business.
- March 2008. Simply Green moves out of Andrew's house into an actual office in Portsmouth and hires its second employee.
- April 2008. Simply Green creates the Green Alliance as a public relations and marketing division to educate the community on "being green" and hires Sarah Brown as the project director.
- May 2008. Simply Green is back to its old ways and starts to offer special pricing for Rye Fuel customers that were unable to get deliveries of their pre-buy fuel at the end of the heating season.
- June 2008. Andrew Kellar and the Simply Green Team win the Environmental Hero award in Maine along with Governor Baldacci for their rescue mission for the residents of Maine left out in the cold by the Veilleux, Peron Fuel, and Price Rite scandal.
- June 2008. Andrew Kellar is invited to give the commencement speech at Berwick Academy.
- July 2008. Simply Green starts to offer discount prices to large groups, such as neighbourhoods, town co-ops, and employees of local businesses, during a time when oil was on its way to $4 a gallon.
- October 2008. Simply Green opens the first biofuels and congreenience store in New England, offering gas and biodiesel at the pump and local products in the store.
- November 2008. Simply Green receives the Innovation Rock award by the New Hampshire Department of Resources and Economic Development and is given the first of many commendations by Governor Lynch.
- November 2008. Simply Green begins its research and development into third-generation biofuels in conjunction with the University of New Hampshire and starts to apply for grants to study algae as a feedstock to make biofuels.
- December 2008. Simply Green is named one of the top fifty hottest companies in the bioenergy sector worldwide.
- January 2009. Andrew Kellar is named one of the "25 Leaders for the Next 25 Years" by BusinessNH Magazine.
- April 2009. Simply Green marks a huge milestone by delivering BioHeat to more than one thousand customers around the seacoast of New Hampshire and Maine, signs on Coca-Cola and Public Service of New Hampshire for onsite fuelling services, and hires its fifteenth employee.
- December 2009. Simply Green is named one of the top fifty hottest companies in the bioenergy sector worldwide for the second year in a row.

- January 2010. Simply Green is back at it again. Flynn's Oil goes out of business on Christmas night and leaves customers without fuel, so another bailout plan is in place to help thousands of customers heat their homes at Christmas.
- April 2010. Simply Green announces the purchase of their new office, Regeneration Park in Portsmouth. Once construction is completed, Regeneration Park will be the "greenest" building on the seacoast.
- June 2010. Simply Green's customers complete the 2,000,000 lb. "Carbon Challenge," which results in planting the equivalent of 153,000 trees.
- August 2010. Simply Green is honoured to have Congresswoman Shea-Porter and US Secretary of Labour Solis visit Regeneration Park and hold a press conference praising Simply Green for their efforts in the green movement.
- September 2010. Simply Green marks another milestone by delivering BioHeat to more than 1,500 customers around the seacoast of New Hampshire and Maine.
- November 2010. Andrew Kellar leaves Simply Green.
- February 2011. Andrew Kellar starts work with Revolution Energy, helping with blended (private, public, and tax incentivized) financing of large scale solar projects.
- May 2011. Andrew becomes entrepreneur in residence with the University of New Hampshire's Green Launching Pad program.
- January 2012. Andrew Kellar begins yearlong activities as Mel King Community Fellow at MIT.

APPENDIX 2: BIODIESEL

Biofuels have been around as long as cars have. At the start of the twentieth century, Henry Ford planned to fuel his Model Ts with ethanol, and the original diesel engine designed by Rudolph Diesel used peanut oil–based fuel. Discoveries of huge petroleum deposits kept gasoline and diesel at a low cost for the twentieth century, and biofuels were largely forgotten. However, with the rise in oil prices, along with growing concern about global warming caused by carbon dioxide emissions from conventional fuels, biofuels have been regaining popularity recently. Gasoline and diesel are actually ancient biofuels. They are known as fossil fuels because they are made from decomposed plants and animals that have been buried underground for millions of years. Biofuels are similar except that they are produced from plants grown today. "Biofuels: The Original Car Fuel," *National Geographic*, http://environment.nationalgeographic.com/environment/global-warming/biofuel-profile.



Biodiesel
Source: Wikimedia, http://commons.wikimedia.org/wiki/File:Bequer-B100-SOJASOYBEAM.jpg.

Biodiesel is a product that is derived from a renewable energy source, such as soybeans. The renewable energy source could also be other crops, such as corn, although corn is more typically made into ethanol for use by gasoline engines. It could also be recycled grease that comes from commercial fryers. Biodiesel produced from recycled oils and grease is considered a second-generation biofuel, whereas the soybean would be, if it was grown as a virgin product specifically for it, considered a first-generation biofuel. There also are third-generation biofuels based on algae. For more information on BioHeat and related products, see "Alcohol Can Be a Gas," http://www.permaculture.com.

The greenhouse gas (GHG) emission reduction from using biofuels is not 100 percent when compared to fossil fuels. Carbon savings are partially offset by the energy that is needed for cultivation, harvesting, processing, and transportation of biofuels. This can represent a substantial fraction of the total energy released from processed biofuels and varies significantly between crops. In the worst-case scenario, the production process may actually take more energy than can be produced when the biofuels are used, which undermines the potential environmental benefits. "Biofuels—The Net Energy Debate," SyntecBiofuel, http://www.syntecbiofuel.com/biofuels_net_energy_debate.php.

Second, there may be carbon emissions associated with changing the usage of land to biofuel crop cultivation. For instance, if areas that have not been previously cultivated, such as forest land, are converted to produce biofuels, then there may be significant immediate releases of carbon stored in the existing plant life and in the soil and also damage to biodiversity and the ecosystem. These land use–change effects may prevent biofuel plantations from generating an overall reduction in carbon emissions until many decades of crops have been produced.

About the source book

The Sustainable Business Case Book provides readers with a broad overview of the core concepts of sustainability and sustainable business practice.

https://2012books.lardbucket.org/books/sustainable-business-cases/