

Simple Colar Ltd.

Freedom Won Solar Hot Water Heater

#### Information Page

Freedom Won will be the first widely available, renewable energy product that provides free hot water and reduces CO2 emissions equivalent to taking one car off the road.

Simple Solar, a new business enterprise, will manufacture the Freedom Won Solar Hot Water Heater.

Via a novel distribution channel, Simple
Solar will distribute Freedom Won to home
builders, who will offer it as an option in
their new homes. New homeowners will
have compelling economic and societal
inducements to buy Freedom Won—
inducements that outshine other products
on the market.

Specifically, Freedom Won will be the first widely available, renewable energy product that provides free hot water and reduces CO2 emissions equivalent to taking one car off the road.

Business Concept Name:
Simple Solar Heating Ltd.
Team Captain:



Team Members:





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# Executive Summary: A Compelling Blueprint for Green Success

#### The Freedom Won Solar Hot Water Heater

In Canadian homes, heating water makes up about 25% of the total utility bill. The Simple Solar's Freedom Won will eliminate this cost. The Freedom Won is a maintenance-free solar hot water system developed specifically for the Canadian climate and for single family homes. With Freedom Won, the sun—the ultimate renewable energy source—fills all residential hot water needs. Essentially for free.

The Freedom Won is a green product that benefits the environment. It's reliable, favourably priced, and easily financed. It saves consumers money every month—from day one. These extremely positive attributes will make the product appealing to consumers, and will position Freedom Won as a viable alternative—a better alternative—to other hot water systems.

The Freedom Won will offer Canadian homeowners an unrivaled convergence of social satisfaction, carefree functionality, affordability, and dollar savings. Simple Solar will be viewed as part of the green movement, and will tap into a deep reservoir of ready demand.

# The Fundamentals: The Business Opportunity

Suddenly, saving the planet has become good business. The sobering science about global warming has hit home, sparking a "green" movement suffused with accelerating momentum. And accelerating urgency.

Canadians take environmental stewardship seriously. They are eager to buy green products that effectively replace their polluting predecessors.

The Canadian government, recognizing that consumers are also voters, has enacted laws and initiatives to stimulate—and fund—innovation in renewable energy. In fact, all levels of government have

launched green programs, including a \$1 billion federal "Climate Fund" for reducing greenhouse gases (GHG). Calgary builders, the initial market for Simple Solar, has launched its own "Built Green" program to reduce GHG emissions; more than 65 builders have enrolled.

These factors signal both a dramatic surge in demand, and a ready market, for green products.

Simple Solar is poised to seize this extraordinary business moment by manufacturing, distributing, and selling the Freedom Won Solar Hot Water Heater. This revolutionary product will be sold through home builders, who will offer it as an option in new homes.

The market—and the industry—is in its infancy. There are no definitive industry leaders. This presents a wide open field to a potentially huge market—an unparalleled opportunity for Simple Solar to command the field and and rapidly become the recognized industry leader.

Currently, the market for solar products is growing between annually. The market for the Freedom Won—in Calgary alone—is about per year. Throughout Canada, the potential market for solar products is The rapid trajectory of this market could well resemble the internet explosion of the mid- to late-1990's.

# Competitive Advantages = Consumer Value

The Freedon Won has decisive operational, technological, and economic advantages over other existing conventional and solar hot water systems. These advantages translate into unmatched consumer value:

- Free hot water. Homeowners realize net cost savings from day one. Eliminates future utility cost hikes.
- Reduced CO2 emissions. Each unit has the same impact as taking one car off the road.
- No Operating Costs. Simple, proprietary design. Only three components, and no moving parts: won't wear out. "Set it and forget it."

Bundling the Freedom Won with newly built homes is a game-changing strategy. Even if homeowners pay more for a Freedom Won-equipped home, their mortgage payment year mortgage at (%) will increase only per month. Since heating water costs about \$100/month for a typical Calgary home, these homeowners will realize an *immediate* per month savings.

# The Target Consumers

Canadians generally want to "do what is right for society"—and be seen doing it. They are therefore *predisposed* to be green consumers and about 40% classify themselves as such. Green consumers are typically well educated, well informed, and relatively affluent.

Simple Solar has identified a robust group of green end-users: (1) 30 to 49 year-old urban professionals, (2) with combined household incomes over \$100,000, (3) who are buying a newly built home. These consumers are not only predisposed to buy the Freedom Won, but can afford it.

# A Novel Distribution Channel = A "No Brainer" Buying Decision

Simple Solar has devised a creative three-step distribution channel, and a push/pull marketing model, that will drive enormous value:

- Home builders offer Freedom Won in new homes. The incentives: sell more homes by offering lower "all in" ownership cost;
- 2. **The builders' sales representatives sell the benefits of the system.** The incentives: their homes are "cheaper", easier to sell; they are earn an extra commission per sale and/or prizes.
- 3. Predisposed buyers demand and purchase the system for their new home. System cost is built into—and amortized as part of—their mortgages. They join the green revolution and save money at the same time.

# The Management Team

The Simple Solar management team have the qualifications, experience and expertise to drive this business. Team members have formidable experience and expertise directly applicable to this Business Plan, including general management; purchasing and procurement; logistics; Asian business contacts; information technology; finance and accounting; project management; sales and marketing.

# Funding Needs

The total initial funding needs for Simple Solar are modest.

# Magnetic Attraction for Investors

The timing is perfect for Simple Solar—and for its investors—to capitalize on the green movement that has captivated the global economy.

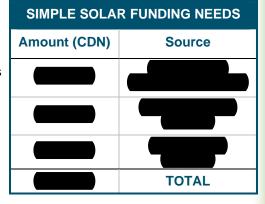
Simple Solar projects conservative—and thus eminently achievable—sales rates. That said, Simple Solar expects to break even by the end of and be cash flow positive by the end of cash will begin to accumulate in the company. The company's expected rapid expansion will be self-funded.

For qualified investors, Simple Solar offers participation in a business with an extremely robust financial outlook:

- IRR forecast:
- NPV positive of approximately based on a 20% discount rate, and a five-year term.
- Cash flow positive after Year

- Excellent operating leverage: break-even at units
- Multiple exit strategies, including licensing or selling IP rights; conducting an IPO; leveraged management buyout; selling the business.

Simply put, a potential 600% return.



# The Product: Freedom Won

#### **Overview**

The Freedom Won is a low-cost, maintenance-free solar hot water system developed specifically for single family homes. It will be offered through home builders as an option to new home buyers.

# Motivating the Buyer: the Economic Case

In Canadian homes, heating water constitutes about 25% of the total utility bill. With Freedom Won, all of a home's hot water needs can be captured directly from the sun—**Freedom Won owners will have free hot water.** The free hot water from Freedom Won can be used for all domestic purposes (showers, drinking, cooking).

# Motivating the Buyer: the Societal Case

Freedom Won reduces CO2 emissions. Each unit has the same impact as taking one car off the road.

The Hardware

Simple Solar's Freedom Won is proven and durable, largely because of its straightforward design—it has no moving parts. The Freedom Won system consists only of the following components:

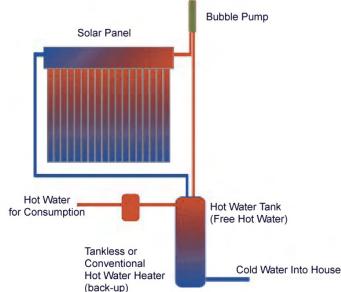
- Solar hot water panels, mounted on a home's roof or walls, and specifically designed to function in the Canadian climate. (A single solar tube will burn your hand at -40°C on a sunny day.)
- A proprietary Simple Solar Bubbling Pump (Design Trademark pending).
- A hot water storage tank.

# The Technology

Simple Solar has leveraged existing technology in the public domain to offer homeowners a low-cost, reliable, and maintenance-free solar hot water system.

Freedom Won works seamlessly with conventional hot water systems, which now can be used merely as a back-up.

Freedom Won reduces CO2 emissions. Each unit has the same impact as taking one car off the road.



# **Working Prototypes**

<u>Existing:</u> Two existing prototypes are now complete and operating, and their functionality fully tested. These prototypes have amply proved the veracity of the performance claims in this Plan.

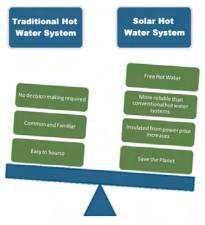
Production: A production prototype still needs to be completed.

# **Competitive Advantage**

Freedom Won will have pronounced advantages over its competition, which is divided into two basic categories:

- 1. Traditional gas or electric hot water heaters.
- 2. Other manufacturers and vendors of solar hot water heaters.

The brilliance behind Freedom Won is its simplicity.



# Freedom Won Beats Traditional Systems

Simple Solar, because of the Freedom Won's simple, proprietary design, owns a notable technological advantage over other current manufacturers of solar hot water heaters—as well as a significant price and cost-effectiveness advantage. That said, the stiffest competition will arise from traditional gas and electric hot water heaters.

Simple Solar's novel distribution channel (more fully described below) has been designed to naturally erode the competition in the field.

Freedom Won will be intentionally placed side by side with the competition so that the systems can be readily compared.

Once compared with conventional systems, the competitive advantages of the Freedom Won will become apparent. Freedom Won:

- Costs less to operate per month (including capital costs)—from day one.
- Delivers free hot water (post-capital cost).
- Offers superior reliability—it has no moving parts.
- Still works during an electrical power outage.
- Insulates homeowners from utility cost increases.
- Uses renewable energy that would otherwise be wasted.
- Is good for the environment.
- Saves CO2 emissions equivalent to taking one car off the road.

# Freedom Won Beats Other Solar Hot Water Systems

Historically, other solar hot water systems have been plagued with high equipment costs, high installation costs, and extremely poor reliability. To keep their systems running, consumers have been practically forced to become experts.

The brilliance behind Freedom Won is its simplicity. The system is passive—it needs no moving parts to circulate hot water from the solar panels to the hot water heater. It uses the same principle as a coffee percolator to move fluid, circulating hot water using the sun's limitless energy.

#### SIMPLE SOLAR'S FREEDOM WON:

# Competitive Advantages Over Existing Hot Water Systems

- Proprietary technology
- Simple design
  - Fully integrated, dedicated system
  - Visual appeal
  - Fewer components; no moving parts
    - Reliable doesn't wear out
    - Easy to maintain homeowner expertise not required
- Significant cost advantages
  - Manufacturing side:
    - Simple design = much lower manufacturing cost
    - Lower manaufacturing costs = lower price for homeowner
  - Homeowner side:
    - Purchase price amortized as part of mortgage payment
    - Economic benefits from day one
      - Free hot water: savings exceed incremental mortgage cost
      - Virtually no operating costs (for appropriately sized system)

Simple Solar's proprietary Bubbling Pump provides this functionality with fewer components than any conventional system on the market. For homeowners, this eliminates the need to buy costly components, as they must do to maintain and repair traditional systems.

# **Consumer Value**

Currently, renewable energy is expensive, and consumers must pay a premium to use it. Moreover, as described below, many so-called "green" products have failed to perform as promised. For these reasons—despite the pervasive political and social sentiment to "go green" and use renewable energy—consumers in great numbers have not yet acted with their wallets. In fact, although 30-90% of people indicate they are "willing to pay more" for "green" power, less than 4% actually do. 1

Being associated with the "green" movement, coupled with Freedom Won's reliability and cost advantages, Simple Solar will tap this reservoir of pent up demand and rapidly generate appreciable value.

#### Market Overview

Analyzing the relevant social, technological, economic, and political/legal trends ("STEP") will identify the market characteristics for Simple Solar. These characteristics, in turn, will establish the framework for long-term strategic planning.

#### **STEP Analysis: Social/Community**

Research shows that consumers will readily buy a green product if it's as good as or better than the typical non-green product. Global attitudes on environmental issues are shifting. Environmental awareness is becoming part of popular culture—it's the right thing to do. The reach and frequency of this morally infused message is increasing, both in recent movies and in the media. In short, the general populace are becoming emotionally attached to the environmental movement, at times even militant about it.

These days, environment-friendly alternatives are being evaluated not just on economics, but on the appropriate **balance between economics and social responsibility.** The Canadian demographic, in general, is closely aligned with this movement.

Canadians want to "do the right thing" and want to be seen doing it. This population is typically very literate, educated, relatively affluent.

#### STEP Analysis: Technological

Young urban professionals purchasing a home are generally not interested in managing their appliances and household systems. Complexity is acceptable in their cell phones, MP3 players, and other sophisticated toys. Household systems, on the other hand, must be functional, easy, reliable, and durable: "set it and forget it." The Freedom Won meets these criteria; it was designed for the layman. It has no moving parts. It's easily understood and maintenance free.

#### **STEP Analysis: Economic**

Society is recognizing the economic ramifications of "doing nothing" about the environment. Research shows that consumers will quickly choose a green product over a non-green product if both have similar functionality and economics.

Simple Solar will command this commercial space. By bundling the Freedom Won with newly built homes, consumers will realize an immediate cash flow benefit. Even if a homeowner pays \$10,000 more for a home equipped with a Freedom Won, the payment on a 25-year mortgage at 6% will increase only by about \$64.50 per

<sup>&</sup>lt;sup>1</sup> Source: www.farmfoundation.org/projects/documents/jensen.ppt

month. Since a typical Calgary home spends about \$100/month on heating water, the homeowner will realize an immediate \$35.50 per month savings.

#### STEP Analysis: Political/Legal

Political trends are driven by voter sentiment. Voters are no longer content to trade short-term economic gain for long-term global pain. Governments are starting to respond by enacting laws and policies geared to environmental stewardship. Government funding programs for green technology have been introduced, and given the growing momentum of this movement, more of these programs (or expanded programs) are likely.

In Canada, all three levels of governments have initiated green programs. Currently:

- A \$500 grant is offered for each residential solar system installed.
- > A 90% funding program is available to certify residential solar systems.
- Most provinces waive the PST on thermal solar systems.

Simple Solar believes that the both the initial capital requirements for this Plan can be raised through government grants, such as those offered through the federal government's \$1 billion "Climate Fund" (described in the attached Appendix), set aside for "actions to reduce GHG emissions".

Calgary, our home city and initial market, has launched its own initiative (including the "Built Green" program) to reduce GHG emissions. As detailed below, our first customers will be buyers of new homes in Calgary and surrounding areas from builders that are enrolled in "Built Green". Albi Homes, Alloy Homes, Arriva Homes, Artisan Homes, Assured Developments, Avalon Master Builder, Avonlea Master Builder—and 65 others—have already enrolled.

All of the factors analyzed above demonstrate that this is the perfect time for Simple Solar to enter this market. The emerging environmental movement has spawned a rapidly emerging marketplace; the macro-environmental trends overwhelmingly support this type of business. We anticipate, in fact, that the boom in this market will rival the internet explosion of the mid- to late- 1990's.

# The Solar Marketplace

#### **Market Segmentation**

#### Overview

The solar market is discerned by evaluating both (1) the traditional bases of consumer segmentation and (2) the related cultural dimension. Traditional bases of segmentation are identified by asking: "What will the product do for the consumer?" The cultural dimension can be identified by asking: "What meaning will the product have for the consumer?" The answers to these questions yield a comprehensive consumer profile that frames the target market and provides a solid foundation for our marketing strategy.

To recap, the Simple Solar Freedom Won heating system is a green product that benefits the environment. It's reliable. It's favorably priced and easily financed. It saves consumers money every month—from day one. These extremely positive attributes will clearly make the product appealing to multiple market segments.

#### The Benefit Segment – The Green Consumer

The green Freedom Won allows for benefit-based consumer segmentation. With the mounting social pressures to "go green", the purchase of a Simple Solar system provides the Benefit Segment with emotional and spiritual value. Benefit-driven consumers will be happy to be participating in the green movement and doing something good for both the environment and their local community. The cultural dimension associated with this segment is long-term orientation. For the most part, society has embraced—and has attached value to—the idea of leaving a clean and healthy planet for future generations.

All factors analyzed demonstrate that the timing is perfect for Simple Solar to enter this market.

# Simple Business Plan

Green consumers are a readily identifiable group. They comprise about 40% of the Canadian population. The typical green consumers are between 30 and 49 and are professionals or college graduates with higher than average incomes. More women buy green products in Canada than men.<sup>2</sup>

Green consumers prefer to buy green products where they normally shop. Although they may be willing to spend a little more to buy a green product, the product must be comparably priced, must be easy to install, and must not adversely impact their lifestyle. Almost half of consumers (46%) who do not currently buy recycled or environmentally safe products say that they don't do so because they prefer to stick to familiar brands, and because green brands don't register on their radar screens. More than a quarter (29%) do not believe that such products are genuinely safer for the environment, and 26% say they are too expensive. Other constricting factors include difficulty accessing green products (18%), not knowing where to buy them (12%), and the belief that their quality is inferior to traditional products (12%).

#### **The Lifestyle Segment**

The Lifestyle Segment is essentially the generational demographic segment of 30- to 50- year old professionals. They are the most likely to have the financial means (with household incomes greater than \$100,000/year) and family structure to support green technology home purchases. Simple Solar will be aiming to attract families composed of two to seven people, since they consume hot water in relatively large quantities. To these families, our system would be especially attractive and beneficial in cost savings and green house gas reductions.

#### **The Geographic Segment**



#### **The Cultural Segment**

The Cultural Market Segment is about ritual and sacred consumption. To these folks, monthly utility bills (like taxes) have come to symbolize dependence on—and subservience to—government and large corporations. These people aspire to break free from the burden of ever-rising taxes and utility bills, and Freedom Won offers a palpable increment of that freedom: a renewable energy source that reduces monthly bills and eliminates future cost increases.

#### **Consumer Price Sensitivity Segment**

Consumer Price Sensitivity also helps define the target market. Simple Solar will target households with annual incomes above \$100,000. This correlates with the professional population and also ensures that cost is not an impediment to purchase for home buyers motivated to include Freedom Won as an option. Households with incomes below \$100,000, even if interested in the Freedom Won, are less likely to spend more for options when buying new homes.

# **Cross-Segment Dynamics**

#### **Functionality and Economics Rule**

Several intriguing market dynamics span the above market segments. Although green consumers are now (at least verbally) willing, and may over time become more willing, to pay a premium for environmentally beneficial products, the market research referred to above clearly suggests that in order for Freedom Won to gain rapid

<sup>&</sup>lt;sup>2</sup> Simple Solar's marketing materials will take this fact into account.

market uptake and succeed where other green products have not, it must first and foremost have the same benefits as non-green products, but at a similar or lower cost.

On this point, Freedom Won will offer lower all-in cost over conventional systems. Therefore, even if everything else were equal, Freedom Won will have significant marketplace appeal. Simply put, the economic attributes of the Freedom Won are decisive. They open the spigot, from narrow appeal and slow growth—based on buying decisions grounded solely in "soft", non-economic considerations—to wide appeal and rapid growth based on Simple Solar's unrivaled convergence of social satisfaction, carefree functionality, affordability, and dollar savings.

#### The Apathetic, the Skeptical

The marketing strategy will emphasize these winning attributes to position Freedom Won as a viable alternative—a better alternative—to conventional hot water systems. But to maximize success, we must clear two notable hurdles: ignorance of our product, and the damage done by previously failed green products.

With respect to the first hurdle, and as mentioned previously, consumers do not buy green products because of unfamiliarity with green brands, difficulty accessing them, not knowing where to buy them, and the impression of inferior quality.

As to the second hurdle, many recent marketing efforts have focused on green consumers, but most have failed. They have failed because many advertisers have:

- > Exaggerated the environmental benefits of their products in an attempt to charge a premium.
- Extolled the green virtues of their products without being able to back up their claims—which in some cases, have been proved clearly false.

Unsavory advertisers have tarnished the credibility of truly green products, and those who offer them. This, in turn, has created yet another market segment: those who have become very skeptical of green products and the promises made about them.

As shown above, the Benefit, Lifestyle, and Price Sensitivity segments reflect a very ready and receptive market for Simple Solar. The targeted consumers, as previously stated, are quick adopters, eager to buy any green product that's as good as or better than the non-green product. That said, the once-burned skeptics populate—and represent a potential drag on—all market segments. The skeptics must be met head-on and converted to effectively (1) reach the maximum number of consumers with a green mindset, (2) motivate them to buy a product, and (3) recommend the product to others. That conversion depends not only on effective advertising, but on credibility. Credibility of the product, and how it's manufactured and distributed.

#### Therefore:

- For any green product to succeed, its advantages over the non-green product must clearly and be convincingly stated. But these claims must be backed up with acts. If the benefit gap (including the impact on the environment) is demonstrable, then given the current overall consumer predisposition to buy green, it becomes a "no-brainer" purchase.
- The company offering a green product must also be perceived as green throughout its manufacturing and supply chains, so that consumers will trust that the benefits of their green purchase are not being cancelled out by other environmentally damaging processes.

Simple Solar will convert the skeptics based not only on the demonstrable benefits of the Freedom Won product, but also on environmentally neutral (1) production and distribution cycles, and (2) marketing materials.

# **Consumer Segment**

Through the above analysis, Simple Solar has identified and will pursue the clearly defined target group at right.

Simple Solar will target the Benefit, Lifestyle, and Price-Sensitivity Market Segments by appealing to the social pressures to reduce the environmental footprints of Canadian homes. These consumers have a marked desire to participate in the green movement, but still maintain their quality of life. Therefore, our product must be seamless with existing hot water systems and must be easy to maintain.

#### SIMPLE SOLAR'S FREEDOM WON:

#### Clearly Defined Target Consumer Group

Young urban professionals (30-49 years of age) with a combined household income over \$100,000, who:

- Are purchasing a newly built home.
- Want to reduce home ownership costs.
- Want to participate in the green revolution.
- Like the idea of being protected against utility rate hikes.

#### Market Size/Trends

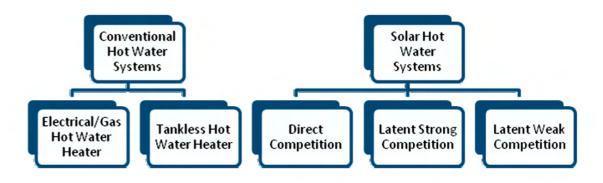
The solar market is expanding, and all signs point to continued strong expansion:

- Currently, the solar market is growing between 15% and 25% annually.
- Hot water heating currently accounts for 25% of the total costs of power, heat, and cooling in the average Canadian home.
- Calgary has launched an initiative to reduce GHG emissions to 50% below the 1990 target of the Kyoto Accord by 2012. The Calgary program aims to have:
  - o 1000 homes adopt solar thermal heating in the short term (one year).
  - o 50% of all new communities and 25% of existing communities adopt solar or geothermal energy in the medium term (four years).
  - 80% of new communities and 50% of existing communities adopt solar or geothermal energy in the longer term (10 years).

In Calgary alone, the market for solar hot water heaters is approximately \$96 million per year.

Based on the Calgary initiative alone, these targets translate into an average annual growth rate for this industry of approximately We will not only tap into that growth rate but also increase market share by increasing the number of consumers willing to adopt green hot water heating technology using our easy, reliable, and cost-effective system.

Each year, in Calgary alone, and even taking into account potential levelling off as a result of the recent real estate downturn, about new single family homes are being built that are candidates for Freedom Won. If this annual quantity is multiplied by the average cost of a solar hot water system, the total market for solar hot water businesses—again, in Calgary alone—is approximately per year. (The actual figures are currently projected to be slightly higher because of lingering momentum from the 2001-2006 housing boom in the Calgary region.)



# **Competition Analysis**

As stated above, Simple Solar's primary competition is existing conventional hot water systems. We have recognized that market ignorance of Freedom Won's viability is one hurdle we must clear. That said, the facts, data, and timing are on our side. Compared with conventional systems, our system is more reliable, better for the environment, has no operating costs, and is cheaper to run from day one.

Simple Solar's second area of competition is other manufacturers and vendors of solar hot water systems. Simple Solar has segmented this competition component into three major groups: Direct Competition, Latent-Strong Competition, and Latent-Weak Competition.

# **Direct Competition**

The Direct Competition group consists of all competitors who exhibit three key characteristics that could be easily channeled into direct competition with Simple Solar:

- The competitor has recently conducted, or has announced interest in conducting, business with Western Canadian customers.
- 2. The competitor has a corporate vision similar to that of Simple Solar.
- The competitor demonstrates a core competence in engineering and design, project management, and installation services.

The companies that exhibit these three characteristics are

# **Primary Locations of Competitors**



# **Latent-Strong Competition**

The Latent-Strong Competition group consists of companies exhibiting some capability or advantage that would, with some investment, enable them to directly compete with Simple Solar. These competitors also have one or more attributes that make them a potential target for a downstream business relationship with Simple Solar, such as service, marketing, alliance, partnership, or merger. All of these latent competitors provide some type of renewable or conventional energy service to Western Canadian customers and have a particular market share or brand component of interest, or some specialized area of engineering and design.

These competitors are

# Latent-Weak Competition

The Latent-Weak Competition group consists of small competitors that provide services or distribute renewable energy products in Western Canada or Alberta. These competitors primarily supply and install solar energy products, and are recognized brands within Simple Solar's intended area of operations. These competitors include, but are not limited to,



# **New Competitors**

Based on our analysis of the existing competition and the projected growth of the market in Western Canada, we have projected that approximately four new competitors will enter the Alberta market within the next five years, and approximately seven within the next 10 years. In general, the solar industry in Canada consists of companies, obs, and in annual sales, which represents a potential total market of a market that will go untapped or underserved if companies (especially Simple Solar) fail to step up soon.

# **Marketing and Sales**

There are three steps in the distribution channel for Freedom Won (see the diagram below). The first step is inducing home builders offer the Freedom Won in their model homes. The second step is to encourage the builders' sales representatives to sell potential customers on the benefits of the system. The third step is to have customers demand and purchase the system as part of their new home.

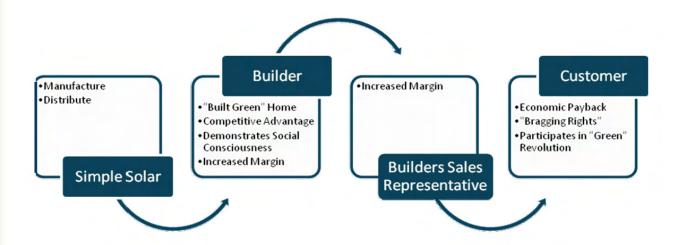
#### The 4 P's: Simple Solar to Builder

#### **Product**

Builders offering the Freedom Won can:

- > Sell more homes by offering customers a lower "all in" cost of ownership.
- Improve their "Built Green" score and receive 10%-30% rebate on permits up to \$10,000.
- Earn more money on each sale, because they will earn margin on our product.
- Differentiate themselves from other builders.

The market—and the industry—is in its infancy. There are no definitive industry leaders. This presents a wide open field to a potentially huge market—an unparalleled opportunity for Simple Solar to command the field and and rapidly become the recognized industry leader.





#### **Price**

Because economic value will be integral to attracting consumers to our product, Simple Solar intends to control its price. Therefore, Simple Solar will initially act as a retailer, offering builders a commission on each sale. Specifically, we will offer builders up to \$ for each sale they facilitate in the first year and We anticipate that as demand increases and pull-through occurs via the distribution channel, we will likely become a wholesaler to other markets.

#### **Place**

We will reach each builder with direct phone calls and face-to-face meetings. We will meet the builders in their offices. This is a one-on-one sale. There are currently Built Green" certified builders in Calgary and the immediate area, of which have successfully built a "Built Green" home.<sup>3</sup>

#### **Promotion**

With builders, we will fundamentally deploy a push strategy, implemented during one-on-one sales calls. In order for a builder to have a home as certified "Green Built", it must achieve a certain number of points. Points are awarded for each "green" element in a home. A "Thermal Solar Heating System"—such as the Freedom Won provides more points than any other single element, with the added benefit that the home buyer pays for it. We will offer to install solar panels on the model homes of large builders.

#### The 4 P's: Builder to Builder Sales Representative

#### **Product**

Freedom Won offers sales representatives an enticing way to:

- Earn extra money.
- Earn prizes.
- Differentiate themselves from other builders/representatives.
- Make their homes "cheaper" and thus easier to sell.

It's no secret: sales representatives are first and foremost interested in making a sale. After all, that's how they earn their living. Usually, their commission compensation is structured in such a way that the size of the sale is less important than the sale itself.

#### **Price**

We will offer sales representatives a commission on each sale, payable on receipt of the order.

#### **Place**

Marketing and materials and information will be put in the sales reps' hands at the point of sale. They will have materials that potential customers can take home.

#### **Promotion**

We will create sales competitions based on cash and/or prizes. On the cash side, the first sale of the system would earn them so much, the second sale so much, and so on. By way of prizes, we might for example offer

# The 4 P's: Builder Sale Representative to End User

#### **Product**

The Freedom Won offers the following compelling appeals to consumers that will make their lives better:

- Free hot water
- Active participation in the "green" revolution
- Doing the right thing for planet earth: reducing CO2
- Adding prestige to the individual and the neighborhood

- Bragging rights
- Convenience
- Simplicity
- Reliability
- > Self sufficiency: freedom from utility price hikes
- Hotter showers and warmer baths

#### **Price**

End users will buy the system as an option when they purchase their new home. The cost of the system will be built into—and amortized as part of—their mortgages. By demonstrating positive monthly cash flow from day one as the system is amortized, we can, as the market research above suggests, make the buying decision a "no brainer".

#### **Place**

We will reach prospects as they visit model homes, and they begin to imagine living there. We will install branded units on the roofs of model homes so that prospects can see Freedom Won from the outset as an integral part of their beautiful and desirable new home. Inside the models, we will place video displays, written materials, and other branding. We will give the prospects written material and a copy of the video to take home.

Even if a homeowner pays more for a home with a Freedom Won, the payment on a year mortgage at will increase only by about 0/month. Since a typical Calgary home spends about \$100/month on heating water, the homeowner will realize a month savings.

#### **Promotion**

As previously suggested, we intend to use both a push and a pull strategy. We will push the products through the builders. We pull the products through to the customer by creating end-customer interest.

Since the primary target market is young professionals buying a new home, we will create a pull—and a buzz about the product—by attracting attention to the system, using some or all of the following tactics:

- As previously mentioned, placing video and written materials, and branding, inside model homes.
- Installing a Freedom Won system in model homes.
- Issuing press releases and e-mail blasts.
- Placing articles in newspapers and magazines.
- Reaching out to, joining—and seeking endorsement by—green interest groups.
- Reaching out to—and seeking endorsement by home mortgage lenders.
- Participating in trade fairs.

- Creating a dedicated web site with Search Engine Optimized text.
- Linking to other relevant web sites.
- Advertising on search engines.
- Broadcasting radio spots at open houses.
- Attending political events.
- Inviting politicians to appear at homes with our product installed and visible on the roof.
- Encouraging municipal governments to invest in a communities with our solar heaters.

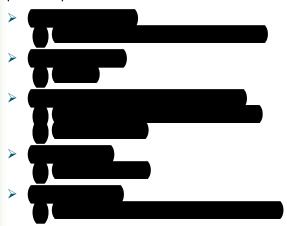
# **Management**

Simple Solar will utilize a phased approach in assembling the human resources to execute this Business Plan. The majority of work in will be done by members of the Advisory Board. During this period, Board members will focus on advancing product development, sourcing suppliers, seeking and obtaining government funding, and general business activities.

Beyond these specified activities, the Advisory Board will play a prominent role in the company. The Board will advise and support the President/CEO and product specialists as required in areas such as product development, contract negotiations with suppliers, and marketing strategy and tactics.

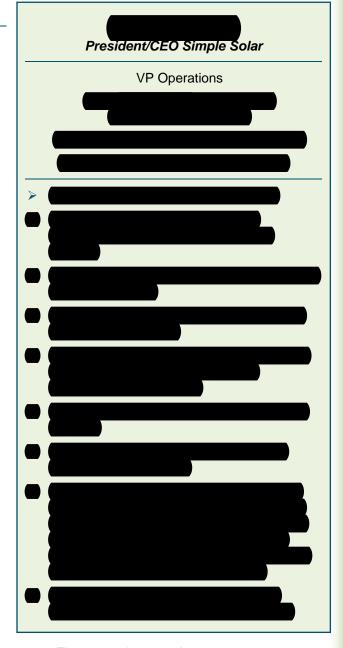
# Management Team

The initial Advisory Board will be composed of the following members providing the following profile/expertise:



Members of the Advisory Board have accumulated formidable experience and expertise directly related to the Simple Solar Business Plan, including:

- General management.
- Purchasing and procurement.
- Logistics.
- business contacts.
- Information technology.



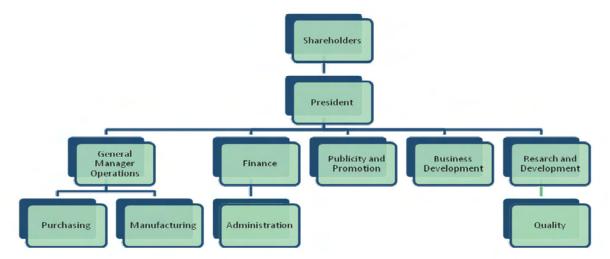
- Finance and accounting.
- Project management.
- Sales and marketing.
- The Freedom Won product itself.

As the business grows, the Advisory Board will be replaced by a formal Board of Directors. Directors will be selected based on the medium- and long- term requirements of the company and may include experts in the solar industry, the housing market, product development, manufacturing, publicity and promotion, and also government lobbyists. Third-party resources for accounting and legal services will be retained as required.



#### 2011- Three Years Out

By 2011, or if earlier required based on growth, the organizational structure will be as follows:



#### 2013 - Five Years Out

As Simple Solar continues to grow, the corporate structure will continue to evolve. Here is a list of the anticipated senior management positions (corporate officers) in 2013:

- President and CEO
- Chief Financial Officer
- Chief Operating Officer
- Vice President of Sales and Marketing
- · Vice President of Product Development

# **Implementation Plan and Schedule**

# Strategic Overview -

1.) Obtain initial funding for the testing and development stage of the strategic plan. We expect initial funding from the following sources:



<sup>&</sup>lt;sup>4</sup> http://ecoaction.gc.ca/ecoenergy-ecoenergie/heat-chauffage/support-soutien-eng.cfm.



- 2.) Complete production prototype
- 3.) Develop, complete, and produce marketing collateral
- 4.) Develop strategic alliances with home builders and join appropriate organizations
- 5.) Start placing articles in media
- 6.) Set up warehousing and infrastructure in Calgary to support product launch in
- 7.) Complete strong penetration into Calgary and surrounding area



The details of the Implementation Plan are best described in a project plan format as shown on the next page. Considerable planning has gone into each event in the plan.

# Further Opportunities Beyond the Scope of this Business Plan

Simple Solar management will begin to assess future vertical or horizontal growth opportunities complementing the existing product offering. It is likely that the "Freedom Too" will be introduced to the aftermarket or retrofit market. However, this can happen only after a wider acceptance of the solar technology. Therefore, following a similar phased approach, we fully expect this growth wedge to be driven by new or expanded uses for solar technology, including those relating to hot water supply or water conservation. These innovations may include both residential and commercial applications such as radiant in-floor heating systems, solar heated driveways, gray water collection and distribution systems, landscaping uses, or remote location energy delivery systems.

# **Operational Workflow**

We get an order when the builder gets the order. At that point, events will roll out according to the following schedule.



#### Simple Solar Operational Timeline

Although we will experience a cash to cash gap of 30 days twice during the period between order and final payment, because new homes take a long time to build we will have somewhat predictable 90- and 180- day planning windows that will allow considerable flexibility in manufacturing and installation.

More specifically, we anticipate having approximately 70 days from order to delivery of the rack and tank, and an additional 83 days until the panel and pump need to be delivered. This appreciable lead time will allow us to match manufacture to demand—build to order.

Inventory, even though the solar panels are sourced from will not be an problem, as explained below.

For all of these reasons, Simple Solar will operate relatively lean. Therefore, our six-month forecast should be well in line.

# 



# Manufacturing System Value Chain

Because of long lead times in building homes, managing inventory will not be a concern. The solar tubes will be delivered from we will place monthly orders based on credible sales forecasts from our builders. The bubble pumps will be manufactured as needed. The other system components do not represent significant inventory costs, because they are relatively low-cost items and will be purchased from wholesalers "off the shelf".

#### Service

Simple Solar is committed to offer exemplary service and support to its customers. We will include an Owner's Manual with each system, and unequivocally welcome customers to call for information or advice. Simple Solar will proactively demonstrate this commitment by calling each customer within two days after closing to check in and make sure their system is functioning properly. (To confirm that the system is working, the homeowner needs only to see bubbles in the bubble pump.)

Simple Solar will also offer, for a fee, an annual maintenance check. This will involve a visual check of the main components of the system and replacing the glycol as appropriate.

# Facility and Assets

During the first year, Simple Solar will have to move out of its temporary space at the offices of When operations officially commence in Simple Solar will relocate to a small bay in an industrial park in Calgary or a surrounding community. The relocation site will be chosen based on available rent, business taxes, access to deliveries, and proximity/ease of access to Calgary.

# **Risk Analysis and Contingency Planning**

# Risk and Risk Management

#### **Barriers to Entry**

Simple Solar will face stiff competition. A significant business window has been opened, and this will lure others. That said, the following barriers will prevent a company from easily encroaching on our business:





Imitation - The Sincerest Form of Flattery

**New Technology** 

# **Financial Statements**

## Financial Plan

This section outlines the projected financial performance of Simple Solar, based on executing the business model, the initial investment, and the project level of annualists William per ug—are neviralled for the projections are predicated on targeting the tribute of the projections are predicated on targeting the tribute of the projections are predicated on targeting the tribute of the projections are predicated on targeting the tribute of the projections are based on 10 years of operations of the projections are based on 10 years of operations at a further projection of the projections are projections are based on 10 years of operations at a further projection of the projections also depend on the following key

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-\$200,000

- We assume that housing starts in the markets that Simple Solar outlines in its Sales Forecast and Marketing Plan continue to grow as expected.
- We assume no dramatic, unforeseen changes in renewable technology that would render our product immediately obsolete.

Simple Solar expects to break even by the end of and be cash flow positive by the end of year of operation. After the initial investment, the greatest cash needs will arise during which we will



#### The Revenue Profile

The revenue profile, as depicted in the Forecast Revenue Profile graph, reflects modest revenue in the near term followed by phenomenal growth in the medium and long term

# The Sales Activity

To achieve our sales projections, we will focus on the Calgary market in 2008

# **Forecast Revenue Profile**

Operating years 1 - 10



5

8

9

10



1

2

3



Sources and Uses of Funds
Total initial funding for Simple Solar is CDN, obtained from the following sources:
Exit Strategy
Simple Solar management is contemplating multiple exit strategies that will be available to investors who wish to capitalize on the initial growth of Simple Solar over the next given that our initial product will likely we anticipate the following exit options:
The Offering
Funding Request

# Conclusion – A Compelling Blueprint for Green Success

The green movement is well underway, and its momentum accelerating. The Canadian government, attuned to this crescendo in voter attitudes, has enacted several green initiatives to spur growth in green commerce. Canadian consumers are eager to buy green products that work and are affordable. These factors alone clearly portend both a reservoir of demand, and a dramatic surge in demand, for green products.

Simple Solar has identified a robust group of potential end-users that are not only predisposed to buy its product, but can afford it. Moreover, Simple Solar has devised a distribution model that will enlist highly motivated "Green Built" builders and fold the product price into homeowners' mortgages, making their homes even more attractive to potential buyers.

Simple Solar's product itself has demonstrable and decisive competitive edges that position Simple Solar to take rapid and commanding advantage of this fertile market. The Freedom Won will have wide appeal based on an unrivaled convergence of heightened social consciousness, carefree functionality, affordability, and dollar savings from day one.

These competitive advantages apply to both conventional and existing solar products, and enable Simple Solar to succeed where others have failed. The other products on the market are more complicated and costly to install and maintain, and are less reliable. Other green products have failed to deliver what they promised.

The Simple Solar management team have the qualifications, experience and expertise to capitalize on the green movement and drive this business.

There are many other business opportunities that can be leveraged using the technology, name brand, and distribution channel used for Freedom Won. Freedom Too may be an aftermarket system. It is likely we will develop a system for heating the home through in-floor radiant heat as well as small commercial systems.

The timing is perfect for Simple Solar—and for its investors. The initial funding needs are modest. The enterprise's rapid expansion will be self-generated. Investors will have several attractive exit strategies.

In summary, this Business Plan demonstrates that Simple Solar will offer a viable water heating choice—the primary water heating choice—for new homeowners. In so doing, Simple Solar will "do well by doing good", and will become an award winning company.