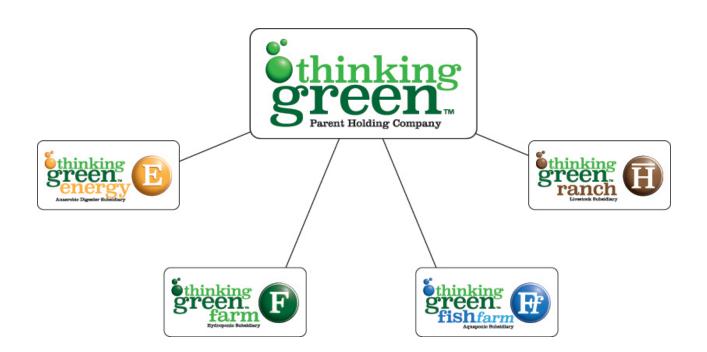


2018



Prepared by: Richard Ham, CEO/President

Thinking Green

BUSINESS PLAN

BUSINESS SUMMARY



THINKING GREEN's mission is to create integrated, environmentally aware food production facilities for carefully selected metropolitan areas that have

extraordinary unmet market demand for high end produce and meats. We select site locations where we are likely to enjoy a monopoly on fresh, ultrapremium, organic, vine ripened produce and local meats.

Our facilities are self-contained and independent of the local conditions. **THINKING GREEN** integrates solar powered



hydroponics/aeroponics and aquaponics, sprouting, conversion of organic waste into energy (and other biofuel production such as algae production if viable in the future), and organic ranching in reproducible and "scalable" facilities.

Our systems are insulated from the local environmental challenges and can provide ultra-premium produce in even the most challenging locations from the arid deserts of Las Vegas to the frozen tundra of Alaska. We will deliver top quality, fresh, organic, local produce in locations where consumers will pay premium prices for produce that are simply unavailable from any other source... at any price.

MONOPOLIZING MARKETS

Warren Buffet once said:

"Buy high quality businesses with a strong competitive advantage below their fair value and hold them until they lose their competitive advantage (which is hopefully never)."

Our Site Selection Team will identify locations that will provide a "strong competitive advantage", a defacto monopoly on fresh, ultrapremium, produce. Our ideal market dynamic will present customers with the choice to buy our high priced luxury produce or buy our





competitors processed, high mileage, box-ripened, fumigated, non-organic, frozen, irradiated produce <u>at even higher prices</u>.

In most of our local markets, we expect to enjoy a monopoly indefinitely ... and the barriers to entry for competitors will be significant. In each marketplace, we will enjoy the first-mover advantage and build on an entrenched, loyal customer base and establish a solid reputation. Our dominance in any specific market should discourage would-be competitors, and motivate them to seek out one of the many other locations where we are **not** in operation.



FOOD

THE ULTIMATE COMMODITY





FOOD IS THE ULTIMATE COMMODITY

When most investors think of commodities, things like gold silver and copper come to mind. However, food and water are also commodities and are actually more important than most of the commodities traded on the COMEX. The public can survive forever without silver; the same cannot be said for food.

Warren Buffett's advice has always been "invest in what you know".

While you probably don't know how a computer chip works or why Intel's latest computer chips are superior, investors immediately understand the value of a fresh flavorful berry or vine ripened heirloom tomato without relying on the advice of technical advisors.

HEAVY COMPETITION FOR PRIME FARM LAND

Farmland in America is divided into several tiers of quality. Grade A farmland is the most fertile land, with the best climate, best access to water and best access to transportation to deliver the finished product.

The other grades range down to Grade F; land which is considered useless for farming for a variety of reasons.

Those people not involved in farming probably don't realize that essentially all of the Grade A farmland in America was bought up years ago. There is essentially no Grade B farmland available either. Most groups interested in buying farmland today must settle for Grade C or D land and try to cope with the compromises and inadequacies of such low-grade farmland. Most of the Grade A and B farmland will never come back on the market or be available at any price.

The **THINKING GREEN** facilities offer the opportunity to pay Grade F land prices, and through our technology, grow produce equal to **or better than** that of Grade A farmland. Our facilities offer maximum fertility, optimal climate, unlimited access to water and we can choose locations that are closer to the customers than most farms. Our facilities are designed to provide farming with zero compromises, zero challenges, in locations that are hand-picked for proximity to the end consumers.



THE ART OF

SITE SELECTION





THE ART OF SITE SELECTION

Site Selection Is Our Most Important Job.

Many businesses have trouble forecasting market demand, market size, pricing elasticity and other key factors. In our case, we can quantify most of these variables with great accuracy, *in advance*. Our Site Selection Group can easily research the existing level of demand and the prices <u>currently being paid</u> for each specific item of produce (inclusive of existing shipping, customs, tariffs, brokerage fees and so on).

The data used for site evaluation is not speculative; it is hard data. Data from ongoing verifiable commercial activity. We can accurately forecast market demand, optimal product mix and set the retail pricing we can charge for each existing item <u>before</u> we commit to any specific location. Most of **THINKING GREEN**'s produce will simply be displacing the inferior, trucked-in, produce being offered in that area.

<u>New Exotic Produce</u>: In some cases however, we will be bringing new and exotic produce to our local marketplaces. In this case, we must estimate pricing and demand for these items. However, we will meet with our prospective customers and negotiate pricing in advance. We feel confident that these exotic, previously unavailable items will, in fact, generate the MOST demand and sell for the HIGHEST prices.

<u>Cost of Production</u>: We will also be able to accurately calculate our cost of production for each location, and thus generate unusually accurate pro-forma income statements that are based in fact, not speculation. Exhaustive analysis and modeling of candidate sites is the key to reproducible long term profits. As they say in real estate development:

"You make your money when you buy, not when you sell."

SITE SELECTION CRITERIA

Because our facilities are essentially independent of the local weather, soil conditions, challenges and constraints, our Site Selection Team is free to consider almost any location on the planet. The Site Selection Team will evaluate sites using the following criteria:

- <u>Monopoly Potential</u>: Local markets with the best chance for a long term monopoly onfresh, organic, local products.
- <u>Potential for Enduring Monopoly:</u> Markets with the best chances of retaining that monopoly for decades into the future.



- Local Factors that Discourage Competitors: Markets where extreme temperatures or lack of land, water, energy or other impediments prevent successful open air farming operations.
- Consumer Profile: Local markets with very high disposable income.
- Success of Presales: Before we commit to a location, we will visit local buyers and negotiate long term sales contracts with them before we even begin production. Obviously this ensures a market for our products and reduces the risk even further.
- Low Supply: Local markets where there is little or no fresh, organic, vine ripened, gourmet produce.
- Very High Demand: Markets where demand is unusually high (gourmet restaurants, high demand for organic food, boutique produce shops).
- <u>High Transportation Costs</u>: Markets where fresh or exotic produce must be flown or trucked or even incurring import duties and taxes ... increasing the cost and degrading the quality of the product.
- Unripe Produce: Locations where the fruits and vegetables must be picked before they are ripe, and forced to ripen in a shipping container en-route. (resulting in poor nutritional value, artificial colors, reduced flavor, spoilage and a generally inferior product).
- Complete Unavailability of Some Items: Where clients demand specific produce items that do not travel well and are, therefore, never available... at any price. (For example: Heirloom Tomatoes)
- Regulatory Impediments: Where import regulations hurt our imported competition. For example, Japan is so concerned about insects coming in with imported produce that they routinely fumigate produce with poison gas. This process, turns premium firm California strawberries into a box of mush. If we grow locally in markets like this, we will avoid these regulatory issues.
- Out of Season Demand: Where there is demand for "out of season" produce (Thinking Green's facilities can grow any crop in any season).
- Excess Demand: Markets where there is demand for high volumes of food; demand that far exceeds the local production capacity.
- Relative Low Cost of Production: We will favor locations where the land, labor and support services are inexpensive (cheap land considered unattractive for farming or any other use) relative to the sale price of the produce. Thus, even if land and labor are very expensive in a particular



location, we may still choose that location if we can charge even higher prices for our products (For example: Las Vegas, NV). A favorable <u>ratio</u> of cost to price is the criterion.

- <u>High Tariffs</u>: Where import taxes and tariffs are abusively high. (Some countries add such heavy taxes that the cost of the produce is doubled or even tripled.) These tariffs hurt our out of country competition and enforces the advantages of local produce.
- <u>Low Sovereign Risk</u>: In evaluating international locations, we will favor markets with favorable local tax laws, low currency risk, political stability, favorable profit repatriation laws and other country specific factors.
- <u>Minimal Corruption Issues</u>: Many international and even some domestic locations are plagued with corruption, bribery and other issues. We will favor locations where corruption and bribery are less of a factor.
- <u>Subsidies</u>: We will favor locations where subsidies, USDA grants, tax breaks and other incentives for our installations are strongest.
- <u>Agrihood Potential</u>: An Agrihood is a new trend in neighborhood subdivision development that incorporates onsite agriculture. Agrihoods are a hot, emerging trend in community real estate developments. Thinking Green will always consider a site's potential as a Agrihood development. See Appendix C for a news article on the Agrihood trend.
- <u>Favorable Long Term Demographics</u>: We will favor locations where the demographics are moving in our favor. For example, increasing populations, increasing disposable income, decreasing per-capita supply of food and so on.
- <u>Availability of a Lease Option on the Land</u>: We will prefer the flexibility of a lease-to-purchase on our acreage. If, after an extended trial period, a local market is as strong as we expected, we can complete the purchase of the land. If, on the other hand, a particular market underperforms our expectations, we can terminate the lease and move our modular facility to a new, more accommodating location. We prefer to make a purchase only AFTER we have a proven market.
- <u>Real Estate Appreciation</u>: If we do elect to purchase the land under our facility, we will favor locations where the acreage is positioned for strong appreciation over the coming years. Real estate value appreciation can have a direct, positive influence our stock price.



Locating our facilities in sites that meet the above criteria will assure long-term demand for our produce and will allow us to sell in an auction-like "seller's market" environment, charging ultra-premium prices to those few customers who will pay the most for our limited production. This model may produce prices that exceed even our most optimistic projections.

EVALUATING THE LAS VEGAS LOCATION USING THIS CRITERON.

Thinking Green owns a 50 acre parcel 30 minutes from Las Vegas. The Las Vegas installation will be our flagship installation and will be the model for dozens of installations around the world. In Appendix One we provide a full analysis of the Las Vegas market using our Site Selection Criteria.



OUR TECHNOLOGY





11

OUR TECHNOLOGY

THINKING GREEN stands apart from "old-school" greenhouse operations because our extensive use of technology. Our long list of innovations include:

- Modular construction
- Anaerobic Digesters
- On-Site water generation
- Sun-tracking solar panels
- High-tech LED lighting specifically engineered for plants
- Computer controlled watering and nutrient delivery
- Vertical gardening
- Robotic automation

STATE OF THE ART MODULAR STRUCTURES

THINKING GREEN has indentified several innovative modular structures that are a good fit for our strategy. We can choose the specific structure that will be the most appropriate strategy for each individual installation. Below are a few



of the outstanding structures we have to choose from:

ARIZON AIR DOME

One of our favorite structures is the Arizon Air Dome technology, which allows rapid construction, prefabricated modules and cookie-cutter buildings. For more information on this new style of construction please visit <u>www.arizonstructures.com</u>. Arizon has posted a video walkthrough that can be viewed <u>HERE</u>.

The Arizon Air Dome technology allows us to build a new facility and render it fully operational in approximately 6 months. The speed and ease of construction mean that thinking Green can expand to new markets quickly, easily, and with a minimal "learning curve". These structures can also be moved easily in case one of our selected locations does not meet our sales expectations.



MULTIPLIED PRODUCTIVITY

A ten acre indoor greenhouse promises impressive productive capacity. But the acreage alone only tells part of the story. One of the primary drivers of our productivity is the multiplicative increase we gain by utilizing our 30 feet of vertical space. Because we use all of the vertical space, a 10 acre facility may produce the equivalent of 100 acres of flat land farming.

But our advantage doesn't end there. For example, a flatland farmer can usually raise only one crop of tomatoes per year when the climate permits. We are able to raise four crops or more per year as we are independent of the seasons.



Thus, our production for one acre of land will be many times more than an open air farmer... with superior quality produce. This radical increase in productivity more than offsets any increased overhead expense.



13

ANAEROBIC DIGESTERS

Our Anaerobic Digesters will internally generate much of the energy for the facility operations. The generation of clean energy for equipment, heating and cooling. vehicles and operations will come from the organic wastes from operations of the facility. This waste stream will be processed in an onsite anaerobic digester. Additional energy will come from the solar panels on the greenhouse roofs. Our



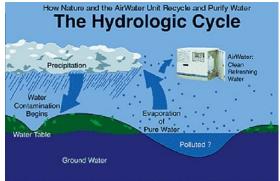
installations should even produce enough energy to allow sale of the excess energy to the surrounding community.

FULLY AUTOMATED:

Because our facilities are fully automated and computer controlled, a massive installation can be supported by only a handful of employees. Our installations can be thought of as automated factories where robotic watering systems, mechanized conveyer belts, sensors monitoring each critical growing factor and computers take care of most of the routine tasks.

ONSITE WATER GENERATION

Because our facilities are "closed loop" we lose little water to evaporation, hence the challenge of replacing lost water is easily managed. We can easily replace what little water we consume with state of the art atmospheric water makers, desalination plants, local wells or municipal water depending on the location. Self contained, solar powered atmospheric water makers can generate far more water than we would ever require, some can produce up to 5,000 liters per day! (See article <u>HERE</u>).







STATE-OF-THE-ART LED LIGHTING

We plan to use the latest LED lighting from Phillips, specially designed indoor for horticulture. These amazing lights generate different colors (each with different effects on the plants) and deliver light to both the top AND

the underside of the leaves. These lights are super energy efficient while delivering optimal light to the plants. For more information about this technology, click <u>HERE</u>.

SUN TRACKING SOLAR ENERGY

We are evaluating the SIKA ENERGY sun tracking solar equipment to generate both heat and energy for our greenhouses. (www.sika-energy.com). This system gathers the sun's energy, heating and cooling the greenhouse, but DOES NOT BLOCK THE LIGHT. We are also considering installing more traditional solar panels on the "extra" land surrounding each installation.



SCALABILITY

The main strength of **THINKING GREEN**'s forward thinking closed-loop system is the reproducible aspect. Our facilities can be reproduced and "scaled" at will.

Our business model offers scalability in two distinct ways:

<u>Scaling at One Location</u>: We will buy more land than we need at each location. If we encounter extraordinary demand, we can quickly and easily double or triple the size of an installation, allowing us to "right-size" an installation to meet the actual market demand..



<u>Scaling to New Locations</u>: Our installations are "cookie cutter", using the same building materials and the same technologies regardless of the climate or outside conditions. So, our company can easily scale to new locations both domestic and international.

QUICK AND EASY RELOCATION

The dynamics of each our locations will be constantly in flux. If demand in one location is weaker than expected, we can easily disassemble a facility, terminate our land lease and move all of the components to a more favorable location. Our flexibility and adaptability allows us to quickly recover from the occasional disappointing location choice, or from markets that unexpectedly deteriorate in future years.

SNOW LOAD

Some of **THINKING GREEN's** state-of-the-art modular structure designs can withstand 150 mph winds and snow loads of 50 lbs per square foot. This allows us to operate in the heavy snow environments of the northern United States, Canada, Alaska and other challenging environments.



Our ability to cope with highly challenging environments is important, as the demand in these markets is likely to be strongest.

INNOVATIVE PRODUCE PACKAGING

There are several new produce packaging technologies that promise to keep produce fresh 2 to 3 weeks instead of 2 to 3 days. These technologies are safe, healthy and inexpensive. We will continue evaluating these new technologies as they may open up new opportunities to export our produce to a larger, more geographically distributed audience.



CONTINUOUS IMPROVEMENT

The technologies that support the **THINKING GREEN** initiative are evolving at a very rapid pace. We expect huge advances in solar energy, water purification systems, bio-fuels and other key technologies over the coming years.

We will upgrade our technology infrastructure, and improve our profitability as these advances become commercially viable.

CONTINUOUSLY EVOLVING TECHNOLOGY

The above technologies are just a few of the breakthrough technologies that will drive **THINKING GREEN**'s efficiency, profitability and ... share price. There is a 400 page Technical Business Plan that delves into the engineering specifics and provides far more detail on the various technologies that sets us far apart from standard greenhouse operations. Contact our office for a deeper "dive" into our technology suite.

GOOD TECHNOLOGY = HIGH STOCK PRICE

As discussed more fully later in the section entitled "Share Price and Company Valuation", the valuation of **THINKING GREEN** is primarily a function of how many facilities we build and how quickly we can build them.

Our modular, pre-fabricated structures are more than just cool tech, they are possibly the single most important factor influencing the growth of the company and the growth in share value of the Company.

Our ability to deploy new facilities quickly, smoothly and in a cookie-cutter fashion, means the value of the Company (and the share price) should rise just as quickly.



PROTECTING OUR PLANET





ENVIRONMENTALLY SENSITIVE

Our installations are highly controlled environments for growing produce and livestock; generating a nearly neutral ecological impact.

THINKING GREEN strives to internally re-use all of its outputs, as much as possible, to enrich our products and be more cost effective in our operations. We create these efficiencies while implementing the most environmentally safe and ecologically green processes, technologies and practices.

A sustainable agricultural closed-loop system is defined as:

"an environmentally friendly agricultural production system in which any output is capable of being recycled to create another product" (QFINANCE, n.d.)¹

Our mission is to achieve, as far as today's technology allows, an agricultural installation, which is a closed system, self sufficient and "off the grid."

CARBON CREDITS

The **THINKING GREEN** concept may qualify for carbon credits and other incentives available to green businesses. It is premature to speculate on the carbon credit marketplace, the success of these initiatives and whether thinking greens facilities will qualify. However there is a good possibility that our facilities will be recognized for being green and will be rewarded for our efforts.

WATER AWARE

Conserving our water resources is an increasingly important issues in most parts of the world. Open field farmers lose as much as 80% of their water to evaporation.

More water goes back into the air, than into the plants!

The **THINKING GREEN** technologies virtually eliminate water loss from evaporation. And what little water is lost will be replaced by onsite water generation equipment. We plan to impose nearly zero burden on the local water supply.



ENVIRONMENTALLY AWARE INVESTORS

There is a significant group of investors who strongly prefer funding environmentally responsible and sustainable enterprises. Not only is green business the right thing to do, but being green also attracts a strong and dedicated shareholder base. Which brings us back to one of our core principles:

"Doing Well... By Doing Good."



PRODUCT GROUPS





PRODUCT GROUPS

Thinking Green is composed of four distinct product groups:

- THINKING GREEN FARMS
 - o Fruits, Vegetables, Spices, Herbs
- THINKING GREEN RANCH
 - Meat Products including Wagyu Beef
- **THINKING GREEN** FISH FARMS
 - Aquaculture farming of Salmon, Talapia, Trout, Shrimp and so on
- THINKING GREEN ENERGY
 - Clean green energy generation from our Anaerobic Digesters and Solar Farm

EXOTIC ULTRA-PREMIUM PRODUCTS

In reviewing our product groups, bear in mind, we will always seek to produce the most exotic, high value, coveted products in each category. High end restaurants are always looking for new and exciting dishes to stand out from the crowd. They actively search for exotic, unusual, ultra-premium ingredients to lure their customers back. **THINKING GREEN** will constantly scour the planet to bring exciting, unique, tasty new produce to our discerning clientele.

As part of this effort, we will stay in close contact with our celebrity chefs, solicit their wish list of meats, fruits, vegetables and spices and, in some cases, provide those exotic products to our special clients on an exclusive basis.



HYDROPONICS

THINKING **GREEN's** selection of fruits. vegetables, spices, herbs and exotic produce will

be grown in an organic, pesticide free environment. The product mix for each facility will be "customized" to meet the individual needs of high end restaurants, catering companies and luxury produce retailers in each local market. No two will be the same.



The Vertical Advantage: Vertical farming and/or hydroponics can produce about 10 times the amount of produce per acre, per year, than a traditional soil farmer. This type of growing uses 70 to 90 percent less water than a field farmer as the water is recirculated and goes straight to the plants, resulting in minimal

evaporation.

Reduced Pests and Diseases:

Most pests and diseases are soil-borne, however hydroponics is soilless, therefore, there are fewer pest and disease problems.

Multiple Crops per Year:

Hydroponic growing allows crops that would traditionally be a mono crop to have multiple yields each season. This strategy also allows us to grow coveted "out of season" crops.

The following is a partial list of Fruits and Vegetables that can be grown in our Note, however, that we will analyze each local market individually facilities. and focus exclusively on those items that deliver the highest revenue, at the lowest cost and can be produced in the shortest time period:

- ➤Tomatoes
- ≻Cucumbers
- > Artichokes
- ≻ Celerv
- ➢ Radishes
- ≻ Carrots
- ≻Yams

- > Strawberries
- > Beets
- > Leeks
- Asparagus
 - > Peas

 - ➤ Beans
 - ➢ Eggplant

- ➢ Lettuce
- > Peppers
- > Cabbage
- > Parsnips
- ➢ Broccoli
- ➢ Rhubarb
- Brussels Sprouts



23

- ≻ Cauliflower
- ➢ Potatoes
- ➤ Cantaloupe
- ≻Grapes
- > Spinach
- ≻ Mustard Seed
- ≻Herbs Basil
- > Herbs Mint
- >Herbs Sage
- ≻Herbs Medicinal

- Squash
- Blueberries
- ≻ Melons
- > Arugula
- Chard
- ➤ Cress
- ➤ Herbs Chives
- Herbs Oregano
- ➢ Herbs Thyme
- > Exotic fruits like pineapples, bananas & citrus

- > Onions
- ➢ Watermelon
- ➢ Raspberries
- > Zucchini
- ➢ Edible Flowers
- ➤ Barley
- Herbs Marjoram
- > Herbs Rosemary
- 🕨 Mizuna







THINKING GREEN's cattle and livestock ranching operations are key to our "off the grid" sustainability. The waste from the cattle and the aquaponics feed the bio-digester and allow us to generate more than enough energy to run all of our other operations.

The cattle can be raised in both indoor and/or outdoor facilities. The animals will be raised in a

controlled environment. No

hormones or inorganic substances will be used. Natural growth processes will be used in order to minimize potential health and environmental concerns.

THINKING GREEN will package its meat products (beef, pork, poultry, in some cases exotic meats) for sale both locally and nationally. Local customers will include local chefs, restaurants, grocers, farmers market, local public and private customers. The national market will be served via internet sales and shipping.

Wagyu Beef: Initially, we plan to focus our meat production on ultra-premium Wagyu beef in response to the huge demand for this high quality and healthy meat from restaurants and private tables across the country.

Wagyu beef typically sells for \$110 to \$150 per pound. CNN recently featured Wagyu beef in an article entitled "The World's Priciest Foods" (click <u>here</u>). We anticipate a manageable cost of

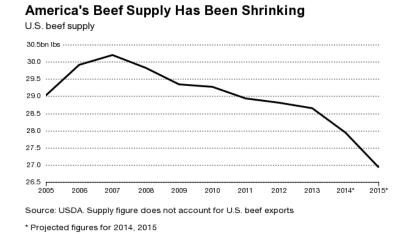


production, and therefore anticipate a very healthy profit margin in both local markets and via e-commerce orders to a national and even worldwide audience.



Custom Meats: We plan to offer restaurant chefs an unprecedented opportunity to select unusual, special cuts of meat, prepared to their specifications, aged for their specified time period and finished to their order. Again, this will give the restaurant chefs the ability to offer signature dishes that are simply unavailable at any other restaurant.

While raising cattle on inexpensive range land may appear more cost effective, however, our low transportation cost, premium products and premium pricing will usually more than compensate for our slightly higher cost of production.



Shrinking Supply:

The graph below shows the price of beef has been rising steadily since 2000 from about \$1.50 per pound to the current price of over \$9.00. The climbing price for beef should create an increasingly positive profit picture for our **THINKING GREEN** Ranching operations.



Meat and Animal Products may include:

- ➢ Breeding Cattle
- \succ Pork Products Finished Cattle (meats)

26

> Poultry

Business Plan

Confidential www.ThinkingGreen-USA.com



AQUACULTURE

THINKING GREEN'S Aquaculture will initially focus on the following kinds of fish:

and goldfish)

➤ Tilapia ➢ Bluegill

> Shrimp

- > Perch Miniaturized Carp (koi
- ➤ Catfish
- > Trout (brown, rainbow and brook)

Our local production will allow us to deliver the freshest fish to our clients without freezing. In many markets, fresh fish is simply unavailable. In some markets, we may find it profitable to grow breeds of fish that are not typically raised in an aquaculture setting. We will only undertake aquaculture projects in markets showing a strong demand coupled with a willingness to pay premium prices.

indoor Our aquaculture farms give protection against pollution, predators and eliminate most of the water loss from evaporation. Our complete control of environmental factors allows us to avoid all antibiotics, chemicals and hormones.

The waste stream from the aquaculture will be used as fertilizer and added to the digester as inputs.





BIOFUEL AND SOLAR POWER

Anaerobic digestion will be used to convert the waste of the animals and foodstuffs into renewable electricity and renewable propane vehicle fuel. The renewable natural gas should produce enough electricity to power all of the facility and fuel for the equipment. Solar powered greenhouses will contribute additional energy to the facilities. Our goal is total power self sufficiency, generating a minimal or net zero carbon footprint. **THINKING GREEN**'s management is actively considering other forms of energy such as algae and expects to incorporate them into our facilities as they become economically viable.

Other byproducts from the Bio Digesters will include organic fertilizer, animal supplements, animal bedding and so on.

The solar power will be used primarily for greenhouse and to purify water through reverse osmosis or other emerging technologies.

Generation of renewable energy reduces the carbon footprint of operations by incorporating the capacity of solar power and anaerobic



digestion into a closed-loop agricultural model for self generation of energy and by-products which go directly to operations or are sold to the public. These value added by-products will directly reduce costs for the hydroponic (i.e., fertilizer), fish and animal products (i.e., bedding and animal supplement).

BioMass Energy potential outputs include:

- FertilizerAnimal Supplements
- Animal bedding
- Bio diesel
- Methane
- ➢ Other bio fuels



OUR COMPETITION & SALES, MARKETING





OUR COMPETITION - HIGH MILEAGE LOW QUALITY FOOD

Some markets have excellent access to fresh produce and meats, *we will, therefore, avoid those markets.*

Instead, we will operate in markets where the only choice consumers have had from our "competitors" is food that suffers from one or more of the following insults:

- <u>Irradiation</u>: Many food producers extend the shipping and shelf life of their food by irradiating the food. Irradiation kills the molds, bacteria and other organisms that degrade food. Believe it or not, they not required to disclose irradiation because it is not considered an "ingredient".
- <u>Dyes</u>: Many of the fruits, vegetables, meats and other items in today's stores have been dyed to disguise their color. If consumers saw the true color, the fraud would be exposed. Grey salmon doesn't sell.
- <u>Methyl Bromide Fumigation</u>: Many countries are concerned about insects and other pathogens coming across their borders into their agriculture from imported food. They fumigate their imported food with Methyl Bromide (and other horrendous chemicals), which typically turns the produce into mush. Methyl Bromide is not green; it depletes the ozone.
- <u>Freezing</u>: Many markets have produce that is sold as "fresh" but has actually been frozen for long periods of shipping and storage and then thawed and sold as fresh. The freezing process breaks down the cell walls and injures the integrity of most produce.
- <u>Pesticide Residue:</u> Produce that is grown in the open air must usually be grown with pesticides. Pesticide residues can almost always be detected in and on the produce even after it is sold to the public.
- <u>Genetic Modification</u>: Genetically altered food is highly controversial. GMOs grow faster and are more resistant to pests, but the long term health risks and other implications will not be known for years to come. Thinking Green will never grow genetically modified produce.
- <u>Chemical Fertilizers</u>: Most imported produce is grown using nitrogen-based fertilizers. These chemicals are like narcotics that cause the fruits and vegetables to grow at a frantic hyperactive rate. The produce usually <u>looks</u> good, but, in fact, contains few vitamins and minerals, very low food value and very low nutritional value.



• <u>Mandatory Quarantines</u>: Many countries mandate that all incoming produce be quarantined for extended periods to monitor for pathogens and other threats. Obviously, the longer the food is kept in quarantine, the more flavor, nutrition and freshness is lost.

THINKING GREEN will focus on markets where our 'competition' is selling produce that has been subjected to some or all of the above atrocities. When we begin offering our produce in these deprived markets, the purveyors of low quality afflicted produce will immediately lose the high end of the market.

RISING COSTS INCREASE OUR RELATIVE ADVANTAGE

The continually rising costs of transportation, storage, fuel and other costs will exact a progressively greater burden on our 'competitors' ... but not **THINKING GREEN**. Our local advantage over the 'high mileage' producers will grow larger and larger as transportation prices rise.

SALES PLAN:

THINKING GREEN's local sales plan will entail direct marketing to the restaurants, chefs, grocers, farmers markets and private customers. To access these markets, in-house and external commission compensated sales representatives and wholesale distribution firms will be used. Also, specialized commission based representatives will work with high-end restaurants and chefs or private individuals, explaining our "designer" approach to delivering their prized ingredients. In other words, the restaurants will actually be able to <u>order</u> a wish-list of premium ingredients and we will grow it to their specifications.



THINKING GREEN will build a retail shopping area at many of our facilities where customers can come and select fresh produce and meats and even have it delivered.





We will actively cultivate national on-line sales for a few of our products, modeled on the sales and distribution methods pioneered by companies like Omaha Steaks, Scotts brand and the Herbal Supplement companies.

Ongoing advertising and development of the **THINKING GREEN** brand will facilitate ever increasing brand awareness in our existing customers and potential new customers. Marketing all our products consistently under the consistent **THINKING GREEN** brand will help expose our entire product group to the large health and nutrition aware consumer segment.

DATA ANALYTICS

Return sales and the generation of new sales will be key. A strong customer loyalty/appreciation program will be established using state of the art data analytics and proven techniques to reward customers who regularly purchase our **THINKING GREEN** products. *Data analytics will be an important part* of the ongoing sales plan to enable, over time, an efficient and cost effective way to focus on the most likely opportunities for **THINKING GREEN** to cultivate new customers and to increase sales from existing customers.

THINKING GREEN will use the internet as a significant sales channel, as a medium for interaction with our customers and for communication with new potential clients.

ECONOMIES OF SCALE

THINKING GREEN will expand its operations to many markets and locations both domestically and internationally. Each of the locations will require many of the same support products and services for day-to-day operations.

THINKING GREEN corporate headquarters will negotiate national supply contracts with vendors to provide top grade consumable products (such as filters, nutrients, solar power equipment) to each location based upon a single



negotiated contract. This centralized, single source, high volume purchasing power will enable **THINKING GREEN**'s Corporate Buyers to negotiate the best pricing and best terms.

Another advantage of a centralized purchasing strategy is specialization. We will have a team of buyers who are specialized in identifying the outstanding products, testing products to verify their quality and negotiating the best supply contracts.

None of our single locations could justify the expense and effort of such an ambitious program, however, when central corporate purchasing is negotiating for all the locations, this effort is money well spent.

The same logic applies to our sales and marketing programs. Central corporate will:

- Maintain a training center, to provide ongoing centralized training programs for sales reps to ensure excellent culinary and product knowledge.
- Maintain all company websites, generating a strong online presence ...
- Maintain a full video studio, generating hundreds of promotional videos... that will benefit each of our local installations.
- Buy advertising from nationwide sources at volume rates
- Purchase all promotional and packaging materials from bulk vendors at the lowest prices, with the highest quality materials for delivery to each of our locations
- Manage all data analytics of market and client information and deliver user-friendly market intelligence reports to each individual location.



ECONOMIC FACTORS

REAL ESTATE

COMPANY VALUATION

SHARE VALUE





FLEXIBILITY FLEXIBILITY FLEXIBILITY!

One of our key strengths at **THINKING GREEN** is our <u>ability to adapt</u> to changing market and economic realities. A quote attributed to Charles Darwin captures the importance of adaptability:

"It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change."

Throughout this business plan there is a strong bias toward ultra-premium, high-priced products, sold to a clientele more concerned with quality than price. While this strategy certainly makes sense in today's marketplace, economic cycles constantly change the economic landscape. The demand for ultra-premium produce will alternately grow and shrink.

Furthermore, even if the general economy remains unchanged, the specific local markets in which we operate, may experience surges or setbacks in economic conditions. These changes may impact demand for our products.

If the global, national, or even a single specific micro-economy changes, Thinking Green has the capacity to immediately adapt, adjust and reposition.

- 1. If a local micro-economy is suddenly not receptive to our concept, our facilities can be relatively easily and inexpensively be moved and redeployed in a marketplace that is better suited to our model.
- 2. If the product mix demand suddenly shifts in a local market, we can change with the market and deliver a new series of products that ARE in demand. We have almost no commitment to any particular product or process... plants are plants... we can immediately begin changing our seedlings and planting strategy.
- 3. If the United States economy enters a recession or depression, we can change our product mix towards an international market, towards those economies that are strong and vibrant. Remember, food is the most international commodity there will ever be.
- 4. If one local market experiences a major surge in demand, we can simply add on more modular sections to existing facilities. We will always acquire substantial extra acreage around our facilities that will allow for a major expansion if required by market demand.



The **THINKING GREEN** model is extraordinarily flexible, mobile, opportunistic, international and durable. As long as we listen attentively to our customers and marketplace, locally, nationally and internationally, we should have the ability to immediately adjust our production to not only thrive, but <u>benefit</u> from changes in market conditions.

INFLATION IS OUR FRIEND

Most businesses see inflation as a neutral impact. In other words, as the prices they pay for their raw materials, shipping cost, employee wages and other costs rise, the prices they sell their products for rises at about the same rate. Thus, inflation neither helps them, nor hurts them in a significant way.

THINKING GREEN is not an ordinary business.

Our greenhouse operations consume relatively few outside inputs. We have few employees, consume little or no power, have very low local transportation costs and are generally not very exposed to increased costs of doing business.

This means that, as the price we charge for our commodities continues to march upward, we don't see a substantial rise in costs. Therefore, inflation is our friend and should, all by itself, make a substantial, ongoing independent contribution to our net profit.

OUR SECRET WEAPON - REAL ESTATE APPRECIATION

Ray Kroc, founder of McDonalds, understood the wealth created by real estate appreciation. He famously said:

"We are in the <u>real estate business</u>... not the hamburger business."

Like McDonalds, **THINKING GREEN** will own substantial acreage under and around each of our facilities. Many of our sites will be "in the path of development", where we forecast substantial appreciation over the next ten or twenty years. We expect that real estate appreciation will substantially strengthen our balance sheet and be a major additional driver of stock value in the future.

MORE SECRET WEAPONS – GRANTS, SUBSIDIES AND INCENTIVES

THINKING GREEN expects to receive substantial financial assistance and regulatory concessions from state, federal and local governments and also from private foundations and other groups supportive of our mission.



For example, we are currently working with the USDA on several grants that should absorb a substantial portion of the startup cost for our facilities. As time goes on we will pursue a wide array of grants, loans, tax breaks and other support from government and private entities.

SHARE PRICE – COMPANY VALUATION

Obviously, investors and shareholders are focused on Company valuation. **THINKING GREEN**'s value model is fairly straightforward:

Every new facility has a fairly consistent and predictable amount of gross sales and net revenue. An analysis of our flagship Las Vegas facility will provide investors with a good estimate of the revenue that can be expected from a typical **THINKING GREEN** facility.

<u>The Key Question</u>: The question in forecasting stock value, therefore, is forecasting the <u>number of facilities</u> that will be created and forecasting how quickly new facilities can be brought online.

<u>The Analysis</u>: There is essentially no limit to the number of facilities that can be built, no limit to the number of sites that are in dire need of a ultra premium local food producer and, as a publicly traded company, no limit to the amount of capital available to construct these facilities.

<u>Management Bandwidth</u>: For companies like thinking green with unlimited opportunity and unlimited resources, the constraining factor is often management bandwidth. However, **THINKING GREEN** can be thought of as a 'modular' company, where each facility has its own local staff, its own local management and we expect each location to be fairly autonomous from Corporate management. We will hire a full team for each location, including a General Manager with responsibility for all aspects of the operation. Therefore, for **THINKING GREEN**, even management bandwidth should not be a limiting factor.

<u>The Answer</u>: Because there are essentially no impediments to growth, it becomes difficult to forecast how fast we will grow, how many facilities we will open, how much profit we can generate, what the future company valuation will be and ultimately what share price targets might be reasonable.

Rest assured that **THINKING GREEN** management has every intention of expanding the company and increasing the profits and share price as quickly as can be responsibly accomplished.

However, we are acutely aware that uncontrolled growth can kill an otherwise highly successful company. Therefore, we will <u>carefully</u> grow the Company maintaining maximum quality control, shareholder safety, regulatory compliance and unwavering adherence to our core business principles.



We will have full time, traveling Brand Protection Inspectors talking with our customers and touring each facility on a frequent basis to identify issues early, insure that our brand is protected and insure a consistent product.



RISK MANAGEMENT





RISK MANAGEMENT

Risk Management is one of our top priorities. Our entire business model has been designed to minimize risk and deliver smooth, predictable growth into the future.

Robert Kiyosaki famously said:

"It's not how much money you make, but how much money you keep."

The following are few of the strategies that protect the value of our brand and protect our shareholders.

A TRIED AND TRUE MODEL

THINKING GREEN is by no means a "new" concept. There are many other operations around the United States and the world that provide proof of concept for greenhouse food production.

THINKING GREEN is simply an enormously more efficient, higher tech, dramatically more profitable version of a proven model.

While our predecessors provide compelling proof of the viability and success of this type of farming, we will 'take it to the next level'.

DIVERSIFIED LOCATIONS

THINKING GREEN facilities will be built all across the country and internationally. Even if we encounter an issue with one local market or facility, the other facilities should continue operating as usual and should be unaffected by an isolated issue in one market.

NATURAL THREATS

Traditional farms are subject to a wide variety of threats that could damage or destroy their crops at any time. Threats ranging from too much rain to not enough rain to frost, local wildlife, insects, flooding, disease and a long list of other threats that plague dirt farmers.

Our fully contained facilities eliminate many of these threats; giving us a much more reliable net profit and subjecting us to far less unpredictability and risk (see the section entitled "Business Risks" below for a more thorough discussion of risks).



PRE-SOLD CONTRACTS

We expect that much of our produce and meat will be sold based upon longterm contracts with various restaurants, specialty food producers and local customers. We expect that our high-end customers will want to assure themselves preferred access to our best produce on a reliable basis and may request an exclusive relationship that will provide a solid, reliable, long term stream of income from each local facility.

CHANGES IN DEMAND FOR OUR PRODUCT MIX

There is a risk that particular items of produce may experience declining demand. In this case, we can shift our focus to a different mix of products in a matter of days to adapt to our changing marketplace. In most cases, we will have minimal commitment to any specific mix of products.

SCALING

Each of our facilities has a risk of becoming too large or too small for the local market demand. The modular nature of our buildings and the ease with which we can expand or reduce capacity allows us to "right size" our facilities to adapt to changes in each local market. Our adaptability is our key to reducing the impact of changes in local marketplace demand.

LEASE OPTION

Flexibility is the key to managing risk. We will typically enter into a multi-year lease with option to purchase on each of our parcels of land. The lease-option strategy allows us to "test drive" a location before we actually complete the purchase. Therefore, since our structures are easily relocated and our lease agreements can be terminated, we have the maximum flexibility to recover from an unexpectedly bad location.

RELOCATION

Over the years, we may find that one of our locations becomes unsuitable for any number of reasons. In this case, we have the option of simply closing down the operation, terminating our lease and moving the entire facility to another location that promises higher demand. This relocation option will be supported by acquiring land using a lease option as discussed above.



41

EXAMPLE FACILITIES & CASE STUDIES





OUR FLAGSHIP FACILITY

THINKING GREEN's first flagship facility will be built about 20 minutes outside the metropolitan area of Las Vegas, Nevada. The Las Vegas metropolitan area features tremendous demand, generated by a wealth of world class restaurants and sophisticated consumers.

Las Vegas imports essentially all of its produce. There are currently only one or two greenhouse operations in the greater Las Vegas area. There will never be meaningful competition from open air operations due to the extreme heat, lack of rain, dry climate and challenging soil conditions.

In Appendix One we have included a wealth of information about the Las Vegas location and market. We have also provided a full analysis of the Las Vegas market using our Site Selection Criteria.

For more information about the Las Vegas marketplace and our first installation, see Appendix One.

The future of food and energy production by just ... **THINKING GREEN!**

LAS VEGAS FINANCIAL PROJECTIONS

PROJECT CASH FLOW	YEAR 1	YEAR 2	<u>YEAR 3</u>	YEAR 4	YEAR 5
Net Income	\$3,304,032	\$3,667,851	\$4,059,392	\$4,480,549	\$4,933,304
Depreciation	1,305,000	1,305,000	1,305,000	1,305,000	1,305,000
Principal Payments	663,680	711,659	763,104	818,268	877,422
TOTAL PROJECT CASH FLOW	\$3,945,352	\$4,261,192	\$4,601,288	\$4,967,281	\$5,360,882
DDA IFATED INTEDNAL DATE A		DDO IFOTI	NET DDESI	NT VALUE	

PROJECTED INTERNAL RATE OF	RETURNS
IRR without any Tax Credits	18.78%
IRR with Tax Credits ¹⁰	32.93%

PROJECTED NET PRESENT VALUE

NPV @ 10% (10 yrs) \$33,481,733



43

ORGANIZATIONAL CHART





REGULATORY





REGULATORY CONSIDERATIONS

The Food Industry: The food industry, in general, is subject to fairly extensive regulatory oversight. Hydroponic grow operations, however, are less impacted by these regulations. Our produce is grown in a controlled environment with no pests, no pesticides or chemicals. The regulatory burden on **THINKING GREEN** is, therefore, likely to be far less than ordinary open air farm operations.

Aquaculture: The regulatory rules associated with Aquaculture farming are also generally manageable. Our indoor aquaculture installations will be sheltered in a closed greenhouse environment thus little or no antibiotics, chemicals or hormones will be required. Our fish will contain zero heavy metals, contaminates or other issues that plague the wild fish marketplace.

Energy Regulation: In renewable energy production, regulation is the main barrier for new facilities. Environmental considerations and the paperwork necessary for approval are time consuming and can be expensive. Also, sale of excess energy output may be regulated or not accepted by a local utility. Fortunately, we have highly



skilled engineers designing and installing our plants. They should help guide us through the myriad rules and considerations efficiently.

PROJECTED CASH FLOW STATEMENTS





CONSOLIDATED PROJECTED CASH FLOW STATEMENT



(5 - YEAR PROJECTIONS)

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
		. 27.11 2			
REVENUES					
Hydroponic/Aeroponic Subsidiary	\$5,362,500	\$5,791,500	\$6,254,820	\$6,755,206	\$7,295,622
Aquaponic Subsidiary	1,965,600	2,122,848	2,292,675	2,476,090	2,674,176
Livestock Subsidiary	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000
Anaerobic Digester Subsidiary	1,353,544	1,353,544	1,353,544	1,353,544	1,353,544
TOTAL REVENUES	10,281,644	10,867,892	11,501,039	12,184,840	12,923,342
SUBSIDIARIES EXPENSES					
Cost of Goods Sold - Hydro/Aero	1,542,753	1,646,094	1,756,939	1,875,859	2,003,469
Operations - Hydro/Aero	1,794,694	1,845,613	1,902,187	1,965,110	2,035,168
Cost of Goods Sold - Aqua	567,140	603,292	641,991	683 <i>,</i> 430	727,814
Operations - Aqua	753,395	777,433	804,176	833 <i>,</i> 958	867,163
Expenses - Livestock	1,195,166	1,189,097	1,182,590	1,175,612	1,168,129
Expenses - Digester	590,464	580,112	569,012	557,110	544,346
TOTAL SUBSIDIARIES EXPENSES	6,443,612	6,641,641	6,856,895	7,091,079	7,346,089
GENERAL ADMININISTRATION					
Salaries	250,000	270,000	291,600	314,928	340,122
Office	24,000	24,000	24,000	24,000	24,000
Professional fees	100,000	100,000	100,000	100,000	100,000
Media/IR	75,000	75,000	75,000	75,000	75,000
Payroll Tax and Benefits	55,000	59,400	64,152	69,284	74,827
Travel	24,000	24,000	24,000	24,000	24,000
Office Supplies	6,000	6,000	6,000	6,000	6,000
TOTAL GENERAL ADMINISTRATION	534,000	558,400	584,752	613,212	643,949
EBIT FROM OPERATIONS	\$3,304,032	\$3,667,851	\$4,059,392	\$4,480,549	\$4,933,304
PROJECT CASH FLOW					
Net Income	3,304,032	3,667,851	4,059,392	4,480,549	4,933,304
Depreciation	1,305,000	1,305,000	1,305,000	1,305,000	1,305,000
Principal Payments	663,680	711,659	763,104	818,268	877,422
TOTAL PROJECT CASH FLOW	\$3,945,352	\$4,261,192	\$4,601,288	\$4,967,281	\$5,360,882
			DROIFCTER		
PROJECTED INTERNAL RATE OF RETUR					
IRR without any Tax Credits	18.78%		NPV @ 10	9% (10 yrs)	\$33,481,733
IRR with Tax Credits ¹⁰	32.93%				



48

Notes to Consolidated Projected Cash Flow Statement **THINKING GREEN**

DEBT:

DEBT	
Anaerobic Digester Facility	\$2,000,000
Livestock Facility	1,172,500
Hydroponic/Aeroponic Facility	4,355,000
Aquaponic Facility	1,742,000
Total Debt	\$9,269,500

EQUITY:

EQUITY	
Anaerobic Digester Facility	\$1,000,000
Livestock Facility	577,500
Hydroponic/Aeroponic Facility	2,145,000
Aquaponic Facility	858,000
Total Equity	\$4,580,500

PROJECT COST (With and Without Tax Credits)

PROJECT COST (With and Without Tax Credits)					
Debt	\$9,269,500				
Equity	4,580,500				
TOTAL PROJECT COST W/O CREDITS	\$13,850,000				
Less: Potential Tax Credits*	(3,630,000)				
TOTAL PROJECT COST With CREDITS	10,220,000				

* Federal Tax Credits for green energy could be as much as 30% of the project cost of some of the facilities. Further credits from Federal Programs or the State of Nevada for green energy, property and sales taxes and other incentives are not taken into allowance but would further reduce the overall cost of the project.

There are a number of potential grants which may be available from private and public sources for this project. Accessing these grants would further reduce the cost of the project.

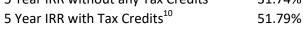
Also, the sprouting facility for the feed for the livestock may qualify for federal incentives (could be as much as \$100,000 +-) and perhaps state tax credit incentives as well but are not taken into the calculations for any of the projected cash flow statements.



PROJECTED CASH FLOW STATEMENT

(5 - YEAR PROJECTIONS)

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
SALES					
Gross Sales- Produce, herbs, etc. ¹	\$5,500,000	\$5,940,000	\$6,415,200	\$6,928,416	\$7,482,689
Less: Returns and Allowances ²	137,500	148,500	160,380	173,210	187,067
NET SALES	5,362,500	5,791,500	6,254,820	6,755,206	7,295,622
COST OF GOODS SOLD					
Purchase Cost ³	790,486	853,725	922,023	995,785	1,075,448
Fertilizer ⁴	160,147	172,959	186,796	201,740	217,879
Freight (In)	43,560	47,045	50,809	54,874	59,264
Direct Labor Costs ⁵	548,560	572,365	597,311	623,460	650,878
TOTAL COST OF GOODS SOLD	1,542,753	1,646,094	1,756,939	1,875,859	2,003,469
GROSS PROFIT (LOSS)	3,819,747	4,145,406	4,497,881	4,879,347	5,292,153
OPERATIONS					
Advertising	150,000	172,500	198,375	228,131	262,351
Commissions ⁶	220,000	237,600	256,608	277,137	299,308
Depreciation	650,000	650,000	650,000	650,000	650,000
Delivery Expenses	124,915	134,908	145,701	157,357	169,946
Liability Insurance	25,624	27,674	29,888	32,279	34,861
Interest ⁷	294,972	272,431	248,261	222,343	194,552
Property Taxes	7,500	7,500	7,500	7,500	7,500
Management Consultant ⁸	75,000	81,000	87,480	94,478	102,036
Repair allowance	25,000	27,000	29,160	31,493	34,012
Travel	21,000	22,680	24,494	26,454	28,570
Payroll Taxes and Benefits	120,683	125,920	131,408	137,161	143,193
Utilities ⁹	0	0	0	0	0
Maintenance	30,000	32,400	34,992	37,791	40,814
Miscellaneous	50,000	54,000	58,320	62,986	68,025
TOTAL OPERATIONS	1,794,694	1,845,613	1,902,187	1,965,110	2,035,168
EBIT FROM OPERATIONS	\$2,025,053	\$2,299,793	\$2,595,694	\$2,914,237	\$3,256,985
PROJECT CASH FLOW					
Net Income	2,025,053	2,299,793	2,595,694	2,914,237	3,256,985
Depreciation	650,000	650,000	650,000	650,000	650,000
Principal Payments - Hydroponic	311,811	334,352	358,522	384,439	412,231
TOTAL PROJECT CASH FLOW	\$2,363,242	\$2,615,441	\$2,887,172	\$3,179,798	\$3,494,754
PROJECTED INTERNAL RATE OF RETUR	NS		PROJECTED	NET PRESENT	VALUE
5 Year IRR without any Tax Credits	31.74%			% (10 yrs)	\$21,378,405
E Voar IPP with Tax Credits ¹⁰	E1 700/		.		





50

Notes to Projected Cash Flow Statement THINKING GREEN FARM

- ¹ Gross sales revenue is based upon a variety of different types of produce and herbs. The mixture depicted for gross sales were typical hydroponic/aeroponic products of tomatoes, lettuce, and strawberries. Market driven products should be of higher revenue and profitability. Herbs are expensive and in most cases, easy to grow. In some cases, exotic herbs will be grown and, if feasible, be sold under company brand for health or beauty supplements.
- ² An allowance of 2.5% of gross sales for returns and allowances.
- ³ Purchase cost includes seedlings, seeds, rootstock and other required stock for growing the produce or herbs.
- ⁴ Fertilizer is from the liquid output of the anaerobic digester and from waste from the aquaponic facility. The fertilizer will be billed to THINKING GREEN FARM from THINKING GREEN ENERGY and THINKING GREEN FISH FARM.

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Farm Manager	\$80,000	\$82 <i>,</i> 400	\$84 <i>,</i> 872	\$87,418	\$90,041
Biologist(Chief Technical Officer)	90,000	93 <i>,</i> 600	97,344	101,238	105,287
Laboratory Technician	72,000	74,880	77,875	80 <i>,</i> 990	84,230
Farm Labor	240,000	249,600	259,584	269,967	280,766
Temporary Labor	66,560	71,885	77,636	83 <i>,</i> 846	90,554
Total Direct Labor Costs	\$548,560	\$572,365	\$597,311	\$623,460	\$650,878

⁵ Direct Labor Costs:

- ⁶ Commissions are calculated at 4% of gross sales.
- ⁷ Interest is calculated on a \$4,355,000 7% loan amortized over 10 years. Total cost of the hydroponic/aeroponic project is \$6,500,000 and assumes \$2,145,000 of equity.
- ⁸ Management consultant(s) will be utilized on an array of areas such as agronomy regarding exotic produce and herbs, biological and testing areas, equipment, new state of the art techniques, research and development.
- ⁹ A solar powered facility to generate enough solar power electricity for all the needs of the hydroponic/aeroponic environment. Cost of the solar power is contained in the structure and installation bid portion of the total project cost. So there should be no expenditures for utilities.
- ¹⁰ Federal Tax Credits for green energy could be as much as 30% of the project cost. Further credits from the State of Nevada for green energy, property and sales taxes and other incentives are not taken into allowance but would further reduce the overall cost of the hydroponic/aeroponic facility.



PROJECTED CASH FLOW STATEMENT



(5 - YEAR PROJECTIONS)

fishfarm							
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5		
SALES							
Gross Sales - Fish ¹	\$2,016,000	\$2,177,280	\$2,351,462	\$2,539,579	\$2,742,745		
Less: Returns and Allowances ²	50,400	54,432	58,787	63,489	68,569		
NET SALES	1,965,600	2,122,848	2,292,675	2,476,090	2,674,176		
COST OF GOODS SOLD	70 200	05 500	02.270	00 700	407 754		
Purchase Cost ³	79,200	85,536	92,379	99,769	107,751		
Feed Cost ⁴	212,520	229,522	247,884	267,715	289,132		
Freight (In)	7,500	8,100	8,748	9,448	10,204		
Direct Labor Costs ⁵	267,920	280,134	292,980	306,498	320,727		
TOTAL COST OF GOODS SOLD	567,140	603,292	641,991	683,430	727,814		
	507,140	005,252	041,001	005,450	727,014		
GROSS PROFIT (LOSS)	1,398,460	1,519,556	1,650,684	1,792,660	1,946,362		
OPERATIONS							
Advertising	75,000	86,250	99,188	114,066	131,176		
Commissions ⁶	60,480	65,318	70,544	76,187	82,282		
Depreciation	260,000	260,000	260,000	260,000	260,000		
Delivery Expenses	75,000	81,000	87,480	94,478	102,036		
Liability Insurance	29,484	31,843	34,390	37,141	40,112		
Interest ⁷	117,989	108,973	99,304	88,937	77,821		
Property Taxes	2,500	2,500	2,500	2,500	2,500		
Management Consultant ⁸	30,000	32,400	34,992	37,791	40,814		
Repair allowance	10,000	10,800	11,664	12,597	13,605		
Travel	7,000	7,560	8,165	8,818	9,523		
Payroll Taxes and Benefits	58,942	61,629	64,456	67,430	70,560		
Utilities ⁹	0	0	0	0	0		
Maintenance	12,000	12,960	13,997	15,117	16,326		
Miscellaneous	15,000	16,200	17,496	18,896	20,408		
TOTAL OPERATIONS	753,395	777,433	804,176	833,958	867,163		
EBIT FROM OPERATIONS	\$645,065	\$742,123	\$846,508	\$958,702	\$1,079,199		
PROJECT CASH FLOW							
Net Income	645,065	742,123	846,508	958,702	1,079,199		
Depreciation	260,000	260,000	260,000	260,000	260,000		
Principal Payments - Aquaponic	124,724	133,741	143,409	153,776	164,892		
TOTAL PROJECT CASH FLOW	\$780,341	\$868,382	\$963,099	\$1,064,926	\$1,174,307		
PROJECTED INTERNAL RATE OF RETU	RNS		PROIFCTED	NET PRESENT	VALUE		
5 Year IRR without any Tax Credits	23.14%				\$7,154,705		
			NPV @ 10% (10 yrs) \$7,154,705				





52

40.81%

Notes to Projected Cash Flow Statement THINKING GREEN FISH FARM

- ¹ Gross sales revenue is based upon a variety of different types of fish. The mixture depicted for gross sales were typical aquaponic products such as fresh water shrimp. Market driven products should be of higher revenue and profitability. Average sales price for the shrimp produced is conservatively estimated at \$3.50 per pound.
- ² An allowance of 2.5% of gross sales for returns and allowances.
- ³ Purchase cost primarily is based upon larval shrimp. The purchase cost of the larval shrimp is estimated at \$6,500 per one million (1,000,000).
- ⁴ Feed costs are assumed to be \$0.35 per pound of feed.

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Farm Manager	\$50 <i>,</i> 000	\$51,500	\$53 <i>,</i> 045	\$54 <i>,</i> 636	\$56,275
Biologist(Chief Technical					
Officer)	60,000	62,400	64,896	67,492	70,192
Laboratory Technician	48,000	49,920	51,917	53 <i>,</i> 993	56,153
Farm Labor	60,000	62,400	64,896	67,492	70,192
Temporary Labor	49,920	53 <i>,</i> 914	58,227	62,885	67,916
Total Direct Labor Costs	\$267,920	\$280,134	\$292,980	\$306,498	\$320,727

⁵ Direct labor costs:

- ⁶ Commissions are calculated at 3% of gross sales.
- ⁷ Interest is calculated on a \$1,742,000 7% loan amortized over 10 years. Total cost of the aquaponic project is \$2,600,000 and assumes \$858,000 of equity.
- ⁸ Management consultant(s) will be utilized on an array of areas such as biology regarding aquaponic and marine life, testing, equipment, new state of the art techniques, research and development.
- ⁹ A solar powered facility to generate enough solar power electricity for all the needs of the aquaponic environment. Cost of the solar power is contained in the structure and installation bid portion of the total project cost. So there should be no expenditure for utilities.

Federal Tax Credits for green energy could be as much as 30% of the project cost. Further credits from the State of Nevada for green energy, property and sales taxes and other incentives are not taken into allowance but would further reduce the overall cost of the aquaponic facility.



PROJECTED CASH FLOW STATEMENT



(5 - YEAR PROJECTIONS)

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
REVENUES					
Livestock sales ¹	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000
TOTAL REVENUES	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000
EXPENSES					
Livestock Invesment ²	800,000	800,000	800,000	800,000	800,000
Feed Costs ³	70,750	70,750	70,750	70,750	70,750
Other including depreciation ⁴	235,000	235,000	235,000	235,000	235,000
Interest ⁵	79,416	73,347	66,840	59,862	52,379
Trucking	10,000	10,000	10,000	10,000	10,000
TOTAL EXPENSES	1,195,166	1,189,097	1,182,590	1,175,612	1,168,129
EBIT FROM OPERATIONS	\$404,834	\$410,903	\$417,410	\$424,388	\$431,871
PROJECT CASH FLOW					
Net Income	404,834	410,903	417,410	424,388	431,871
Depreciation	95,000	95,000	95,000	95,000	95,000
Principal Payments - Cattle	83,949	90,018	96,525	103,503	110,985
TOTAL PROJECT CASH FLOW	\$415,885	\$415,885	\$415,885	\$415,885	\$415,886

PROJECTED INTERNAL RATE OF RETURNS

PROJECTED NET PRESENT VALUE

\$2,555,436

5 Year IRR 6.04%

NPV @10% (10 yrs)

Notes to Projected Cash Flow Statement THINKING GREEN RANCH

- ¹ Gross sales revenue is based upon 400 head of purebred Wagyu finished cattle at \$4,000 per head.
- ² Livestock investment is based upon 400 head of purebred Wagyu feeder calves at \$2,000 per head.
- ³ Feed costs are based upon using sprouting as the main feedstock with necessary supplemental roughage (straw, barley, alfalfa, etc. depending on seasonal and demand prices). Feeding time (finishing) of 270 days (9 months). For the first 135 days of the finishing period the cattle are fed 2% of their body weight in sprouts per day (with an average body weight during the period of 600 pounds). The last 135 days of the finishing period the cattle are fed 3% of their body weight in sprouts per day (with an average body weight during the period of 850 pounds). Supplemental cost of \$10,000 is allocated for roughage, bedding and salt, etc.
- ⁴ Other Expenses:

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Depreciation	\$95,000	\$95 <i>,</i> 000	\$95,000	\$95,000	\$95,000
Property and Local Taxes	2,500	2,500	2,500	2,500	2,500
Labor Cost	110,000	110,000	110,000	110,000	110,000
Processing/vaccine/vet	15,000	15,000	15,000	15,000	15,000
Insurance	12,500	12,500	12,500	12,500	12,500
TOTAL	\$235,000	\$235,000	\$235,000	\$235,000	\$235,000

* Depreciation is calculated on the tensile fabric structure/equipment at \$950,000.

⁵ Interest is calculated on a \$1,172,500 - 7% loan amortized over 10 years. Total cost of the cattle project is \$1,750,000 and assumes \$577,500 of equity.





PROJECTED CASH FLOW STATEMENT

(5 - YEAR PROJECTIONS)

	r				
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
REVENUES					
Generation Revenue ¹	\$357,094	\$357 <i>,</i> 094	\$357 <i>,</i> 094	\$357,094	\$357,094
Digestate Revenue ²	996,450	996,450	996,450	996,450	996,450
Tipping Fees ³	0	0	0	0	0
TOTAL REVENUES	1,353,544	1,353,544	1,353,544	1,353,544	1,353,544
EXPENSES					
Generator Interest ⁴	67,732	62,556	57,006	51,055	44,673
Operations and Maintenance	40,000	40,000	40,000	40,000	40,000
Other including depreciation ⁵	415,000	415,000	415,000	415,000	415,000
Digester Interest ⁶	67,732	62,556	57,006	51,055	44,673
TOTAL EXPENSES	590,464	580,112	569,012	557,110	544,346
EBIT FROM OPERATIONS	\$763,080	\$773,432	\$784,532	\$796,434	\$809,198
PROJECT CASH FLOW					
Net Income	763,080	773,432	784,532	796,434	809,198
Depreciation	300,000	300,000	300,000	300,000	300,000
Principal Payments Generator	71,598	76,774	82,324	88,275	94,657
Principal Payments - Digester	71,598	76,774	82,324	88,275	94,657
TOTAL PROJECT CASH FLOW	\$919 <i>,</i> 884	\$919 <i>,</i> 884	\$919 <i>,</i> 884	\$919 <i>,</i> 884	\$919,884

PROJECTED INTERNAL RATE OF RETURNS

5 Year IRR without any Tax Credits	16.17%
5 Year IRR with Tax Credits ⁷	33.46%

PROJECTED NET PRESENT VALUE

NPV @ 10% (10 yrs)	\$5,652,289

Notes to Projected Cash Flow Statement THINKING GREEN ENERGY

- ¹ Generation revenue is from the biogas production of the anaerobic digester. From the biogas, electricity is generated by a generator sized according to the volume of biogas being generated. Also, some biogas will be refined to a 98% pure mixture of methane (natural gas) which can be used on site for equipment, heating or sold to third parties. Usage on site for either electricity or for methane for other subsidiaries' use will be billed accordingly to the individual subsidiaries.
- ² Digestate revenue from the residual liquids will be used as fertilizer and nutrients for the hydroponic/aeroponic facilities. Remaining residual liquids will be sold in liquid form or pellatized to reduce the volume further and sold as a branded fertilizer, bedding for animals, or other types of supplemental products. Any products described herein which are used by other subsidiaries will be billed accordingly.
- ³ Tipping fee (or gate fee) is a charge levied upon a given quantity of waste received at a waste processing facility. THINKING GREEN ENERGY intends on soliciting restaurants, grocers, clubs, hotels, etc. for their organic waste to supplement the quality and quantity of output of the anaerobic digester. There has been no allowance taken in the projected financials for charging these potential customers for their organic waste. But this could be an additional source of revenue for the company.
- ⁴ Generator interest is calculated on a \$1,000,000 7% loan amortized over 10 years. Total cost of the anaerobic digester and generator is \$3,000,000 and assumes \$1,000,000 of equity. See also Note ⁶ digester interest. Generator and digester loans total \$2,000,000 and assuming the \$1,000,000 equity total the \$3,000,000 needed.

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Depreciation	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Property and Local Taxes	7,500	7,500	7,500	7,500	7,500
Transmission Service Charges	15,000	15,000	15,000	15,000	15,000
Communication Expense	1,500	1,500	1,500	1,500	1,500
Labor Cost	60,000	60,000	60,000	60,000	60,000
Legal and Professional	6,000	6,000	6,000	6,000	6,000
Insurance	25,000	25,000	25,000	25,000	25,000
TOTAL	\$415,000	\$415,000	\$415,000	\$415,000	\$415,000

⁵ Other expenses including depreciation:

⁶ Digester interest is calculated on a \$1,000,000 - 7% loan amortized over 10 years.

Note: Federal Tax Credits for green energy could be as much as 30% of the project cost. Further credits from the State of Nevada for green energy, property and sales taxes and other incentives are not taken into allowance but would further reduce the overall cost of the anaerobic digester.

APPENDIX ONE The Las Vegas Facility





Our First Full Scale Plant

Why Las Vegas, Nevada? Las Vegas is, of course, one of the most dynamic metropolitan areas in the world. Beyond Las Vegas, there are several outlying communities of Henderson, Summerlin, and North Las Vegas as well as several cities like Searchlight, Laughlin and Boulder City. This area fits our site selection criteria well and satisfies most of key criteria.

This entire area is inhospitable for growing food and raising animals due to the extreme temperatures and lack of suitable land. This region imports the vast majority of its food and meat from outside the state and outside the country.

Las Vegas is home to some of the most notable chefs and restaurateurs in the world. Wolfgang Puck, Guy Savoy, Joël Robuchon, Mario Batali, Bobby Flay, Emeril Lagasse, Michael Mina, Hubert Keller, Jean Joho, Charlie Trotter, and many more. Fine dining with top of the line food and dishes complemented with world renown service and inspiring environments juxtaposed with almost zero fresh produce output make the Las Vegas metropolitan area one the best location for our flagship installation.

<u>The Nevada Meat Demand</u>: Approximately \$780 million of Meat (all types except poultry) and Rendered Byproducts goods and services were imported into Nevada. Local Nevada industries produced only \$58.6 million worth of this commodity.

The initial location outside of Las Vegas will feature Wagyu cattle as its main beef product line. Although there will be more than just this type of cattle the primary meat will be from the Wagyu cattle variety.

Competition:

<u>Produce Competition</u>: Nopah Springs farm, grows all of their produce from seeds. The primary crops are grown inside small greenhouses utilizing hydroponics methods of growing. Their main operation is located in Pahrump in Nye County, Nevada. An hour west of Las Vegas, the facility is a 30,000 square foot green house, which is far less than the 300,000 plus square foot **THINKING GREEN** facility. They produce excellent products, but are irrelevant in relation to the huge demand in Las Vegas.

<u>Aquaculture Competition:</u> In regards to the competition in aquaculture, a comparable Tilapia Farm model for Nevada, considering climate, temperatures is the Desert Springs Tilapia Farm in Hyder, Arizona, which has seen increases in their tilapia farm since 2008, except for 2011. 2012 was a record year, with an estimated



1,000,000 pounds to be sold. They sell primarily in California, Arizona, Las Vegas, and most recently signed a very large contract with Canada.

SITE ANALYSIS EXAMPLE

The following gives an example of our site evaluation process, using the Las Vegas, Nevada market.

Criterion	Score	Analysis
Potential for a Monopoly	8	There are a few greenhouse operations that could compete, they are tiny compared to the market demand.
Potential for a Long Term Monopoly	7	Las Vegas is developing quickly and while other producers may come into our market, because of the large size of the market, new competition should do little to serve the overall market demand.
High disposable income	9	The tourist trade attracts a global clientele with unusually high disposable income.
Little or no fresh, organic, vine ripened, gourmet produce	9	Las Vegas has almost no fresh produce.
Unusually high demand (gourmet restaurants, high demand for organic food, boutique produce shops).	9	The demand is very high and very poorly served.
Extreme temperatures or lack of land, water, energy or other impediments prevent successful farming operations	9	The climate in Las Vegas prohibits ever developing an outdoor farming industry.
Most produce and meat products are trucked or flown in at high cost	6	Almost all meat and produce are imported. However, importing from neighboring California is relatively inexpensive.
Problematic import regulations	1	Importing food is relatively easy. Facing few regulatory issues.
Demand for "out of season" produce	9	The gourmet restaurants want access to all produce regardless of the season.
Demand for high volumes of food that exceeds the	9	Las Vegas will never have much local capacity; therefore, demand will always



local production capacity		exceed supply.
Cost of land, labor and support services	9	Desert land is inexpensive. Labor is average for the country.
Import taxes and tariffs	1	Food and meat imported into Nevada are not heavily taxed.
Local tax laws, currency risk, political stability, profit repatriation laws and other factors if the location is international.	9	Nevada is domestic, so these threats are non-existent.
Demographics	9	Las Vegas is one of fastest growing areas in the country. The demographics are forecast to move significantly in our favor over the long term.
Lease Option Availability	7	No need for a lease option. We are buying the land.
Overall Score	111	Any score over 85 will be considered for further evaluation.



STATE OF NEVADA 2013 AGRICULTURE REPORT

The following are excerpts from a report commissioned by the Governor of the State of Nevada focusing on the future needs and opportunities for private business:

Excerpts from the report

2013 Nevada Agriculture Report Analysis and Opportunities

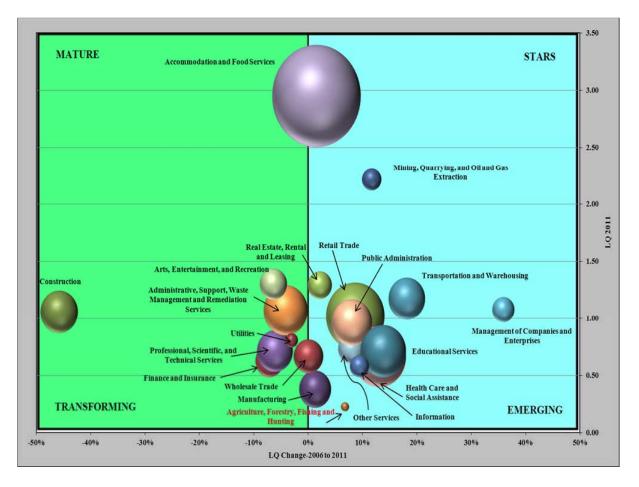
Report available on the Governor's Office of Economic Development and the Northern Nevada Development Authority websites:

www.diversifynevada.com www.nnda.org Governor's Office of Economic Development

The 2013 Nevada Agriculture Report was prepared by the Northern Nevada Development Authority and the Business Resource Innovation Center, the business branch of Carson City Library, for the Governor's Office of Economic Development. This report cited the following information (excerpted), which is applicable to the **THINKING GREEN** business model:

• The location quotient analysis defines the agriculture production sector as Emerging, which indicates a sector that is not specialized compared to the nation, *but growing in its specialization*.





The matrix shows that the Agriculture, Forestry, Fishing and Hunting industry is one of the Emerging industries in Nevada. Though it does not have a high level of concentration with a 2011 LQ score of 0.22, or a large number of employees, its LQ score grew by almost 7 percent between 2006 and 2011, showing industry growth and *potential for future concentration*.

The classification of Emerging is defined as "Emerging industries are those whose ratio of employment in the region is less than that in the nation, but whose ratio of employment has increased over the five year period relative to the nation. *These clusters are less specialized compared to the nation, but some of the emerging industries may become specialized in the future.*

- The agriculture cluster has a number of gaps and disconnects, resulting in local businesses *importing goods and services from outside of the area*, which is the *first step of import substitution*, a practice of reducing the purchases of goods and services by local firms from outside of the state.
- The study shows a number of new crop opportunities given Nevada's physical and economic strengths, including *saffron*, *hops*, *canola*, *and aquaculture*.
- Expanded agricultural opportunities for the state include *vertical farming*, wine grapes and vineyards, potatoes, onions and alfalfa.



Overall, the agriculture cluster has *a positive* and significant impact on the state and *is well positioned for future growth*, given its potential for *export enhancement and import substitution*, though much work remains in identifying the factors necessary for successful growth.

- Nevada agriculture is directed primarily toward *range livestock production*. *Cow-Calf Operations are most prevalent* with a few stocker operators and feedlots.
- Dairy, sheep, lambs, and hogs are among Nevada's other livestock enterprises. *The larger cattle* and sheep ranches are *in the northern half of the state*. The greatest number of dairies is in northern Nevada, but the largest dairies are in the south.
- Additional crops produced in Nevada include potatoes, barley, winter and spring wheat, corn oats, onions, garlic, and honey. *Smaller acreages of mint, fruits and vegetables are grown throughout the state*.
- Local consumers and processors purchase 40.5% of the respondents' products. Regional consumers and processors purchase 29.8% of production. Broker/wholesalers purchase 25.0% of production, *while only 5.7% is exported*.
- Respondents identified five areas that would help grow their business: *lower transportation and/or fuel costs (25.5%),* reduced government regulation (22.3%), marketing and promotion of their products or services (14.0%), financing (11.1%), and access to new markets (9.8%).
- Cattle and calves production, the largest agricultural commodity produced in the state, is similarly concentrated within a few counties. Elko County is the biggest producer of the Cattle and Calves commodity with 29.3 percent of the total state production, followed by Humboldt County with 14.1 percent of state total and Churchill County with 8.3 percent. Overall, over 51.7 percent of total cattle production occurs in the three counties. Clark County's inventory (number of head) *is around 5,000 head or 1.1%*.
- Import Substitution Import substitution is another important aspect of economic development as it attempts to stop the outflow of money from the state and provides information necessary to attract companies producing imported goods and services. An important location consideration for many industries is the size of the local market for the industry's products. One measure of potential local market size is the dollar value of imports of an industry's product to Nevada. The potential to substitute for Nevada's imports may make the region an attractive location for companies.

Import information provided by the IMPLAN model can be used to identify potential "gaps" and "disconnects" in the local economy that can serve as a starting point for economic development strategies. These "gaps" and "disconnects" can occur for two reasons. First, a given industry in Nevada may demand a certain good or service as an input into its production process.

Second, the good or service that a given industry may demand is produced in Nevada, but is also imported for some reason. This type of import is often referred to as a "disconnect" in the local



economy. An import substitution analysis can identify these disconnects, providing information for the economic development entities to investigate its causes.

Non-Competitive Imports - The IMPLAN software estimates two types of imports. Non-competitive imports are imports for which there is no production in the Nevada economy. Competitive imports are imports of goods and services that are also produced locally.

Competitive Imports - Products and services are often imported into the economy when similar products and services are available locally, creating a disconnect. Some of these disconnects may be permanent and impossible to fix, others provide an *opportunity for import substitution*.

The table [Table 19: Top 25 Competitive Commodity Imports for Nevada] shows approximately \$780 million of Processed Animal (except poultry) Meat and Rendered Byproducts goods and services were imported into Nevada in 2010. Local Nevada industries produced only \$58.6 million worth of this commodity, indicating underproduction of this commodity locally, which may make Nevada an attractive market for a company supplying this commodity and bears further discussion.

According to the IMPLAN database, the majority (98 percent) of the processed animal commodity is produced by the animal (except poultry) slaughtering, rendering and processing industry (IMPLAN code 59). The industry shows annual sales of \$57.3 million and employs 128 people with \$5.6 million in employee compensation (average of \$43,683 per employee). What is also interesting is

that \$45.4 million worth of the goods and services produced by this industry (79% of total production) is exported outside of Nevada. There is a significant disconnect in this industry, with over \$780 million of this industry's product being imported from outside the state and the majority of the industry's local production exported outside the state.

The Southern Region depicted in this report entails . Clark, Esmeralda, Lincoln and Nye Counties in Nevada.

This Graph [Graph 5: Agriculture Production Impacts, by Region] shows that the Northwest Region generates the largest percentage of all Agriculture Production impacts in the state at 65 percent of total. This is followed by the Northeast Region with 21 percent of total Agricultural Production impact, and Southern Region with 14 percent.

This Graph [Graph 8: Agriculture Distribution Impacts, by Region] shows the Southern Region again provides the majority of impacts of Agriculture Distribution with 70 percent of total impact generated by this activity.

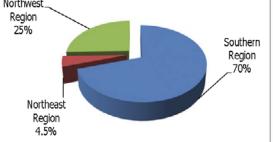


AGRICULTURE PRODUCTION

Northwest

Region

65%



Southern

Region 14%

Northeast

Region

21%

Basically, the Southern Region produces minimal amounts of Agricultural products, but provides distribution for the majority of Nevada's output.



• Future Agriculture Opportunities – According to the report, the following are potential areas for the state's agricultural producers to consider for further development, expansion, or diversification.

New crops: The crops tested in the southern part of the state to determine the potential have included: numerous orchard crops, *wine grapes, numerous vegetables and varieties, saffron, hops and perennial grasses as biofuels*.

Aquaculture farming: Demand for tilapia continues to grow in the U.S., the single largest market for tilapia. In the first ten months of 2010, a 15% growth in total tilapia imports was recorded, compared with the year before.

In the U.S. imports are growing, demand is high and 96 percent of the supply is coming from imports. The popularity of this fish in the U.S. remained unaffected during the economic recession.

The U.S. is the single greatest importer of tilapia, but is the smallest tilapia farmer. China is the largest tilapia producer with the greatest number of "Do not buy" food warnings due to not being farmed in closed, inland systems, raising contamination and impurity risks. As of 2005, 156 farms in the United States cultured tilapia, reporting total sales of \$31.3 million (Census of Aquaculture). According to the Department of Commerce, tilapia imports to the United States in 2011 totaled \$838.4 million. Despite the tilapia farms in the US, the current demand heavily outweighs what is farmed in this country, forcing international imports to be remarkably high and revenues positively impacting other countries.

While the largest number of tilapia farms are located in Hawaii (19 farms) and Florida (18 farms), California (15 farms) ranked first with sales over \$8.1 million. Idaho ranked second, reporting over \$1.5 million in sales from seven farms.

Nevada is an *ideal location for tilapia farming* when coupled with Integrated Farming – systems that integrate livestock and crop production. The advantages of integration are obvious for four reasons:

- 1. As far as fish production is concerned, it serves the major purpose of providing cheap feedstuffs and organic manure for the fish ponds, thereby reducing the cost and need for providing fish feeds and chemical fertilizers. By reducing the cost of fertilizers and feedstuffs the overall cost of fish production is reduced and profits increased. *The profit from fish culture is often increased 30 to 40 percent as a result of integration*.
- 2. The overall income is increased by *adding [livestock] pig, goat*, or poultry, grain and *vegetable farming*, etc., which supplement the income from fish farming.
- 3. By producing *grain, vegetables, fish and livestock products, the community becomes self-sufficient in regard to food* and this contributes to a high degree of self-reliance.
- 4. The silt from the ponds [or from the recirculation of the aquaculture water], which is *used* to fertilize crops, increases the yield of crops at a lower cost and the need to buy chemical



fertilizer is greatly reduced. It is estimated about one third of all the fertilizer required for farming in the country comes from fish ponds.

A comparable Tilapia Farm model for Nevada, considering climate, temperatures, livestock and crop production, and has integrated farming, is the Desert Springs Tilapia Farm in Hyder, Arizona. This Tilapia Farm has seen increases in the tilapia farm since 2008, except for 2011. So far, 2012 is a record year, with an estimated 1,000,000 pounds to be sold.

Alternative [Aquaculture] Recommendation – Shrimp has similar economic and production characteristics as tilapia: high US imports, but low US production. Shrimp is the number one product in seafood imports. In 2010, the US imported 1.2 billion pounds, 22.2 million pounds more than the quantity imported in 2009. Valued at \$4.3 billion, shrimp imports account for 28.9 percent of the value of total edible imports.

Shrimp farming can be generated in Nevada the same as tilapia using closed inland systems.

• **Expansion Opportunities** – Expanding what is grown and how it is grown can increase sustainability and improve the livelihood of the farmers and local communities. Not only means utilizing farms that have additional acreage that can be farmed or methods to lengthen growing seasons, but it also means creating alternative ways of growing and alternative farming products such as:

Vertical farming and Hydroponics: The opportunity for sustainability and dependable food source offers food security. This type of farming produces: large yields in a controlled environment; offers soilless cultivation, eliminating pest, toxins, and soil diseases resulting in healthier foods and increase in nutritional value; and an excellent growing method for herbs, strawberries, tomatoes and small vine crops.

Vertical farming and/or hydroponics growing produces about 10 times the amount of produce per acre, per year, than traditional soil farming. This type of growing uses 70 to 90 percent less water than a field farmer, as the water is recirculated and goes straight to the plant, resulting in minimal evaporation. Since most pests and diseases are soil-borne and hydroponics is soilless, there are fewer pest and disease problems. This type of growing allows crops that would traditionally be mono crop to have multiple yields.

Wine grapes/vineyards: Wine grapes have low-water requirements, and vineyards offer tourism opportunities such as tours and wine tastings; however, wine grape growing success in Nevada can be hampered by spring frosts and the dearth of varieties that succeed in local growing conditions. However, it is a low water use crop, has potential for higher return than forages or grain crops, enjoys a high demand for Nevada wine, and provides diversity in a cropping system.

• Agriculture Gaps [Nevada] – Nevada agriculture performs well in many areas, but economic gaps are occurring that result in a large in-state revenue loss. In addition to the major gap of animal processing within the state, there are additional gaps identified for improvement to avoid out of state economic leakage are (not all-inclusive):



1. Localized Agriculture Development: Vegetables, potatoes, and other crops made up 21.1 percent of the Total Cash Receipts by Commodity in Nevada 2010 (Nevada Agriculture Statistics, 2011) or in terms of economic contribution, \$10,587,500; however, the state imports \$93.8 million of vegetables and melons and \$195 million of fruits every year. This is economic disconnect. Nevada is importing approximately nine times current in-state production, in commodities already successfully grown in Nevada.

A strategy to increase statewide agriculture revenues throughout the state is the development of "localized agriculture" or the creation of distribution channels that will connect local producers to restaurants, grocers, and the communities.

The newer strategies are defined as food hubs. The goal of this hub is to create "a system of mutual support that increases sustainability and profitability.

Advantages of localized agriculture: creates healthy sustainable community; increases instate economic contributions; introduces farmers to local markets, commercial and residential; supports efforts to increase sustainability by growing and meeting demands for fresh produce; reduces transportation costs; initializes food hubs; produces fresher, more nutritious products; and provides positive impact to health.

- Meat Production: Approximately \$780 million in Processed Animal (except poultry) Meat and Rendered Byproducts goods and services were imported into Nevada in 2010. Local Nevada industries produced only \$58.6 million worth of this commodity, indicating underproduction of this commodity locally, which makes Nevada an attractive market for a company supplying this commodity.
- 3. Understanding and Accessing Federal Loans, Grants and Incentives: Nevada growers, producers and distributors have many loans, grants, and incentives available to support their operations, expansions and eventual bottom line success. However, many of these programs are minimally utilized. Mainly, from the lack of understanding and process capabilities represents an economic gap. It is believed that if filled, the expansion of the sector would be accelerated. The programs provide assistance to organizations connected to the Agriculture industry to support: research; access to capital; community development; marketing; conservation practices; operating funds; export assistance; renewable energy implantation; organic certification and youth programs (Northern Nevada Development Authority and the Business Resource Innovation Center, 2013).ⁱⁱ

The report solidifies the concept of **THINKING GREEN**'s integrated agricultural business model as one that is warranted in the State of Nevada. The Company's strategy should be well accepted by the consumers and satisfy some of the agriculture gaps described in the report.





¹ QFINANCE Dictionary (n.d.). Definition of closed-loop production system. Bloomsbury Information Ltd. Retrieved from http://www.qfinance.com/dictionary/closed-loop-production-system

ii Northern Nevada Development Authority and the Business Resource Innovation Center, the business branch of Carson City Library, for the Governor's Office of Economic Development (2013). 2013 Nevada Agriculture Report: Analysis and Opportunities. Retrieved from http://www.nnda.org/