

RESOURCEFUL ENERGY  
MCGUIRE CENTER FOR ENTREPRENEURSHIP  
BUSINESS PLAN

By  
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In Partial Fulfillment of the Bachelors degree

With Honors in  
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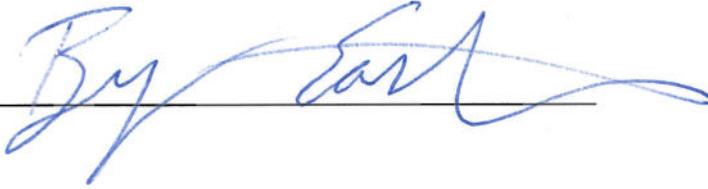
Approved by:   
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## STATEMENT BY AUTHOR

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A handwritten signature in blue ink, appearing to read "By Earl", written over a horizontal line.

Resourceful Energy was a team that worked together during the 2010-2011 academic school year on a group business plan project for the McGuire Center for Entrepreneurship. The team consisted of Benjamin Eastman, Daniel Arrington, Darren Thompson, and Daniel Ference. Each team member had a specific role which enabled the team to complete assignments and the project promptly and efficiently. Arrington was the team general manager, I was the finance manager, Thompson was the marketing manager, and Ference was the operations manager.

As the finance manager I was responsible for the venture's financial data, financial statements, and financial estimates. During our Finance 480 class, Entrepreneurial Finance, we were given an excel document that allowed us to create financial statements for our venture. I was responsible for running various estimates to see what our financials would look like in successful times, in poor times, and in average times. I was also responsible for presenting all financial data during group presentations which included the entrepreneurship academic review presentation, and the showcase "rocket pitch" day for the entrepreneurship program. Through this experience I learned how to use financial data to estimate the future of the venture. I also learned how to present financial data in an easy to understand format.





# resourceful energy

Daniel Arrington

Benjamin Eastman

Daniel Ference

Darren Thompson



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## Executive Summary

Resourceful Energy is a startup venture set to engage in value-added applications for 900 tons of scrap tires discarded annually in the state of Arizona.

Resourceful Energy will collect, sort, and process scrap tires into a Tire-Derived Fuel (TDF) compound. The processed TDF will be sold to cement factories, power plants, and industrial manufacturers in the Arizona region as an environmentally friendly substitute to coal fuels. TDF burns cleaner and more efficiently than coal and is significantly less expensive. The EPA-supported fuel is a technology that has yet to penetrate the Arizona industrial market as other companies have focused their efforts in more concentrated metropolitan areas. Resourceful Energy will turn the state's own supply of scrap tires into one of its most valuable sources of industrial fuel.

While TDF is the main product offered to our customers, our business model includes three separate revenue streams. A \$2.50 per-tire fee will be assessed when tires are collected from local tire retailers. This service revenue contributes nearly 70% to our total annual revenue. The tires collected will be sorted, and those with remaining useful tread will be sold to local used tire outlets for \$8.00 per tire. Finally, the remaining inventory of scrap tires will be fed through a series of shredders and conveyors and packaged as TDF to be delivered to cement manufacturing plants. Additionally, we will engage in research and development projects aimed to identify additional innovative applications for recycled tire rubber.

In year 1 we project an EBITDA of \$180,000. We expect to sell the company in year 5 with an EBITDA of \$1,800,000. Based on our research of Waste Management and Allied Waste the benchmark P/E ratio for our industry is 17.5. Using this ratio, our year 5 value will be \$32,000,000. We have calculated that the pre-money value of the company will be \$1,200,000 after the \$200,000 of founder's investment has been spent and \$400,000 has been raised through investors.

The success of our venture relies heavily on securing a contract with one of the state's largest new tire retailers. We are currently pursuing letters of intent from Discount Tire and Big O Tire, highlighting our lower price, convenient and consistent pick-up schedule and marketed environmental partnerships as the main benefits. Our financials rely on the assumption that we have secured Discount Tire as our first partner through year 3. In year 4 we expect to add Big O Tires as our next major client.



We intend to sell the company at the end of year 5 to a large tire supply or tire recycling company. Our prospective buyers will be Waste Management (11.8 B annual sales), Discount Tire (2.7 B annual sales), Lakin Tire (48 M annual sales), and Liberty Tires (similar business model, various recent business acquisitions).

## Inception of Idea

Resourceful Energy, LLC was founded in September of 2010. The idea for a scrap tire recycling business came while one of our managers, Daniel Ference, was driving along Interstate 10 from Phoenix to Tucson. Daniel noticed during his drive on I-10 that there seemed to be an overabundance of scrap tires on the side of the road. He wondered what the reasoning was for these scrap tires and started to ponder some of the alternative uses to this garbage.

During the initial stages of our venture formulation, each team member laid out all of the possible business ideas they had. Out of all the ideas we discussed, the idea of a tire recycling company stood out as one of the most viable options. We saw this idea as a way to promote environmental change and pollution reduction. Through our research on the uses of scrap tires, we found a lot of information regarding Tire Derived Fuel. This information really sparked our interest and allowed us to formulate a business around our idea.

Research has shown that burning coal is harmful for the environment. In trying to formulate a business model, we took this information and determined whether Tire Derived Fuel was ecologically sounder than coal. Through our research, we determined that TDF burns more cleanly and more efficiently than coal. We had found our business model.

In order to develop a sustainable business model, we had to focus our idea on a continuous tire collection process with a large tire retailer. We believed that by establishing contracts with large tire retailers, we would be able to charge those companies a fee to remove the used tires from their facilities. This removal service would be offered by our company and would be the main stream of revenue for our business. Once collected, we would determine whether any of the tires could be retreaded or resold. Those tires that could not be resold, would then be shredded and converted into TDF, that would later be sold to coal burning plants.

Once our company has produced enough TDF, we would then work with coal burning manufacturing plants to help convert them to using TDF. We would do this by highlighting all of the benefits associated with using TDF instead of coal, such as the cost savings associated with its use.



We understand that in order for our business to be successful, we have to offer a service and process that outrivals our larger competitors. We believe that by offering our services at a lower fee than our competitors, we can effectively penetrate into the Arizona market, which has yet to see any movement in the TDF industry.

## Consumer Problem & Opportunity

Resourceful Energy, LLC became interested in innovative ways to recycle used tires due to the amount of scrap tires along U.S. Interstate 10 between Tucson and Phoenix. The Resourceful Energy team attempted to find a market for used scrap tires from the sides of highways and sitting in landfills. We explored the concept of creating tire sandals and rubber mats for children's playgrounds. After extensive research we determined that there was not a profitable market for landfill tires and tires found on the side of roads. We concluded that turning used tire rubber into shoes, children's playground mats, and rubber mulch would not provide a sustainable business model for our venture. Our research led us to the new direction of working with tire retailers. We were able to determine that tire retailers had the largest amount of used tires and needed a way to safely and responsibly dispose of the tires.

Resourceful Energy has developed a business model that we confidently believe will result in a profitable relationship between tire retailers and ourselves. Tire retailers currently use rubber-recycling companies to remove used tires from their business property, but we believe we can offer a more efficient and productive system for tire removal. We also have the unique opportunity to work with coal-burning power plants by reselling shredded tire rubber as a more efficient energy source while also profiting in another aspect of the business.

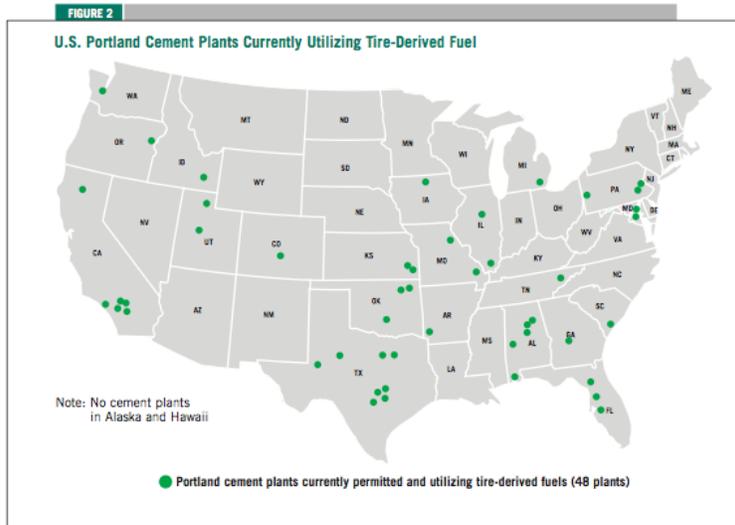
As of 2010, coal power plants generated over 23% of the electricity for the state of Arizona. Along with power plants, cement kilns and paper mills use coal as a source of power. These utility companies, cement companies, and paper manufacturers currently use coal because it is easy to obtain and it is bountiful in the United States. Burning coal for power has many positive benefits, but also has some very negative drawbacks. Coal must be mined from the ground, which is harmful to the beautiful natural landscape of Arizona. Coal also burns dirty so proper cleaning devices must be put in place at each facility. Coal is also more costly than other substitutes that can be burned for power.

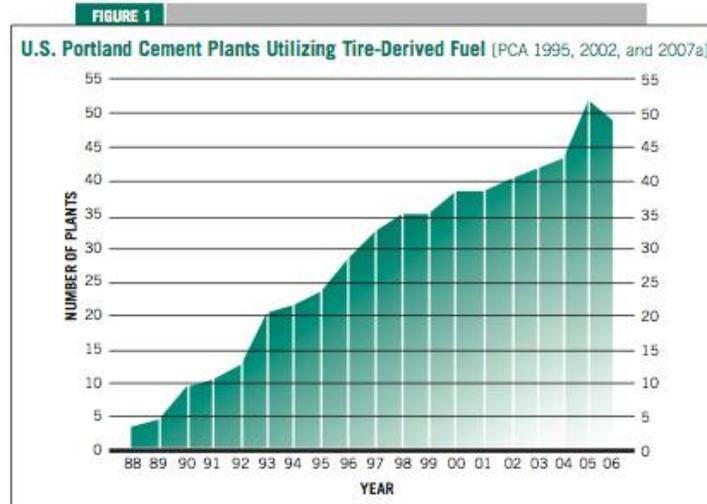
We have a solution that will provide a cheap alternative that can be mixed with coal. Shredded tire rubber can be mixed with coal to create Tire Derived Fuel (TDF). Tire Derived Fuel burns 30% more efficiently than coal, creating more



energy at a reduced price. The U.S. Energy Administration says that “the average sale of coal at the mine was \$31.26 per ton and the average delivered price to electric utility power plants was \$41.23 per ton, roughly implying a transportation cost of \$9.97 per ton, or 24% of the total delivered price.” We are looking to price each ton of TDF under \$30 per ton as another source of revenue while simultaneously removing the scrap tires (TDF) from our possession. This is under the \$31.26 per ton average of coal. We also believe that we can keep transportation prices down because we will be located closer to coal-burning facilities than coalmines. As was previously stated, TDF burns 30% more efficiently, which equals more power generated using fewer raw materials.

We do not assume that TDF will ever fully replace coal because the supply of TDF is too low. Rather we see TDF as an additive to coal-burning plants, which will help the coal burn more efficiently. We have the opportunity to help coal-burning plants become more efficient while also helping reduce the amount of tires going to landfills. Providing utility companies, cement companies, and paper manufacturers with an opportunity to save money and clean up the environment is a win-win situation.





## Service and Product

### Collection

Resourceful Energy will engage with the community, tire merchants, landfill operators, and the state government to streamline the collection of used vehicle tires and the production of clean, efficient, and inexpensive Tire Derived Fuel to manufacturers as an alternative to coal-based fossil fuels.

Everyday in the state of Arizona, nearly 17,000 new tires are purchased and installed. Consequently, about 17,000 used tires must be disposed of. Resourceful Energy will partner with Arizona's largest new tire retailer, Discount Tire, to collect the used tires that are gathered at each of its stores in the Maricopa and Pima counties and deliver these used tires to a facility located in the southeast Phoenix area.

Discount Tire is currently burdened with the responsibility to insure that each of the used tires collected at its stores is disposed of properly. This includes the transportation of used tires to government-approved solid, non-hazardous waste collection sites. Currently, Discount Tire partners with Lakin Tire, paying a fee of \$2.50 per tire to have them pick up the used tires from Discount Tire retail locations. Lakin Tire transports the tires to its facility in Los Angeles California. Resourceful Energy will provide its collection service for a \$2.50 per tire fee while adding value to Discount Tire with a more efficient collection service and additional marketing incentives. Resourceful Energy will simplify the disposal process for Discount Tire, guaranteeing timely pickup and cooperative dealings with only one company, while providing assurance of the proper disposal of the used tires generated through its business.



Initially, the partnership between Discount Tire and Resourceful Energy will include a contract for Resourceful Energy to service 45 local Discount Tire retail stores, each producing an average of 1300 used tires per month, and contributing over \$200,000 in service and product revenue to Resourceful Energy.

## **Sorting**

Upon delivery of the collected used tires to the southeast Phoenix facility, Resourceful Energy employees will immediately begin the process of sorting the used tires, differentiating between those that have remaining tread life and those which do not. Tires with 5/32" of tread remaining can be sold to used tire wholesalers across the state for an average price of \$8 per tire. According to the Scrap Tire Management Council, 10% of used tires have remaining tread life. All of the remaining tires without sufficient tread will be processed into Tire Derived Fuel.

## **What is Tire Derived Fuel?**

Tire Derived Fuel (TDF) is an aggregate of shredded tire rubber, usually 1-2" chunks, that is then mixed with coal and other fuels to be burned in manufacturing facilities, such as concrete kilns, power plants, and paper mills. According to the EPA, Tires produce the same energy as petroleum and approximately 30% more energy than coal. TDF is also cheaper than coal, with an average price of \$30/ton (equivalent to the aggregate of 119 used passenger vehicle tires shredded) as compared to coal which ranges from \$40-\$80/ton.

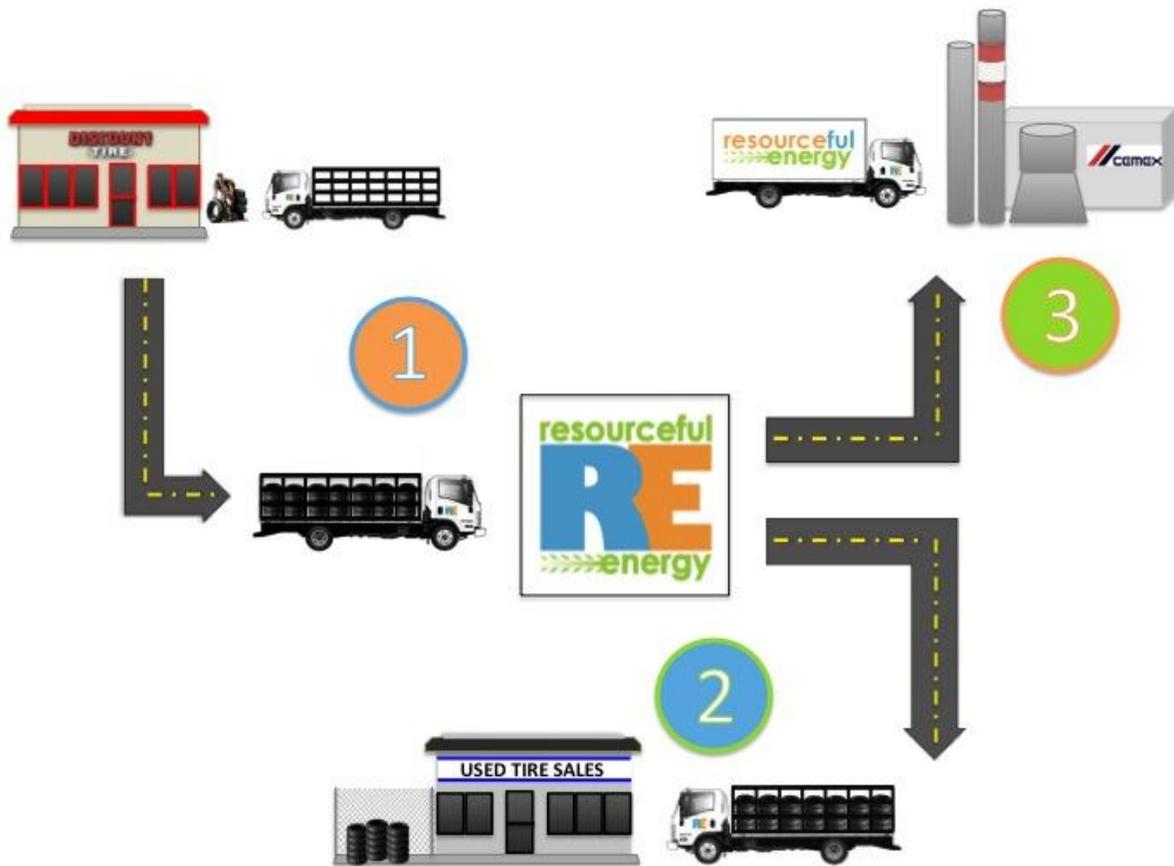
## **TDF Production**

Resourceful Energy will employ the newest available technology, including the most powerful and most efficient materials shredders on the market today to shred used tires into value added Tire Derived Fuel. A series of conveyor belts will transport the used tires through a series of shredding machines, capable of shredding 3-7 tons of tires per hour. Once shredded, the scrap tire chunks will be funneled into ½ ton bags ready for delivery. The process is simple and is completed very quickly. The turnover is quick with very little inventory held on site. The equipment needed for these processes costs nearly \$1 million dollars. Resourceful Energy will lease the equipment over 48 months at a monthly \$12,000.

## **TDF Sales**



Our first customer will be CEMEX Cement Company. This cement manufacturer has 11 plants in Arizona that all rely solely on coal for their energy production; however, CEMEX Cement has already begun implementing TDF burning practices in several other states. Arizona currently has a very limited supply of TDF and CEMEX Cement Company's Arizona plants are unable to purchase an effective amount. The company is eager for an opportunity to use TDF in its energy production and Resourceful Energy is ready to supply. Initially, CEMEX Cement will be willing and able to purchase all of Resourceful Energy's output of TDF since any supplement of TDF into their current fuel mix is value added.



## Competitive Advantage

The nature of our business offers us different areas that give us a competitive advantage over our competitors. From the way we collect used tires, to our innovative processing of those tires into TDF, we feel our experience outrivals similar companies. Because Arizona does not currently have a tire-recycling program, our company is at an advantage in trying to penetrate into this



market. Through the nature of our collection and manufacturing processes, we will be able to offer TDF at a highly competitive price.

Currently, many of our competitors are paid by various companies to take away used tires. Our competitive advantage would be to take away these tires from local businesses at a discounted fee. We expect customers will see our price and social value as reason enough to purchase our tire derived fuel. We understand the benefits of using Tire Derived Fuel and know that in order to be profitable in this market, we have to provide a customer experience that perpetuates our resourcefulness.

## Current Industry

Since 1999, the scrap tire industry has grown an average of 2%-4% annually as the focus in the United States has shifted to a more environmentally conscious nation. The stockpiles of scrap tires have decreased immensely as the demand for recycled tires has increased. According to the Rubber Manufacturer's Association, 85% of the remaining stockpiles are located in 7 states including Arizona, where about 700,000 tires in Pima County ended up in landfills last year. Additionally, 3 of the 7 states don't have statewide abatement programs, including Arizona. Establishing a tire-recycling program in Arizona is a great opportunity to obtain market share in this industry. As these used tire stockpiles start to diminish, our focus will be on creating relationships with government and private businesses that possess used tires.

Scrap tires can be transformed into a wide variety of products. These main products created from used tires are tire-derived fuel, crumb rubber, civil engineering products as well as construction materials. Both the TDF and ground rubber applications are expected to grow 10%-20% in the next 2 years. Strong federal and state government grants have helped fund companies in this industry. The future of the scrap tire industry is looking favorable as more creative and effective uses for scrap tires are continually being discovered.

## Competition

Our direct competition revolves around businesses involved with the collecting, processing, and manufacturing of used tire resources. The most well known competitor we face is Lakin Tire. They currently have offices in California and Connecticut and their primary business is centered on tire collection and tire recycling. In addition, they also participate in the conversion of turning used tires into Tire Derived Fuels. This is the main component of our business model for disposing of tires, however, we can still capitalize on the Arizona market because there is a growing use for TDF in this state. Another competitor is Crumb



Rubber Manufacturers, Inc. based in Phoenix, AZ. They also have offices in Los Angeles, CA and Albany, NY. Their business revolves around the collecting and processing of used tires into crumb rubber that can be used for ground surfaces. The strength of these companies is that they are established companies and understand the tire-recycling business. Both companies focus on a specific area of tire recycling business, however, they have not adapted to the technological changes present in the 21st century. Their lack of marketing and social outreach to the communities in which they reside is evident. These competitors have solely focused their resources to target business-to-business partners. Our goal as a competitor is going to be to differentiate our business model from the competition by highlighting how our company is going to enhance and improve the communities in which we live. We want individuals in our community to understand and be aware of our efforts in addition to our business-to-business interactions. By focusing on community environmental benefits and publically partnering with local landfills and tire companies we can effectively gain traction in this growing market by giving our name more exposure.

Lakin Tire and CRM are our two main competitors. However, we still face competition from other small companies around the US who participate in tire recycling initiatives. While there is definitely competition in this industry, our unique opportunity in Arizona, community focused business and quality a TDF product will allow our tire recycling business to flourish and grow.

## Marketing and Sales Strategy

Resourceful Energy will be utilizing a wide variety of marketing techniques and media to promote the benefits of our company and our services. Our marketing efforts will be geared towards both our suppliers, the end users of our tire derived fuel and the community at large. The purpose of our marketing will be to educate both businesses and individuals on the benefits our company is providing as well as create strong brand equity for Resourceful Energy.

Our company utilizes waste in a resourceful manner to improve our community. This core message will be portrayed in our marketing campaign. We want this message to be communicated to our customers and suppliers as well as their customers. These co-branded marketing materials will help highlight our company as well as displaying how Discount Tire retailers and manufacturing plants are doing their part in improving our community through of our partnership. Environmental consciousness is growing nationwide and we want to highlight our efforts in this vital area.

Our community partnerships area of the campaign will specifically include colored printed handouts that are available at all Discount Tire and manufacturing plant locations. Each location will also have a 5ft standing



colored display board that highlights our partnership, its benefits to the community and how one can help contribute to scrap tire recycling in our state. Both Resourceful Energy as well as the partnering company will have logo and branding highlights with a heavily educational message to customers. These efforts are a benefit to our customers as it shows value added beyond our services and allows them to highlight their corporate social responsibility.

Our website will be an important part of our branding and informational sources as well. It will provide information regarding our services and our benefit to businesses as well as our community efforts. While our initial marketing strategy is important our sales strategy and establishing successful partnerships will be the most vital to our future.

Our business-to-business sales strategy focuses on securing a strong partnership with a major Arizona tire retailer, Discount Tire, a major cement company, CEMEX and the largest used tire retailer in Arizona, AZ Best Tire. To obtain these key business relationships we will use personal selling techniques as founders as well as the potential utilization of several sales associates. As our company expands we will adjust our sales team as required.

While the benefits of our socially responsible business model are great, we will focus the majority of our selling on the financial benefit of utilizing Resourceful Energy. For Discount Tire we will focus on their current techniques of disposing of used tires and how our company can improve this. By offering a lower price, more regular pick up schedule and a positively marketed partnership we provide additional benefits Discount Tire is not currently experiencing. For CEMEX we will discuss the benefits of tire derived fuel and its increased used across the country by several of their competitors. Our cheaper, more efficient and EPA recommended source of energy will provide a financial and social benefit to CEMEX. Lastly, our partnership with AZ Best Tire will provide them with a consistent supply of used tires. 1500 used tires per week will be supplied each week at a charge of \$10 per week. The consistency of our price and supply will enhance the stability of AZ Best Tire.

Our main target customer is Discount Tire as their tire supply is vital to the success of our business model. Discount Tire has 68 locations in Arizona and we will be targeting 58 of these locations based on tire volume and location. By gaining 85% of Discount Tire locations this will enable us to gain a consistent and profitable supply with room for more contract acquisitions as we grow. This initial sales and marketing strategy will enable Resourceful Energy to begin our successful business model. We look forward to increasing industry and community awareness as our business grows.



## Financial Overview

Resourceful Energy has a unique concept because our primary source of revenue is not the sale of our final product. Rather, our primary source of revenue will be generated from the tire collection fee paid by landfills, auto dealers, and tire stores. We project our first year revenue to be \$2,680,000. Of that amount, \$1,900,000 will be generated from the 750,000 tires we collect for a fee of \$2.50 per tire. Of the 750,000 tires, we conservatively estimate that 10% of the tires can be sold as retread tires for \$8/tire generating \$600,000 in revenue. The final component of our venture is shredding the remaining 90% of the collected tires into 2" chips and selling the chips as Tire Derived Fuel. Selling the 2" chips to be used at coal plants, paper mills, and cement kilns will generate a modest revenue stream of \$180,000. We estimate labor and other costs of sales to be \$930,000. This will give us a year one Gross Margin of \$1,750,000. We estimate that our operating expenses in year one will be \$1,600,000. The expenses will be made up of salaries & wages, payroll tax, employee benefits, depreciation, building expenses, and additional operating expenses. Our additional operating expenses include leased tire shredding equipment. We chose to lease the equipment instead of making a capital investment and purchasing the machinery.



<b>Resourceful Energy</b>					
<b>Projected Income Statements (\$s)</b>					
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>SALES</b>					
Gross Sales	\$2,680,000	\$3,440,000	\$4,620,000	\$5,500,000	\$7,780,000
Returns and Allowances	\$0	\$0	\$0	\$0	\$0
<b>NET SALES</b>	<b>\$2,680,000</b>	<b>\$3,440,000</b>	<b>\$4,620,000</b>	<b>\$5,500,000</b>	<b>\$7,780,000</b>
<b>COST OF SALES</b>					
Materials	\$760,000	\$960,000	\$1,260,000	\$1,440,000	\$2,040,000
Labor (Inc Taxes & Benefits)	\$90,000	\$120,000	\$150,000	\$180,000	\$240,000
Other	\$80,000	\$100,000	\$130,000	\$140,000	\$200,000
<b>TOTAL COST OF SALES</b>	<b>\$930,000</b>	<b>\$1,180,000</b>	<b>\$1,540,000</b>	<b>\$1,760,000</b>	<b>\$2,480,000</b>
<b>GROSS MARGIN</b>	<b>\$1,750,000</b>	<b>\$2,260,000</b>	<b>\$3,080,000</b>	<b>\$3,740,000</b>	<b>\$5,300,000</b>
<b>OPERATING EXPENSES</b>					
Salaries and wages	\$390,000	\$670,000	\$950,000	\$1,120,000	\$1,250,000
Payroll taxes	\$30,000	\$50,000	\$70,000	\$86,000	\$100,000
Employee benefits	\$100,000	\$170,000	\$240,000	\$280,000	\$310,000
Depreciation	\$7,000	\$7,000	\$9,000	\$5,000	\$5,000
Bad debt expense	\$110,000	\$140,000	\$180,000	\$220,000	\$310,000
Utilities	\$120,000	\$130,000	\$180,000	\$210,000	\$280,000
Equipment Maint Exp.	\$96,000	\$140,000	\$170,000	\$190,000	\$240,000
Rent Expense	\$336,000	\$340,000	\$340,000	\$340,000	\$340,000
Advertising Expense	\$50,000	\$60,000	\$60,000	\$60,000	\$60,000
Office Supplies	\$18,000	\$40,000	\$50,000	\$80,000	\$80,000
Vehicle Insurance	\$55,000	\$60,000	\$60,000	\$60,000	\$60,000
General Insurance	\$60,000	\$60,000	\$100,000	\$100,000	\$100,000
IT/Web Design Expense	\$20,000	\$0	\$0	\$0	\$0
Truck Lease	\$50,000	\$50,000	\$50,000	\$70,000	\$70,000
Equipment Lease	\$144,000	\$140,000	\$140,000	\$290,000	\$290,000
<b>TOTAL OPERATING EXPENSES</b>	<b>\$1,586,000</b>	<b>\$2,057,000</b>	<b>\$2,599,000</b>	<b>\$3,111,000</b>	<b>\$3,495,000</b>
<b>OPERATING PROFIT (LOSS)</b>					
BEFORE INTEREST AND TAXES	\$164,000	\$203,000	\$481,000	\$629,000	\$1,805,000
<b>INTEREST EXPENSE</b>	<b>(\$6,000)</b>	<b>(\$5,000)</b>	<b>(\$6,000)</b>	<b>(\$5,000)</b>	<b>\$0</b>
<b>PROFIT (LOSS) BEFORE TAXES</b>	<b>\$158,000</b>	<b>\$198,000</b>	<b>\$475,000</b>	<b>\$624,000</b>	<b>\$1,805,000</b>
<b>DISTRIBUTION FOR TAXES</b>	<b>(\$70,000)</b>	<b>(\$80,000)</b>	<b>(\$180,000)</b>	<b>(\$250,000)</b>	<b>(\$720,000)</b>
<b>NET PROFIT (LOSS)</b>	<b>\$88,000</b>	<b>\$118,000</b>	<b>\$295,000</b>	<b>\$374,000</b>	<b>\$1,085,000</b>
<b>EBITDA</b>	<b>\$171,000</b>	<b>\$210,000</b>	<b>\$490,000</b>	<b>\$634,000</b>	<b>\$1,810,000</b>

In year one, we predict that our net profit will be \$90,000 with an EBITDA of \$170,000. We will be able to generate a sizable profit our first year primarily from the tire collection fee. The sale of 2" chips as TDF will serve as a way to get rid of the scrap tire once the fee has been generated.

Resourceful Energy is projected to grow into a healthy company and will be ready for acquisition by year 5. We project revenues to reach \$3,400,000 in year two. We are able to project this large increase due to our assumption that each year there are over 2 million scrap tires in Arizona that are not guaranteed through contract to one of our competitors. We are also aware that as many as



1 million additional tires are circumventing the county tire collection process because they are disposed of by private tire stores to other tire reuse companies or private landfills. We project year two to have a net income of \$120,000 and an EBITDA \$200,000.

By year five we intend to market our company for sale to a competitor such as Lakin Tires or tire retailers like Discount Tire or Firestone. In year five we estimate net sales to be \$7,800,000. Net profit is estimated to be \$1,100,000 and our EBITDA will be \$1,800,000. This should show stable enough in profit to be very favorable for a buyer.

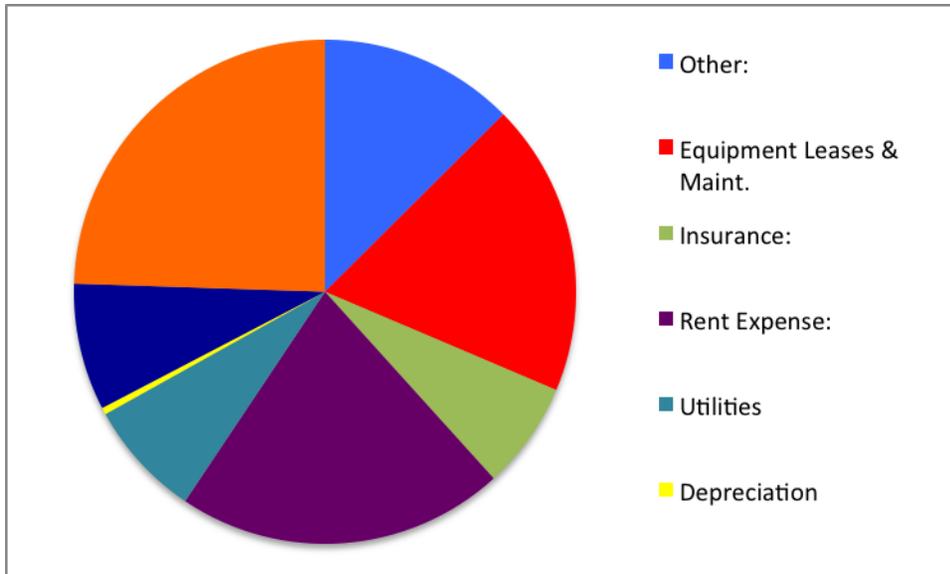
### **Proposed Use of Funds**

The founders of Resourceful Energy will invest \$200,000 of their own money to begin the venture. We are looking for an outside investor to partner with Resourceful Energy by investing \$400,000 into the company. With the initial founders capital investment of \$200,000, our goal is to use the funds to sign leases for equipment, land, and a building. We will also need funds for legal purposes and employee pay for engineers, truck drivers, and facility management. We would like to secure \$400,000 from external investors before we launch, but with the combined capital investment we project we will be cash positive in 5 months. Our pre-money valuation of Resourceful Energy is \$1,200,000 after we have signed contracts with Discount Tire or another similar competitor of Discount. Using the ownership formula we have determined that the Outside investors will receive 25% ownership of the company for their \$400,000 investment.

We are proposing to use the funds in a multitude of ways. First, we want to use the investments in order to lease capital equipment to transform used tires into tire-derived fuel. This lease is estimated to cost \$12,000 per month. We also plan on using the investment money in order to lease three trucks that will transport the used tires costing \$1,500 per month per truck and lease a warehouse where we can process and store the used tires at a price of \$28,000 per month. We must also pay the salaries of employees, purchase office equipment and furniture, and pay utility costs.

### **Use of funds:**





## Risk Assessment

### Market Risk

The biggest risk to Resourceful Energy is not being able to line up a major tire retailer as our first partner. If we are unable to secure a contract with a tire retail store or numerous auto dealer chains for used tires, our supply will be limited to landfills and tire disposal sites. Many landfill and disposal sites do not even pay to have their tires removed. Currently Pima and Maricopa County are under 10 year contracts with our competitor CRM Inc. so we will not be able to obtain tires from county landfills in those two counties. Our business plan is only possible if a major tire retailer signs on to have us collect their scrap tires. Countless hours of research has been done so that major tire retailers feel comfortable working with us to sign a contract.

### Operations Risk

Another risk is less use of vehicles. As gas prices continue to rise, people are watching their driving habits. When people drive less, there is not as great a need for new tires because wear and tear is less. In year one, if our supply of tires from retailers drops from 75,600 tires per month for the first ten months of collection to a flat 50,000 tires for the 10 months of operation in the first year, our revenue from tire fees goes from \$1,890,000 down to \$1,250,000, which is a \$640,000 revenue decrease.

In addition, the use of machinery also poses a risk to our company. As new shredding machinery emerges in the market, we are at a greater risk to losing



our innovative technology practices. In order to deal with this change, we have to continually be on the lookout for new innovative and less expensive equipment.

### **Execution Risk**

As mentioned in our market risk, in order for Resourceful Energy to execute its business model, we have to have a contract with a large tire retailer as well as a contract with a large manufacturing/cement company. Without these contracts in place, we will not be able to execute our business model effectively and as financially sound, as we would like. Also, we need to have the necessary capital and machinery in order to collect tires and create Tire Derived Fuel.

### **Financial Risks**

We also want to note that our financial model is based on leases for equipment and trucks. If we are unable to secure leases and instead must make capital investments, our cash flow will be down about \$900,000 in year one.

### **Alternative Value**

Overall, our alternate valuation has impacted our strategic decisions in a way that will make our venture viable and profitable. By identifying a problem and creating an effective solution, we feel we can successfully tap into the used tire market. Since our alternate valuation revolves around cleaning up the environment, it is important that our venture maintains the “green” friendly image. Arguably, we must make sure that our operations and processing of used tires remains within the realm of sustainable development. We don’t want to be producing harmful emissions through the processing of our used tires. From the collection to the distribution of our products, we must make sure our process is environmentally sound. Even though our costs may be higher in order to maintain our alternate valuation, we feel our image as an environmentally conscious venture, is attractive to many customers interested in the “green” movement. Our alternative valuation has given us the vision to make sure our business is not creating more pollution than is already being created by the used tires.

### **Innovation and Expansion**

Markets, customer needs, and regulatory climates change. Resourceful Energy pledges to stay ahead of the curve by investing heavily in research and development opportunities that will provide numerous, validated avenues for



expansion and innovation. There are four main arenas for expansion and innovation that Resourceful Energy will focus on:

### **Product Expansion**

Tire Derived Fuel is only one of hundreds of known recycled rubber applications, and the list continues to grow. The TDF production line includes the beginning processes for nearly all other tire rubber products. After the fifth year of operations, Resourceful Energy plans on purchasing additional capital equipment that will enable to the company to produce other recycled rubber materials such as crumb rubber or complete consumer recycled rubber products such as hoses, sandals, mats, and temporary curbs. These products will be able to be protected by patents and brand and will offer a much higher profit margin than the unprotected technology required to produce TDF. Not only will these new products enable us to grow our brand, but they will also mitigate any risks associated with potential regulation of TDF and coal energy.

### **Market Expansion**

Resourceful Energy's business model is highly scalable. Once we have developed and nurtured our relationships with several of Arizona's largest tire retailers, we will capitalize on any opportunities that allow us to expand to service their multi-state operations. For instance, Discount Tire has nearly 70 retail locations in Arizona, yet the company has over 750 locations nationwide. We will leverage the relationships we have already created to gain access to these potential new markets and customers.

### **Operations Efficiency**

In the second year of continued operations, Resourceful Energy will launch a comprehensive quality campaign aimed at cutting costs and waste. Our engineers and quality experts will be tasked with identifying wasteful processes and challenged to imagine and execute innovative changes to minimize costs and wasted time, energy, and labor. Our mechanical engineers will work specifically to design and craft new machinery that is uniquely designed for the venture's specific processes and needs. We will license the technology to other non-competing firms.

### **Applying the Latest Technology**

Resourceful Energy will persistently research new technologies associated with rubber recycling and processing. Our engineers will survey the industry closely to discover any new technologies that are available and will capitalize on opportunities to incubate promising technologies at our facilities. We plan to



protect our business model and technologies through patents that will allow us to profit from the licensing of our innovations to other tire processing facilities.

## **Scalability**

After securing the business of 58 Discount Tire retail locations and the customer, Portland Cement Company, and proving the quality of the TDF product, Resourceful Energy plans to expand its collection services to other large tire retailers in the state of Arizona, such as Big O, Firestone, and Sears. Resourceful Energy will continue to grow its production capacities in parallel with the growth in supply.

## **Product Line Expansion**

Once several long-term contracts are established with tire retailers and manufacturing plants, Resourceful Energy plans to explore new applications and products that can be created with used tire rubber, such as construction materials, crumb rubber for asphalt and other civil engineering applications, and other consumer products.

## **Research & Development**

Resourceful Energy will commit resources during years 4 and 5 to researching and developing new recycled tire rubber-based products. The Tire Derived Fuel market is the most mature and established market for scrap tires; however, in recent years many new markets have emerged as an increasing number of companies have begun putting scrap tires to use in “eco-friendly” and resourceful products. Tire rubber is valuable to many companies for its strength and its price. We have compiled a list of potential tire rubber based products that we will begin to engineer during our fourth year of operation and plan to sell in year 5. They include crumb rubber for civil engineering purposes, rubber mulch, landfill leachate collection systems, rubberized flooring, construction barricades, movable speed bumps, and many others. Each of these products requires a front-end tire shredding that will be accomplished by our already-operating TDF system. With the addition of the necessary equipment we will be able to produce several of these products that promise a more substantial profit margin.

## **Exit Strategy and Return to Investors**

Resourceful Energy's fifth year exit strategy involves our most notable competitor: Lakin Tire. Lakin Tire operates in and throughout many of the United



States. Our main competitive advantage in the Arizona market will be marketed to their leadership as our greatest appeal and benefit. Currently, Lakin Tire operates two recycling facilities: one in California and the second in Connecticut. Acquiring our facility and clients will enable them to establish a greater presence in the Southwest and allow them to provide greater service to the large Arizona, Texas, the Midwest and the South. Catering to our plan, we have decided to operate our facility using the same equipment found in Lakin Tire's facilities. We feel that the company's familiarity with our market, their expertise with the equipment, and the opportunities for more efficient service to large markets will add value to our venture and make them willing and eager to acquire our company in year 5.

## Conclusion

Resourceful Energy is in a strong position to enter the tire collection and recycling industry in Arizona. The research we have conducted shows there is a market for cheaper tire collection. We are confident that utility companies, cement companies, and paper manufacturers will benefit from a cheaper source of energy and higher efficiency. We also believe we will be helping the State of Arizona by cleaning up landfills and other tire deposits.



## Management Team



**Dan Arrington** currently serves as the General Manager for Resourceful Energy, LLC. He is studying Finance and Entrepreneurship at the Eller College of Management at the University of Arizona and will graduate in May 2011. His experience lies mostly in financial planning and project management. He has a passion for real estate, investments, and law. He brings a high-level yet focused approach to operations strategy and a highly motivating personality to the venture's leadership team. He is always eager to learn and apply new knowledge and is excited to engage with several of the team's advisory board and investors on this venture. Dan is a Tucson native with an extensive local network. He enjoys hiking, biking, and golfing in the beautiful Tucson weather. He can be reached at [darrington@resourcefulenergy.com](mailto:darrington@resourcefulenergy.com).



**Benjamin Eastman** is currently the Finance Manager for Resourceful Energy, LLC. He is senior in the University of Arizona's Honors Program. He is graduating in May 2011 with a degree in Business Administration focusing on Accounting and Entrepreneurship. Benjamin's business background is in finance and accounting where he has worked with operating budgets of over \$500,000 and had completed tax work for over \$100,000,000 in real estate assets. Benjamin brings a hard work ethic and an unwavering commitment to success. He held various leadership positions including treasurer and vice president of the Sigma Chi Fraternity, and has been active in numerous honorary clubs at the University of Arizona. Benjamin is from Mequon, Wisconsin and enjoys boating, golfing and spending time with family. He can be reached at [beastman@resourcefulenergy.com](mailto:beastman@resourcefulenergy.com).



**Daniel Ference** is currently the Operations Manager for Resourceful Energy, LLC. He is an honors senior, graduating in May 2011 from the Eller College of Management at the University of Arizona. He is pursuing a degree in Business Administration, focusing on Management Information Systems, Business Management, and Entrepreneurship. Daniel has a strong technical background in web development, JAVA programming, and Oracle Applications. He has done research on Human Resource development, Enterprise Resource Planning, and is knowledgeable in sales and leadership practices. He brings a strong work ethic to the company and understands the importance of social entrepreneurship. Daniel is from Scottsdale, Arizona and enjoys golfing, playing sports, and spending time with family and friends. He can be reached at [dference@resourcefulenergy.com](mailto:dference@resourcefulenergy.com).



**Darren Thompson** is currently the Marketing Manager for Resourceful Energy, LLC. He is senior in the University of Arizona's Honors Program. He is graduating in May 2011 with a degree in Business Administration focusing on Marketing and Entrepreneurship. Darren's business background is in sales and marketing where he is familiar with research, sales presentations and company branding. Darren brings a strong background of leadership and community involvement to the team. He held various positions including president with Pi Kappa Alpha, was heavily involved Alpha Kappa Psi professional business fraternity, and has been a Big Brother in Big Brothers Big Sisters of Tucson for over 18 months. Darren is from Sandpoint, Idaho and enjoys staying fit, outdoor activities and community service. He can be reached at [dthompson@resourcefulenergy.com](mailto:dthompson@resourcefulenergy.com).



# Pro Formas

## Cash Flows 12-Months

Month Ending	1 Nov-11	2 Dec-11	3 Jan-12	4 Feb-12	5 Mar-12	6 Apr-12	7 May-12	8 Jun-12	9 Jul-12	10 Aug-12	11 Sep-12	12 Oct-12
<b>Projected Cash Flows (\$s)</b>												
<b>CASH FLOWS FROM OPERATIONS</b>												
Net income	\$ (83,748)	\$ (94,510)	\$ 31,084	\$ 43,487	\$ 43,515	\$ 43,543	\$ 32,918	\$ 26,360	\$ 26,376	\$ 10,762	\$ 10,779	\$ 10,796
Adjustments to reconcile net income to cash flows from operations												
Depreciation	-	595	595	595	595	595	595	595	595	595	595	595
Changes in certain assets and liabilities												
Accounts receivable	-	-	(239,501)	(259,096)	(91,446)	(5,879)	-	-	-	-	-	-
Inventory	(85,667)	(92,887)	(7,220)	-	-	-	-	-	-	-	-	-
Other current assets	(95,000)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Accounts payable	151,773	168,493	21,720	5,000	-	-	-	-	-	-	-	-
Other current payables	-	-	-	-	-	-	-	-	-	-	-	-
Pre-existing debt	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL CASH FLOWS FROM OPERATIONS</b>	(72,642)	(13,309)	(188,321)	(205,014)	(42,336)	43,259	38,513	31,955	31,972	16,357	16,374	16,391
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>												
Purchase of equipment	(30,000)	-	-	-	-	-	-	-	-	-	-	-
Other Assets	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL CASH FLOWS FROM INVESTING ACTIVITIES</b>	(30,000)	-	-	-	-	-	-	-	-	-	-	-
<b>CASH FLOW BEFORE FINANCING</b>	(102,642)	(13,309)	(188,321)	(205,014)	(42,336)	43,259	38,513	31,955	31,972	16,357	16,374	16,391
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>												
Borrowing of long-term debt	200,000	-	-	-	-	-	-	-	-	-	-	-
Repayment of long-term debt	-	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)
<b>CASH FLOW BEFORE MEMBERS' CONTRIBUTIONS</b>	97,358	(21,642)	(196,655)	(213,347)	(50,669)	34,926	30,180	23,621	23,638	8,024	8,041	8,058
Members' Capital Contributions	600,000	-	-	-	-	-	-	-	-	-	-	-
Members' Interest Repurchased	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL CASH FLOWS FROM FINANCING ACTIVITIES</b>	800,000	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)	(8,333)
<b>NET CASH FLOWS</b>	697,358	(21,642)	(196,655)	(213,347)	(50,669)	34,926	30,180	23,621	23,638	8,024	8,041	8,058
<b>CASH, BEGINNING OF PERIOD</b>	-	697,358	675,715	479,061	265,713	215,044	249,971	280,150	303,772	327,410	335,434	343,475
<b>CASH, END OF PERIOD</b>	697,358	675,715	479,061	265,713	215,044	249,971	280,150	303,772	327,410	335,434	343,475	351,533

## Income Statement 12-Months

Month Ending	1 Nov-11	2 Dec-11	3 Jan-12	4 Feb-12	5 Mar-12	6 Apr-12	7 May-12	8 Jun-12	9 Jul-12	10 Aug-12	11 Sep-12	12 Oct-12
<b>Projected Income Statements (\$s)</b>												
<b>SALES</b>												
Gross Sales	\$ -	\$ -	\$ 249,480	\$ 269,892	\$ 269,892	\$ 269,892	\$ 269,892	\$ 269,892	\$ 269,892	\$ 269,892	\$ 269,892	\$ 269,892
Returns and Allowances	-	-	-	-	-	-	-	-	-	-	-	-
<b>NET SALES</b>	-	-	249,480	269,892	269,892	269,892	269,892	269,892	269,892	269,892	269,892	269,892
<b>COST OF SALES</b>												
Materials	-	-	75,600	75,600	75,600	75,600	75,600	75,600	75,600	75,600	75,600	75,600
Labor (Inc taxes & Benefits)	-	-	2,507	9,727	9,727	9,727	9,727	9,727	9,727	9,727	9,727	9,727
Other	-	-	7,560	7,560	7,560	7,560	7,560	7,560	7,560	7,560	7,560	7,560
<b>TOTAL COST OF SALES</b>	-	-	85,667	92,887	92,887	92,887	92,887	92,887	92,887	92,887	92,887	92,887
<b>GROSS MARGIN</b>	-	-	163,813	177,005	177,005	177,005	177,005	177,005	177,005	177,005	177,005	177,005
<b>OPERATING EXPENSES</b>												
Salaries and wages	13,300	13,300	30,840	30,840	30,840	30,840	30,840	30,840	30,840	50,330	50,330	50,330
Payroll taxes	1,017	1,017	2,359	2,359	2,359	2,359	2,359	2,359	2,359	3,850	3,850	3,850
Employee benefits	3,325	3,325	7,710	7,710	7,710	7,710	7,710	7,710	7,710	12,583	12,583	12,583
Depreciation	-	595	595	595	595	595	595	595	595	595	595	595
Bad debt expense	-	-	9,979	10,796	10,796	10,796	10,796	10,796	10,796	10,796	10,796	10,796
Additional Operating Expenses	66,106	75,606	80,606	80,606	80,606	80,606	80,606	80,606	80,606	80,606	80,606	80,606
<b>TOTAL OPERATING EXPENSES</b>	83,748	93,844	132,090	132,906	132,906	132,906	132,906	132,906	132,906	158,760	158,760	158,760
<b>OPERATING PROFIT (LOSS) BEFORE INTEREST AND TAXES</b>	(83,748)	(93,844)	31,723	44,098	44,098	44,098	44,098	44,098	44,098	18,245	18,245	18,245
<b>INTEREST EXPENSE</b>	-	(667)	(639)	(611)	(583)	(556)	(528)	(500)	(472)	(444)	(417)	(389)
<b>PROFIT (LOSS) BEFORE TAXES</b>	(83,748)	(94,510)	31,084	43,487	43,515	43,543	43,571	43,598	43,626	17,800	17,828	17,856
<b>DISTRIBUTION FOR TAXES</b>	-	-	-	-	-	-	(10,653)	(17,239)	(17,250)	(7,038)	(7,049)	(7,060)
<b>NET PROFIT (LOSS)</b>	(83,748)	(94,510)	31,084	43,487	43,515	43,543	32,918	26,360	26,376	10,762	10,779	10,796
<b>EBITDA</b>	(83,748)	(93,248)	32,318	44,694	44,694	44,694	44,694	44,694	44,694	18,840	18,840	18,840



## Balance Sheet 12-Months

Month Ending	1 Nov-11	2 Dec-11	3 Jan-12	4 Feb-12	5 Mar-12	6 Apr-12	7 May-12	8 Jun-12	9 Jul-12	10 Aug-12	11 Sep-12	12 Oct-12
<b>Projected Balance Sheets (\$s)</b>												
<b>ASSETS</b>												
<b>Current Assets</b>												
Cash	\$ 697,358	\$ 675,715	\$ 479,061	\$ 265,713	\$ 215,044	\$ 249,971	\$ 280,150	\$ 303,772	\$ 327,410	\$ 335,434	\$ 343,475	\$ 351,533
Accounts Receivable	-	-	239,501	498,597	590,043	595,922	595,922	595,922	595,922	595,922	595,922	595,922
Inventory	85,667	178,555	185,775	185,775	185,775	185,775	185,775	185,775	185,775	185,775	185,775	185,775
Other	55,000	50,000	45,000	40,000	35,000	30,000	25,000	20,000	15,000	10,000	5,000	-
<b>Total Current Assets</b>	<b>838,025</b>	<b>904,270</b>	<b>949,336</b>	<b>990,085</b>	<b>1,025,862</b>	<b>1,061,667</b>	<b>1,086,847</b>	<b>1,105,468</b>	<b>1,124,107</b>	<b>1,127,131</b>	<b>1,130,172</b>	<b>1,133,229</b>
Property and Equipment	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
(less accumulated depreciation)	-	(595)	(1,190)	(1,786)	(2,381)	(2,978)	(3,571)	(4,167)	(4,762)	(5,357)	(5,952)	(6,548)
<b>Net Property and Equipment</b>	<b>30,000</b>	<b>29,405</b>	<b>28,810</b>	<b>28,214</b>	<b>27,619</b>	<b>27,024</b>	<b>26,429</b>	<b>25,833</b>	<b>25,238</b>	<b>24,643</b>	<b>24,048</b>	<b>23,452</b>
<b>Other Assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL ASSETS</b>	<b>868,025</b>	<b>933,674</b>	<b>978,146</b>	<b>1,018,300</b>	<b>1,053,481</b>	<b>1,088,691</b>	<b>1,113,276</b>	<b>1,131,302</b>	<b>1,149,345</b>	<b>1,151,774</b>	<b>1,154,219</b>	<b>1,156,682</b>
<b>LIABILITIES AND MEMBERS' CAPITAL</b>												
<b>LIABILITIES</b>												
<b>Current Liabilities</b>												
Accounts Payable	151,773	320,267	341,987	346,987	346,987	346,987	346,987	346,987	346,987	346,987	346,987	346,987
Other Current Payables	-	-	-	-	-	-	-	-	-	-	-	-
Pre-Existing Debt	-	-	-	-	-	-	-	-	-	-	-	-
Current Portion of L-T Debt	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
<b>Total Current Liabilities</b>	<b>251,773</b>	<b>420,267</b>	<b>441,987</b>	<b>446,987</b>								
<b>Long-Term Debt</b>	<b>100,000</b>	<b>91,667</b>	<b>83,333</b>	<b>75,000</b>	<b>66,667</b>	<b>58,333</b>	<b>50,000</b>	<b>41,667</b>	<b>33,333</b>	<b>25,000</b>	<b>16,667</b>	<b>8,333</b>
<b>Total Liabilities</b>	<b>351,773</b>	<b>511,933</b>	<b>525,320</b>	<b>521,987</b>	<b>513,654</b>	<b>505,320</b>	<b>496,987</b>	<b>488,654</b>	<b>480,320</b>	<b>471,987</b>	<b>463,654</b>	<b>455,320</b>
<b>Members' Capital</b>												
Members' Paid-In Capital	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Undistributed Members' Earnings	(83,748)	(178,299)	(147,174)	(103,687)	(60,172)	(16,629)	16,289	42,648	69,024	79,787	90,566	101,361
Less: Members' Interest Repurchase	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Members' Capital</b>	<b>516,252</b>	<b>421,701</b>	<b>452,826</b>	<b>496,313</b>	<b>539,828</b>	<b>583,371</b>	<b>616,289</b>	<b>642,648</b>	<b>669,024</b>	<b>679,787</b>	<b>690,566</b>	<b>701,361</b>
<b>TOTAL LIABILITIES AND MEMBERS' CAPITAL</b>	<b>868,025</b>	<b>933,674</b>	<b>978,146</b>	<b>1,018,300</b>	<b>1,053,481</b>	<b>1,088,691</b>	<b>1,113,276</b>	<b>1,131,302</b>	<b>1,149,345</b>	<b>1,151,774</b>	<b>1,154,219</b>	<b>1,156,682</b>

## Cash Flow 5 Year

Year Ending	1 Oct-12	2 Oct-13	3 Oct-14	4 Oct-15	5 Oct-16
<b>Projected Cash Flows (\$s)</b>					
<b>CASH FLOWS FROM OPERATIONS</b>					
Net income	101,361	118,137	282,491	385,415	1,093,947
Adjustments to reconcile net income to cash flows from operations					
Depreciation	6,548	7,143	8,639	5,464	5,048
Changes in certain assets and liabilities					
Accounts receivable	(595,922)	(113,509)	(262,973)	(39,744)	(421,728)
Inventory	(185,775)	(35,386)	(72,574)	(117,334)	411,068
Other current assets	-	-	2,000	2,000	2,000
Accounts payable	346,987	50,474	90,674	165,834	(398,568)
Other current payables	-	-	-	-	-
Pre-existing debt	-	-	-	-	-
<b>TOTAL CASH FLOWS FROM OPERATIONS</b>	<b>(326,801)</b>	<b>26,859</b>	<b>48,257</b>	<b>401,635</b>	<b>691,766</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>					
Purchase of equipment	(30,000)	-	(11,000)	-	-
Other Assets	-	-	-	-	-
<b>TOTAL CASH FLOWS FROM INVESTING ACTIVITIES</b>	<b>(30,000)</b>	<b>-</b>	<b>(11,000)</b>	<b>-</b>	<b>-</b>
<b>CASH FLOW BEFORE FINANCING</b>	<b>(356,801)</b>	<b>26,859</b>	<b>37,257</b>	<b>401,635</b>	<b>691,766</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>					
Borrowing of long-term debt	200,000	100,000	360,000	-	-
Repayment of long-term debt	(91,667)	(145,833)	(241,667)	(200,833)	-
<b>CASH FLOW BEFORE MEMBERS' CONTRIBUTIONS</b>	<b>(248,467)</b>	<b>(18,975)</b>	<b>175,590</b>	<b>200,802</b>	<b>691,766</b>
Members' Capital Contributions	600,000	-	-	-	-
Members' Interest Repurchased	-	-	-	-	-
<b>TOTAL CASH FLOWS FROM FINANCING ACTIVITIES</b>	<b>708,333</b>	<b>(45,833)</b>	<b>138,333</b>	<b>(200,833)</b>	<b>-</b>
<b>NET CASH FLOWS</b>	<b>351,533</b>	<b>(18,975)</b>	<b>175,590</b>	<b>200,802</b>	<b>691,766</b>
<b>CASH, BEGINNING OF PERIOD</b>	<b>-</b>	<b>351,533</b>	<b>332,558</b>	<b>508,148</b>	<b>708,949</b>
<b>CASH, END OF PERIOD</b>	<b>351,533</b>	<b>332,558</b>	<b>508,148</b>	<b>708,949</b>	<b>1,400,716</b>



## Income Statement 5 Year

	Year Ending	1 Oct-12	2 Oct-13	3 Oct-14	4 Oct-15	5 Oct-16
<b>Projected Income Statements (\$s)</b>						
<b>SALES</b>						
Gross Sales		2,678,508	3,440,448	4,616,100	5,500,800	7,779,300
Returns and Allowances		-	-	-	-	-
<b>NET SALES</b>		2,678,508	3,440,448	4,616,100	5,500,800	7,779,300
<b>COST OF SALES</b>						
Materials		756,000	964,800	1,260,000	1,440,000	2,040,000
Labor (Inc Taxes & Benefits)		90,054	122,766	155,535	178,409	244,646
Other		75,600	96,480	126,000	144,000	204,000
<b>TOTAL COST OF SALES</b>		921,654	1,184,046	1,541,535	1,762,409	2,488,646
<b>GROSS MARGIN</b>		1,756,854	2,256,402	3,074,565	3,738,391	5,290,654
<b>OPERATING EXPENSES</b>						
Salaries and wages		393,470	665,440	948,580	1,116,500	1,246,070
Payroll taxes		30,100	50,906	72,566	85,412	95,324
Employee benefits		98,368	166,360	237,145	279,125	311,518
Depreciation		6,548	7,143	8,639	5,464	5,048
Bad debt expense		107,140	137,618	184,644	220,032	311,172
Additional Operating Expenses		947,772	1,028,136	1,150,200	1,389,900	1,512,150
<b>TOTAL OPERATING EXPENSES</b>		1,583,398	2,055,603	2,601,774	3,096,434	3,481,281
<b>OPERATING PROFIT (LOSS) BEFORE INTEREST AND TAXES</b>		173,456	200,799	472,791	641,958	1,809,373
<b>INTEREST EXPENSE</b>		(5,806)	(5,403)	(5,556)	(4,487)	0
<b>PROFIT (LOSS) BEFORE TAXES</b>		167,650	195,396	467,235	637,470	1,809,373
<b>DISTRIBUTION FOR TAXES</b>		(66,289)	(77,260)	(184,745)	(252,056)	(715,426)
<b>NET PROFIT (LOSS)</b>		101,361	118,137	282,491	385,415	1,093,947
<b>EBITDA</b>		180,003	207,942	481,430	647,422	1,814,420

## Balance Sheet 5 Year

	Year Ending	1 Oct-12	2 Oct-13	3 Oct-14	4 Oct-15	5 Oct-16
<b>Projected Balance Sheets (\$s)</b>						
<b>ASSETS</b>						
<b>Current Assets</b>						
Cash		351,533	332,558	508,148	708,949	1,400,716
Accounts Receivable		595,922	709,430	972,403	1,012,147	1,433,875
Inventory		185,775	221,161	293,735	411,068	-
Other		-	-	(2,000)	(4,000)	(6,000)
<b>Total Current Assets</b>		1,133,229	1,263,149	1,772,286	2,128,165	2,828,591
<b>Property and Equipment</b>		30,000	30,000	41,000	41,000	41,000
(less accumulated depreciation)		(6,548)	(13,690)	(22,329)	(27,794)	(32,841)
<b>Net Property and Equipment</b>		23,452	16,310	18,671	13,206	8,159
<b>Other Assets</b>		-	-	-	-	-
<b>TOTAL ASSETS</b>		1,156,682	1,279,459	1,790,957	2,141,371	2,836,750
<b>LIABILITIES AND MEMBERS' CAPITAL</b>						
<b>Liabilities</b>						
<b>Current Liabilities</b>						
Accounts Payable		346,987	397,461	488,135	653,968	255,400
Other Current Payables		-	-	-	-	-
Pre-Existing Debt		-	-	-	-	-
Current Portion of L-T Debt		100,000	62,500	200,833	0	0
<b>Total Current Liabilities</b>		446,987	459,961	688,968	653,968	255,400
<b>Long-Term Debt</b>		8,333	(0)	(0)	(0)	(0)
<b>Total Liabilities</b>		455,320	459,961	688,968	653,968	255,400
<b>Members' Capital</b>						
Members' Paid-In Capital		600,000	600,000	600,000	600,000	600,000
Undistributed Members' Earnings		101,361	219,498	501,988	887,403	1,981,350
Less: Members' Interest Repurchase		-	-	-	-	-
<b>Total Members' Capital</b>		701,361	819,498	1,101,988	1,487,403	2,581,350
<b>TOTAL LIABILITIES AND MEMBERS' CAPITAL</b>		1,156,682	1,279,459	1,790,957	2,141,371	2,836,750



RESOURCEFUL ENERGY  
MCGUIRE CENTER FOR ENTREPRENEURSHIP  
BUSINESS PLAN

By  
BENJAMIN CHARLES EASTMAN

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A Thesis Submitted to The Honors College  
In Partial Fulfillment of the Bachelors degree

With Honors in  
ACCOUNTING & ENTREPRENEURSHIP

THE UNIVERSITY OF ARIZONA

MAY 2011

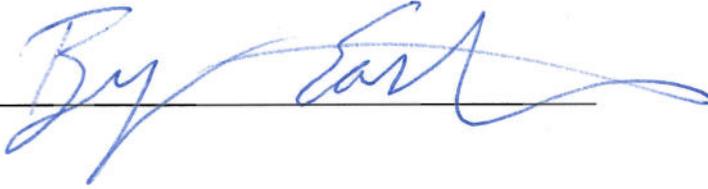
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# **Honor's Entrepreneurship Paper**

April 25, 2011

Josh Constanti

Ben Eastman

Tyler Gardon

## **Introduction**

Tucson is a community that has continually struggled to develop a diverse and independent economy. Over recent years, it has seen many businesses leave their operations in the greater Tucson area. This type of extradition of businesses has been harmful to the Tucson economy. During the recent recession, the business withdrawal from the area was even more prevalent. Sony, for example, shut down three studios in its Online Entertainment division, with Tucson being the home to one. The Arizona Diamondbacks, Chicago White Sox, and Colorado Rockies recently stopped playing their annual spring training games in Tucson. When businesses move to larger cities it hampers the potential development and growth in the area. Tucson clearly needs to further develop its own economy and industries from the ground level up. A great method of accomplishing this goal is to develop, launch, and operate new technologies that morph into successful and lasting businesses in Southern Arizona. Our organization will act as a mediator in the process of transitioning IP and new technological advances into prosperous businesses that maintain their operations in Southern Arizona. We will look to connect those who have made great discoveries and inventions in the laboratory or in the field with those who can apply these great ideas to the real world economy. Our organization will act as a non-profit that seeks to better the Tucson economy in ways that will make it more diverse and independent. We will seek to acquire or hold the IP from both local and national inventors, stream it through our organization for legitimacy, seek an entrepreneurial management team that will have the expertise and desire to launch the operation, and utilize the vast resources made available by the local Angel Investors.

## **Intellectual Property**

Our organization realizes that there are some who create the intellectual property or invent a new technology and would rather continue this type of research instead of launching a business using the technology. All situations are independent and have varying degrees of difference, however, we would require the IP owner to have some level of involvement in the launching of the business. Depending on the type of technology, this type of IP owner involvement may be minimal or perhaps non-existent. However, new technologies and IP often requires the inventor to offer help in certain times of need and uncertainty. We would expect the IP owner to offer his time and help when requested on a limited basis and also serve as an advisor on the company's board. This type of contribution will result in the maximum of a few meetings per month and will deal with specific issues that are problematic for the management team to handle independently. We would expect the owner to stay on board until the company has fully developed the technology and has integrated it into the marketplace. At this point, it is unlikely that the original IP owner could offer valuable contributions and advice to the company. Depending on the type of technology and the entrepreneurship team's expertise, however, this type of IP owner involvement may not be necessary. We will approach each venture and IP independently.

## **Types of Intellectual Property**

We will seek intellectual property that is more advanced in nature and whose end product or service will benefit portions or all of society in a meaningful way. The type of technology that will likely fall under this category includes, but is not limited to: optics, aerospace and defense, medical, biology, mining and business efficiency. We will not seek to act as a mediator for novelty items and inventions that do not offer a larger benefit to

society, as our organization will not have the resources of time and money to spend on these less-important technologies. We will not restrict ourselves in the type of industry under which the IP can be categorized, as meaningful ideas can come from many fields.

### **Types of Intellectual Property Owners**

Our target for IP owners will range in focus. Obviously we want to spur business development in Southern Arizona so we will make it a requirement that the IP and business must remain within Arizona. But we can source IP from anywhere, even outside of the United States. The only contingency is that the IP and business come to Southern Arizona. Even though we can grab IP from potentially anywhere, our main focus will be on IP and businesses within Southern Arizona. We will mainly look to inventors within the community and the inventors at the University of Arizona. Due to ownership rights, the University owns any intellectual property created on University lab premises. This type of IP will not be our target, as this is owned by the University and taken care of by the Office of Technology Transfer. We will mainly look to graduate students and other professors that spend their own time at home and off University premises to develop ideas. Ideas developed on the students' own time is not owned by the University and we can therefore work with the IP owners and license out this IP.

### **Management Teams**

Our intention is to establish stable management teams to use IP and launch companies in Southern Arizona. Our goal is to post a brief description of our available IP for future entrepreneurs to browse through. If any entrepreneur is interested in a specific idea

or IP we will allow the entrepreneur to take a closer look at the IP once he has signed a confidentiality agreement. If the entrepreneur is still interested after taking a closer look at the IP we will vet his background and past experience. If the entrepreneur meets our requirements and passes our inspection test we will allow him to sign an agreement to license or purchase the IP from our non-profit. We will require the entrepreneur to locate the business in Southern Arizona or the agreement will not be valid. At this point we will set up a meeting with the entrepreneur and the local angel investment group. If the investor needs help preparing a presentation for the angels we will provide basic training and feedback before the entrepreneur pitches his venture. It is our goal to provide an easy source of funding for the entrepreneur so he can quickly launch his venture and bring jobs and prosperity to Southern Arizona.

### **Relation With Local Angels**

We see this non-profit organization as a way to funnel good ideas and intellectual property to investors once we have established a management team. After speaking with various angel investors we have concluded that the majority of angels will not invest in an idea or IP without a trustworthy management team. After a management team has been established we plan on connecting the new management team and IP with screening committees for numerous angel groups. We will allow the angels to select ventures that interest them and determine who they would like to see pitch their venture. Our reasoning to partner with the angels, especially the Desert Angels of Tucson, AZ is to provide the Southern Arizona community with an easy way to launch a company and create new jobs. We also want to provide the Desert Angels with a way to make a solid return on investing in a local business. Since we are requiring that all new businesses that use our services to stay

in Southern Arizona we will most likely need local funding. Larger funding institutions would probably prefer our new ventures launch in Phoenix where there is a much larger business scene. Local angels will be more inclined to see the venture stay in Southern Arizona where they can physically inspect the location easily. We hope to create a strong relationship with the Desert Angels and provide them with the opportunity to make money, create jobs, and help the community.

### **Board of Advisors**

In order to have this non-profit IP transfer service be successful we are aware that we will need to have a strong board of advisors. The purpose of this non-profit is to create jobs, wealth, and a stronger community all in Southern Arizona. For this reason we believe that the majority of advisors on the board should be from Southern Arizona. Although we are not limiting the type of intellectual property that is brought to our organization, Southern Arizona is known as a mining, aerospace and defense, and medical device stronghold throughout the world. For this reason we think it would be wise to ask senior executives from some of Southern Arizona's largest mining, aerospace and defense, and medical device companies to serve as members of the board of advisors. For example we would like senior executives from Xeridiam (formerly MRI), Ventana Medical Systems, Raytheon, Universal Avionics, and MineSight to sit on the board of advisors. We would also like entrepreneurs who have started companies and have later sold them to large firms to give advice to ventures that come through our organization. We are also looking for some of the best area lawyers to join our board of advisors. Finally we would like former City of Tucson and Pima County officials to sit on our board. The more connected we are to the community the better our organization can serve the community.

## **Competition**

The intention of this venture is not to compete with the University of Arizona Technology Transfer Office (TTO) or any other university technology transfer office. Our goal is to focus on scientists and other individuals who have an invention but do not want to build and grow a company. We are aware that any work done on university time or using university resources is property of that university. Therefore, we will focus on other innovative individuals such as university graduate students who are working on their own projects at home, retired scientists who still enjoy “playing around with science,” and creative individuals who attempt to invent things in their spare time. We also feel that competing with the University of Arizona Technology Transfer Office is not in our best interest. The TTO has far more experience than us, but it also has more government and bureaucratic red tape.

## **Office of Technology Transfer**

We met with an Office of Technology Transfer employee to speak about their business model and fee structures, in order to better understand the direction we would like to pursue. We would ultimately like to run our business model on a modified version of the way in which OTT functions. Essentially, OTT works to perfect IP and negotiate licensing fees with existing companies or new startups. We found that they have three different streams of revenues: upfront licensing fees, royalty payments, and stock warrants (a loophole around owing equity in a company). We found that much of the technology that OTT harvests is in very early stages. And with this, scientists will often be paid by companies to continue research and refine the technology. Along the same lines, it is often expected that the scientists will act as a sort of “Chief Science Advisor” as they help with the

implementation of the technology. Many businesses may not even understand the full potential of the technology, and after all, who knows the technology better than the inventors themselves. OTT does not do nearly as much marketing as they would like to/should do. This is a key area we will look to differentiate ourselves with. Much of the technology sits with OTT, and there is no real effort to search out possible applications of the technology. We look to go much further in our marketing efforts by voraciously pursuing existing and new startup companies to acquire the IP in question. Additionally, we found that the main focus of many workers at the University is to garner increased funds and supplies for their labs. Consequently, many scientists seem to not have a desire to launch a business or care about its commercial application. They are content to keep researching and discovering new technologies. However, we think that our efforts will help add value and identify superb opportunities of IP acquisition; thereby opening the doors for substantial compensation for the inventing scientists. We say this, because the OTT looks to take a large share of the licensing fees. They automatically take 50% and plow it back to the University, 15% goes directly to OTT, and only half makes it back to the inventor. We hope to only take a small percentage of the fees, just enough to cover operating expenses, and the rest will go back to the inventors. As stated earlier we will have a contingency making the IP and the businesses that acquire the IP remain within Southern Arizona. This then benefits the inventors and our immediate community far better than OTT currently accomplishes.

### **Initial funding/ Licensing**

We will need to raise initial funds in order to sustain the efforts of business in the beginning stages. We will be a non-profit organization, but until we have licensing fees to help cover costs and salaries, we need funds to keep our business running. Once we are

established, we will facilitate the brokerage and team building behind IP, and we will look to take a certain percentage of licensing fees in order to cover costs. Again, we are non-profit, so we will not look to charge exorbitant fees or exploit the IP owners. We are simply here to help the community and foster business development in Southern Arizona.

We will look to facilitate the identification and brokerage of IP identified within the community and abroad. Being that we are trying to foster economic growth in Southern Arizona, we will have a contingency stating that the business must remain within Arizona. This means that we can look to find IP abroad, but it does not have to come from within solely Arizona. Instead, we will ensure that the IP and the businesses remain in Arizona once opportunities are identified. Even so, our main efforts will come in trying to identify and foster IP licensing specifically in Southern Arizona.

Our IP efforts will have two different paths, depending on the specific opportunity. We will look to be “brokers” of Intellectual property, basically finding buyers/users of the specific IP. In this case, we will most likely negotiate an upfront licensing fee, but if applicable, a licensing/royalty structure could be negotiated. The second form of our services will come from identifying IP and seeking out a team of entrepreneurs to take on the project. We will use our network to seek out qualified entrepreneurs who are looking to start a venture around an innovative idea. We’ve found that many science/engineer types do not have an interest in the business aspect of their ideas. They are content to continually research and invent new technologies. They are certainly interested in the good that their ideas can do for society, but they don’t necessarily want to go through all the trouble of masterminding a business plan. On the flip side, there are millions of entrepreneurs out there who are masterminds of what it takes to launch a business. They simply need an innovative idea, on which they can put their expertise to use on. We will obviously look to

bridge this gap and join the parties, so that both may mutually benefit. This process will obviously be far more involved than the simple brokerage/sale of IP to an existing company.

The licensing agreements will be different for every project. There will be no “set” percentage or guideline by which the agreements will be based. Instead, they will be completely customized to the specific IP characteristics. Some of the characteristics that will have influence might be IP owner’s preference, the IP itself, the target company, the entrepreneurial start-up interests, etc. And this will obviously influence whether we take an upfront licensing agreement or a royalty structure etc. It is a negotiation after all, so it will vary widely from project to project. However, the general idea and purpose will remain the same. We will look to facilitate the progress of IP into an actual business (whether it be an existing company, or a new startup that we develop), and we will pay the proceeds of the license sale to the IP owner. We will then take a certain percentage off of this license fee in order to pay salaries and cover costs. More specifically, we will not look to take a percentage such that we may profit; we simply want to cover costs and redistribute the percentage charge back into our business plans and better the community.

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