ecopower

Fueling the future

INTERNATIONAL BUSINESS PLAN EVENT

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April 2017

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I. EXECUTIVE SUMMARY

Description of Business: EcoPower is a consolidated organics recycling firm committed to creating renewable energy, value-adding compost, and sustainable local agriculture. Our business is a general partnership situated in the Canberra metro area in the heart of Australia's thriving capital. EcoPower strives to convert organic wasted material into biofuel, a proven practice that has yet to come to fruition in the Australian marketplace.

Business Opportunity: With Australia discarding an estimated 4.06 million tons of food each year, the country wastes more than $5.2 billion in food annually. When this disposed food decomposes with other organic material in a landfill, it releases deleterious greenhouse gases. The Australian government has called for a goal of 50% renewable energy use by 2030, up from 4% today, requiring significant contribution from private companies. This immense food waste and governmental policy gives EcoPower an opportunity to capitalize on and turn organic waste into an environmentally preferable alternative: **sustainable biofuel.**

Mission Statement:

> *"EcoPower will collect **organic waste** to use as its primary ingredient to develop an enriching **biofuel** through a biological refinery process, additionally selling the soil byproduct produced by the end of the cycle. Through this eco-friendly process, EcoPower will stand out from its competitors as a desirable alternative, ultimately **reducing Australia's ecological footprint**."*

Problem: The problem facing Australia that EcoPower strives to solve can be summarized as follows:

Immense Food Waste	•Australians discard an estimated 4.06 million tons of food annually
Reliance on Nonrenewable Energy	•96% of Australia's energy is currently nonrenewable
Negative Effects on Environment	•Food waste causes the relase of harmful greenhouse gases such as methane

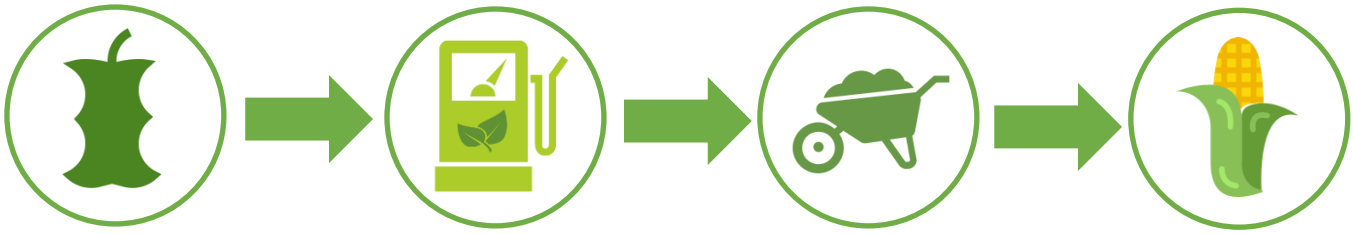
Target Market: To acquire the necessary organic waste to produce the biofuel, EcoPower will target the following primary, secondary, and tertiary markets:

EcoPower Organic Material Source – Segmented Canberra Target Market			
Target Market	**Type**	**Food waste per person/year**	**Values**
Primary	Households	$1,036	• Environmentally Conscious • Understand financial impact of food waste • Qualification for government tax breaks
Secondary	Restaurant Owners	$3,401	
Tertiary	Schools	$3,201	

After the biofuel production, EcoPower will target the following customer segments to become a prominent competitor in the biofuel market to sell its products:

EcoPower Biofuel and EcoSoil Byproduct – Segmented Target Market			
Target Market	**Type**	**2017 Price**	**Values**
Primary	Industrial (Motor)	$130	• Untapped eco-friendly biofuel market • Used to power industry operations • Compostable soil to expand growth
Secondary	Aviation/Naval	$125	
Tertiary	Farming Organizations	$33	

Solution: Australia can resolve its immense food waste issues and reliance on nonrenewable energy through EcoPower's simple and eco-friendly cycle that consists of four stages, outlined below:



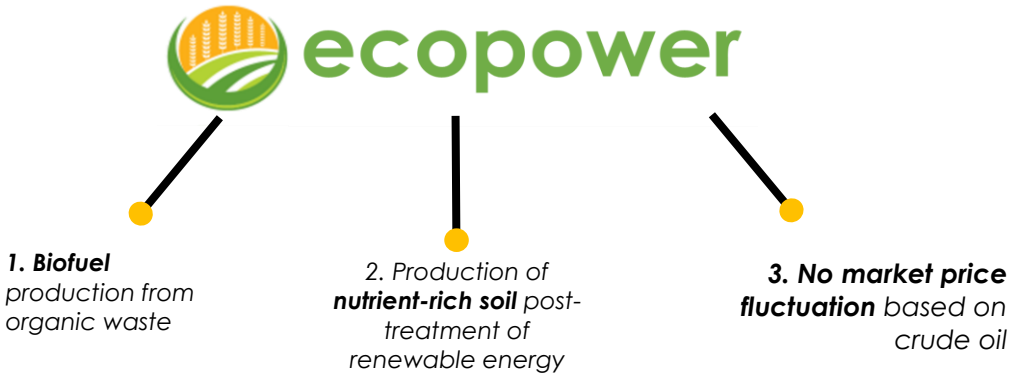
FOOD WASTE
The essential ingredient for eco-friendly biofuel production

BIOFUEL
Made through anaerobic digestion biological process

COMPOST
EcoSoil byproduct created via biofuel synthesis process

FOOD
Compost allows for food growth, completing the cycle.

Unique Value Proposition: Through a targeted plan, EcoPower will use the precepts of the **Disruptive Innovation** business model, which creates a new market (Biofuel from Food Waste) and eventually displaces an existing market, in this case the wider Australian energy market. EcoPower's UVP can be broken down into three factors as follows:



Revenue: Although EcoPower's primary source of revenue is biofuel, its other source of capital resides in its EcoSoil byproduct. Based on secondary research, it was discovered that schools and households waste thousands of dollars annually on garbage collectors that do not account for compost, drastically increasing pollution rates. Thus, EcoPower will collect organic food waste at an affordable rate. Finally, EcoSoil will be produced and sold as a secondary byproduct following anaerobic digestion. Use of our biofuel will reduce companies' overall fuel costs, as demonstrated below.

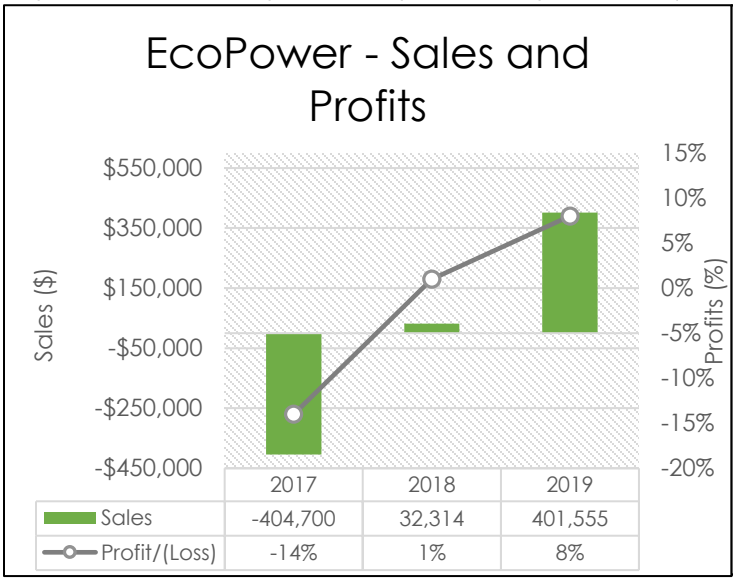
Fuel Savings Projections by Amount of EcoPower Biofuel Used					
Company	**Annual Fuel Needed**	**Cost Using 100% Fuel**	**Cost Using 90% Fuel & 10% Biofuel**	**Cost Using 75% Fuel & 25% Biofuel**	**Cost Using 60% Fuel & 40% Biofuel**
Sample A	10000 barrels	$1,528,800	$1,500,920	$1,459,100	$1,417,280
Sample B	5000 barrels	$764,400	$750,460	$729,550	$708,640
Sample C	1000 barrels	$152,830	$150,092	$145,910	$141,728
Sample D	500 barrels	$76,440	$75,046	$72,955	$70,864

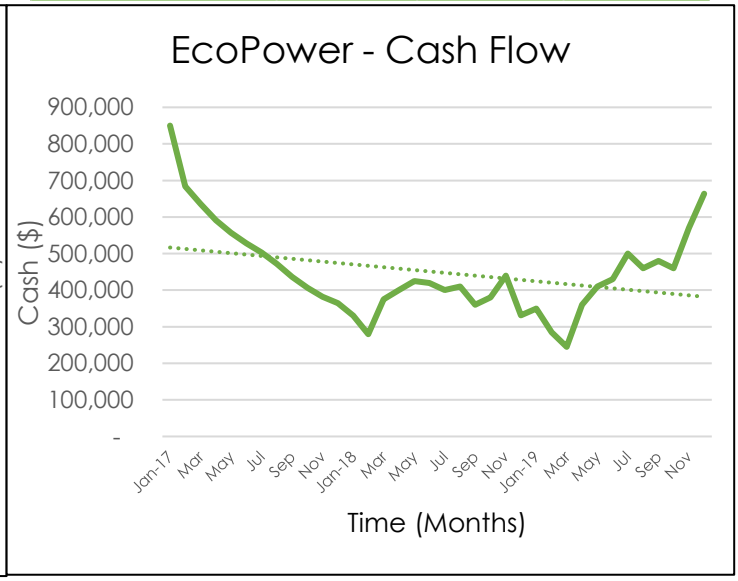
Financial Request: We (Brendan, Nishi, and Brandon) will each invest $100,000 of share capital into EcoPower. We are requesting **a $550,000 loan at a 6.0% annual interest rate payable over seven years.** Using both quantitative and qualitative analysis through a **bottom-up** and **data-driven** approach, we are projecting sustainable growth over the first three years of operations, steadily increasing profitability from an initial loss to a profit by year three.

Financial Statements: The following condensed financial statements detail our projected profitability and cash flow.

EcoPower Forecasted Statement of Cash Flows For the years ended December 31, 2017, 2018 & 2019			
	2017	2018	2019
Beginning Cash Balance	$ -	$364,833	$331,657
Cash Inflows:			
Owner	300,000	-	-
Bank	550,000	-	-
Operations	$2,821,865	$3,860,593	$4,883,670
Total Cash Inflows	**3,671,865**	**3,860,593**	**4,883,670**
Cash Outflows:			
Fixed assets	19,000	-	-
Inventory	1,738,874	2,131,444	2,598,169
Payroll and related	779,736	803,128	827,222
Customer acquisition	179,686	185,076	190,629
Other	589,736	774,121	935,853
Total Cash Outflows	**3,307,032**	**3,893,769**	**4,551,873**
Net Cash Flow	**364,833**	**(33,176)**	**331,797**
Ending Balance	**$364,833**	**$331,657**	**$663,454**

EcoPower Forecasted Statement of Income For the years ended December 31, 2017, 2018 & 2019			
	2017	2018	2019
Operating Revenue	$2,821,865	$3,860,593	$4,883,670
Cost of Goods Sold	1,738,874	2,131,444	2,598,169
Gross Profit	**1,082,991**	**1,729,149**	**2,285,501**
	38%	**45%**	**47%**
Operating Expenses	1,557,645	1,661,550	1,760,619
Income/ Loss before tax	**(474,654)**	**67,599**	**524,882**
Interest Expense	31,221	27,206	22,938
Tax Expense	-101,175	8,079	100,389
Net Income [Loss]	**($404,700)**	**$32,314**	**$401,555**
	-14%	**1%**	**8%**





To monitor our financial performance in the above forecasts, we will use **key performance indicators** to track our success and adjust our operations as needed, such as the ones included in the table below.

EcoPower – Key Metrics				
Metric	**Purpose**	**Calculation**	**Benchmark**	**How to Improve**
Gross Profit Margin (%)	Measure % of profit made from sales when factoring cost of producing the product	(Rev - COGS) / Rev	• Industry: 25% • 2017: 38%	• Increase sales price • Decrease COGS
ROCE	Measure efficiency of capital invested in the business	Net Profit / (LT debt + Equity)	• Industry: 20%	• Improve profitability • Pay down debt
Working Capital	Indicates if there are enough short term assets	Current assets / Current liabilities	2:1	• Increase amount of cash or A/R • Decrease short term loans

We thank you for reviewing our proposal for our start-up company, EcoPower, and we look forward to further discussing the opportunity of a bank loan of $550,000 at 6.0% interest over seven years.

A. Economic, political and legal analysis of the trading company

1. Describe the trading country's economic system, economic information important to your proposed business/product/service, the level of foreign investment in that country

Australia is a vibrant free-market, capitalistic economy, similar to the economic system of the United States. It has enjoyed two decades of economic growth and emerged from the 2009 global recession relatively unscathed.

With a mere 1.8 percent average tariff rate, low non-tariff barriers, and minimal limits on foreign investment, Australia has established itself as an attractive location for potential investors. These intriguing economic policies ensure Australia has one of the world's most open trade and investment systems. Additionally, Australia has a Gross Domestic Product (GDP) of $1.34 trillion, over 30% of which comes from the state of New South Wales[1]. This large production makes New South Wales' economy larger than that of Colombia, South Africa, Malaysia, Thailand, the Philippines, or Ukraine. New South Wales is home to Sydney, Australia's most populated city, as well as Canberra, the nation's capital. With a strong and increasingly diverse economy, in addition to a vibrant and well-educated community, Canberra serves as the ideal location for EcoPower.

The Australian government is known for its heavy investment in creating a diverse portfolio of energy sources to power its nation. However, in a sweeping move by the conservative government in 2015, the taxpayer-funded $10 billion Clean Energy Finance Corporation (CEFC) was ordered to cease any new investments in wind power projects. As wind power and other energy sources continue to lose prevalence in Australia, this provides a unique opportunity for new, innovative energy sources to gain momentum in an emerging market.

2. Describe the trading country's governmental structure and stability, how the government controls trade and private business

Australia has established itself as an attractive and dynamic destination for investment, with an abundance of industries open to foreign competition. The government has withdrawn from most areas of the market, and since the early 1980s, has deregulated financial and labor markets, while reducing trade barriers. Australia's regulatory environment is considered to lie in the upper quartile of the world and ranks among the world's most transparent and efficient, with the federal and state governments each regulating trade and private businesses, albeit in slightly different

[1]The World Bank. "Australia." *Australia | Data*. N.p., n.d. Web. 19 Oct. 2016.

ways. The federal government generally regulates trade between different states and internationally, while also controlling foreign investment and the incorporation of federal companies.[2] State governments generally perform the converse; they focus on regulating trade and private businesses within their jurisdiction and are unable to interfere with commerce in another state.[3] The table below breaks down several economic distinctions between government levels.

Economic Powers & Jurisdiction of the Australian Government	
Federal Government	**State/Territorial Governments**
Regulation of Foreign Investment	No Regulation of Foreign Investment
Regulation of Interprovincial & International Trade	Regulation of Trade & Commerce within the State
General Regulation of Trade (Competition Law)	Creation and Regulation of General Trade in the State

3. Describe the laws and/or governmental agencies that affect your business/product/service [i.e., labor laws, trade laws (U.S.A. and foreign)]

Australia has several federal and state laws in place that promote free trade and unity. The most important foreign agreement is AUSFTA: The Australian-United States Free Trade Agreement. Signed in 2004 with the U.S., the treaty calls for reduced tariffs, predictable rules, and reductions in technical trade barriers among the two nations.[4] The United States is the most significant investor in Australia, accounting for 27.2 percent (or $758.2 billion) of Australia's total foreign investment stock as of December 2014.[5] The United States is also by far Australia's largest destination for investment abroad, accounting for 30 percent (or $575.5 billion) of Australia's total overseas investment stock as of December 2014. Australia states have also passed several environmental protect acts, such as the Australian Capital Territory Environmental Protection Act of 1997, that establish standard enforcement of environmental laws and protection of basic worker rights. The Australia Revenue Agency heads uniform federal tax collecting and providing industry-based exemptions, with **some of the lowest business taxes in the world: 54% lower than the United States.**[6] The table below lists and explains several other important acts that will affect EcoPower's operations, particularly federal and provincial tax incentives that provide a clear cost-effective benefit to owning a business in Australia.

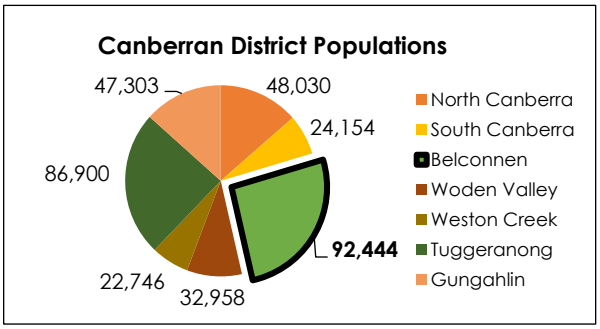
Main Laws and Taxes Affecting EcoPower Operations[7]			
	Federal/State	**Description**	**Impact**
Australian Partnership Act	State	Businesses w/two or more partners have **joint liability**.	All profits, losses, and events are **liable to both owners**.
Non-Resident Taxes	Federal	Non-residents taxed on **income that comes from Australian sources –** owning a business or selling Australian property	EcoPower will be taxed for being **owned by non-residents** and for any **property sold**.
State Tax Incentives	State	Used to encourage (small) business investment and innovation: Funding for reducing energy consumption	By **reducing consumption**, we can get additional **funding/tax credit incentives**
SR&ED Program	Federal/State	Provides **tax deduction incentives to encourage scientific research and development:**	EcoPower can qualify for **tax incentives** due to our energy-efficient product

[2] "Funding Programs and Incentives in Australia." *Australian Trade Commission*. Australian Gov. n.d. Web. 20 Oct, 2016.
[3] ibid
[4] "Invest in Australia" *Australian Trade Commission*. Australian Gov. n.d. Web. 20 Oct, 2016.
[5] ibid
[6] "Funding Programs and Incentives in Australia." *Australian Trade Commission*. Australian Gov. n.d. Web. 20 Oct, 2016.
[7] "Invest in Australia" *Australian Trade Commission*. Australian Gov. n.d. Web. 20 Oct, 2016.

B. Trade area and cultural analysis

1. Geographic and demographic information, important customs and traditions, other pertinent cultural information, competitive advantages and disadvantages of the proposed product and/or service

Geographic: Though the smallest continent, Australia is the sixth largest country in the world and is located within the Indian Ocean, directly south of Indonesia. Both famous for its Great Barrier Reef and rugged terrain, the country largely consists of a desert terrain. **Major industries of the country include mining and farming, thus leaving the development of biofuel as a nearly untapped reservoir.**[8] Canberra, the national capital of Australia, is an optimal area for EcoPower to operate, primarily since there is a high amount of industrial activity, located close to the largest cities in Australia. Canberra resides in the Australian Capital Territory, surrounded by New South Wales. The size of the city is roughly 150 square kilometers, providing an ideal market size for EcoPower to flourish. Furthermore, Canberra has earned the nickname of "The Bush Capital" due to a high volume of natural vegetation and fertile land, benefitting local farmers, and in turn EcoPower, greatly.



Demographic: The region of Canberra is home to over 390,000 residents, the majority of whom speak English as their primary language.[9] As one of the most populated cities in Oceania, Canberra flourishes with a wide variety of cultural backgrounds. However, of the current residents in Canberra, approximately 71.4% were born in Australia. The next largest nationalities are English and Chinese, accounting for 3.7% and 1.8% of the city's population. EcoPower will operate in the Canberra district Belconnen, which holds a population of over 92,000 citizens and is the largest district within Canberra (see graph). From the Australian Bureau of Statistics, the **average Canberra citizen is a female 34 years of age, with an average income of approximately $80,054 per annum.**[10]

Socioeconomic/Cultural: Although Australians take pride in the nature and preparation of their food, the concept of the preservation of food is underdeveloped. For the average Australian household, $1,036 of food is thrown away every year. Due to the high volume of wasted food, Australia is the optimal location for EcoPower to effectively transform the

[8] "Australia Geography." *Australia Geography*. U.S. Reference Library, n.d. Web. 19 Nov. 2016.
[9] Australian Bureau of Statistics. "Key Indicators." *Australian Bureau of Statistics, Australian Government*. N.p., n.d. Web. 19 Nov. 2016.
[10] ibid

problem of wasted food into a solution: **biofuel**.[11]

SWOT Analysis: To further analyze our operations in Canberra, we have created a SWOT analysis, which focuses on dissecting the main internal and external factors that will affect EcoPower, as described in Section XV and Appendix A.

3. Analysis of the potential location – importance and requirements of each trade document required by the U.S.A. and the country of choice

EcoPower will be headquartered in Canberra, Australia. By being based in Canberra, EcoPower will have a central base for its foreign operations in Australia, with proximity to other major cities like Sydney and Melbourne. This short distance creates a closely linked network between our main sites – facilitating communication and transport of materials. Additionally, a significant amount of our biofuel sales will occur in the United States. Despite relatively low trade restrictions between the United States and Australia because of AUSFTA, there are certain trade documents that EcoPower will need in order to conduct business overseas, which are outlined in the table below.

United States-Australia Common Trade Documents[12]	
Trade Documents	**Requirements**
Commercial Invoice	Bill for the goods from the seller to the buyer. It is used to determine the true value of goods when assessing customs duties.
Export Licenses	Authorizes the export of specific goods in specific quantities to a destination,
Australian Customs Invoice	Preferred document by Australian Customs and customs brokers. It is issued in Australian dollars for dutiable and taxable exports exceeding $1600 Australian dollars.

III. PROBLEM

Every day, a vast amount of organic material is transported to landfills, where it is left to perpetually decompose. When food waste rots with other organics in a landfill, it releases a harmful greenhouse gas known as **methane, which is an astonishing 25 times more potent that the carbon dioxide pollution that comes out of a traditional car exhaust.**[13] Furthermore, 25% of the manmade global warming experienced today is a direct result of methane emissions. Though this is certainly a cause for significant concern, it is important to note that these emissions are preventable with the reappropriation of food waste. **Though food waste and climate change are seemingly unrelated matters, these issues are inextricably linked, providing EcoPower an opportunity to capitalize on.**

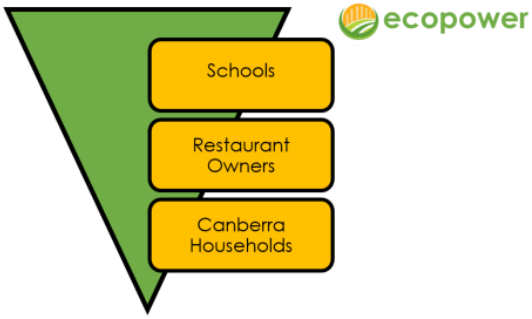
The current Labor Party has recently announced a lofty goal of 50% renewable energy use by 2030. While in theory this may sound easy to attain, Australia's mere 4% of renewable energy usage is a cause for concern. In fact, an independent report by *The Australian* has said this policy would require about $48 billion of new private sector investment by 2030 in large-scale renewable energy production. The problem that plagues Australia can be summarized as follows:

[11] "Australian Food Wastage Statistics." *Lunchalot*. Foodwise, n.d. Web. 19 Nov. 2016.
[12] "Common Export Documents." *Companies Export*. N.p. n.d. Web. 12 Oct, 2016.
[13] "Methane: The Other Important Greenhouse Gas." *Environmental Defense Fund*. N.p., n.d. Web. 6 Nov. 2016.

1. Immense Food Waste	•**Average Australian household wastes $1,036 of food annually** •Discard an estimated 4.06 million tons of food each year
2. Reliance on Nonrenewable Energy	•**96% of Australia's energy is currently nonrenewable** •Government announced necessity for private sector growth in nonrenewable energy field to meet 2030 target
3. Negative Effects on Environment	• Food waste causes the release of greenhouse gases such as methane • Gas from incineration in landfills contributes to acid rain

IV. CUSTOMER SEGMENTS

Segmentation: Due to the nature of EcoPower's operations, our market segmentation is threefold. To triangulate our market segmentation, we utilized an **inverted pyramid**. We designed our approach after gathering primary research, with the intention of prioritizing EcoPower's market sources. To the right is the inverted pyramid, showing EcoPower's needs in the Australian marketplace, with **segments increasing in priority towards the pyramid's tip.**



Primarily, to acquire organic materials, we will collect wasted food from Canberra households using a contracted truck pick-up system to minimize costs. Customers will save on excess food disposal costs, while EcoPower will use the raw materials to produce the biofuel. Second, EcoPower will contact restaurant owners who are interested in saving money on disposal of their formerly wasted food. Finally, we will focus wasted food from schools in the Canberra area. Our company caters toward these demographics, appealing to the target market's environmental and financial values.

Upon converting the organic waste into renewable energy, a process that will be outlined in detail in Section VI, we will then be able to sell our byproducts to consumers. The primary focus in this stage is companies in the industrial field. However, with the Australian government's newly introduced **tax credits** for the use of biofuel, companies in the aviation and naval industries also pose potential opportunities. For example, in early 2016, Virgin Australia and Air New Zealand began to seek biofuel supply for 10 years, beginning in 2020, of 200 million liters of biofuel a year[14]. This is about 5% of their projected fuel consumption, a significant market given that fuel costs for Virgin Australia added up to about $1.1 billion in 2015.[15]

Moreover, biofuel is a so-called drop-in fuel that is compatible with existing engines and infrastructure,

[14] Pond, Susan. "Australian Biofuels Could Create Jobs." *The Guardian*. Guardian News and Media, 20 Apr. 2016. Web. 7 Nov. 2016.
[15] ibid

removing the necessity for engine replacement costs.[16] Outside Australia, the United States Navy is another key potential consumer in the biofuel market and EcoPower target. A U.S. renewable energy policy has set a goal for half of the Navy's energy consumption to be met from alternative energy sources by 2020.[17]

> *"Biofuel has the potential to be our next **growth industry**. We know the technology is there, we know we have the people already working in this field, what we now need to do is seek out those industry partners."*
>
> **– Annastacia Palaszczuk**, 39th Premier of Queensland

Targeting: While EcoPower will initially focus on the local Canberra industrial target market and airlines to establish a strong foundational customer base and financial viability, increased success and demand will be vital to expanding our focus to a different target market demographic group.

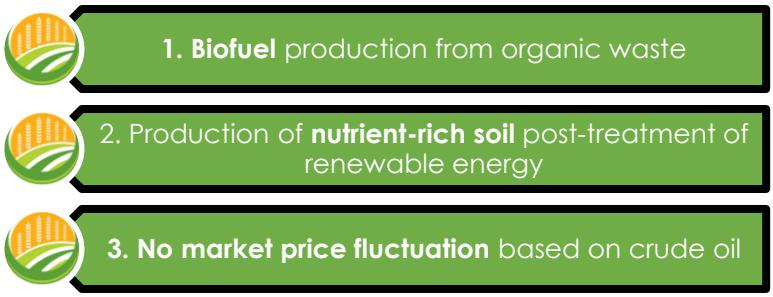
Positioning: EcoPower will effectively target these segments by using the marketing mix and numerous different channels/pathways to the customer. The key difference between the primary and secondary target markets will be their slightly different economic needs. **Our primary target for biofuel, industrial companies, have a more immediate need for power**, and thus will provide a significant portion of EcoPower's revenue. As such, EcoPower will position its traditional motor biofuel toward this demographic. We will **market our premium aviation/naval grade biofuel to our secondary target market, the United States Navy and commercial airliners**, both of whom have identified a pressing need for our product. Finally, the byproduct of the biofuel synthesis process (EcoSoil) will be positioned towards livestock producers and other local farmers who seek to use this nutrient-rich soil. This multifaceted approach to positioning will give EcoPower the greatest opportunity to capitalize in the Canberra marketplace. With these base markets, EcoPower hopes to establish a strong foundation before potentially expanding into another market like the general consumer market.

EcoPower Biofuel and EcoSoil Byproduct – Segmented Target Market			
Target Market	**Type**	**2017 Biofuel Segment Prices**	**Values**
Primary	Industrial (Motor)	$130	• Used to power industrial machinery • **Untapped eco-friendly biofuel market** within the U.S. and Australian air forces and navies • Compostable soil to expand vegetation
Secondary	Aviation/Naval	$125	
Tertiary	Farming Organizations	$33	

V. UNIQUE VALUE PROPOSITION

EcoPower biofuel is the future of renewable energy, providing environmentally-friendly and efficient fuel options that are relatively inexpensive. Certain Australian companies have begun to acknowledge the food waste problem, but the market still lacks reliable energy-efficient technology. EcoPower offers three unique aspects to its operations:

[16] Pond, Susan. "Australian Biofuels Could Create Jobs." *The Guardian*. Guardian News and Media, 20 Apr. 2016. Web. 7 Nov. 2016.
[17] "U.S. Navy Could Create Thriving Biofuel Hub Australia" *The Guardian*. Guardian News and Media, 12 June 2015. Web. 2 Nov. 2016.



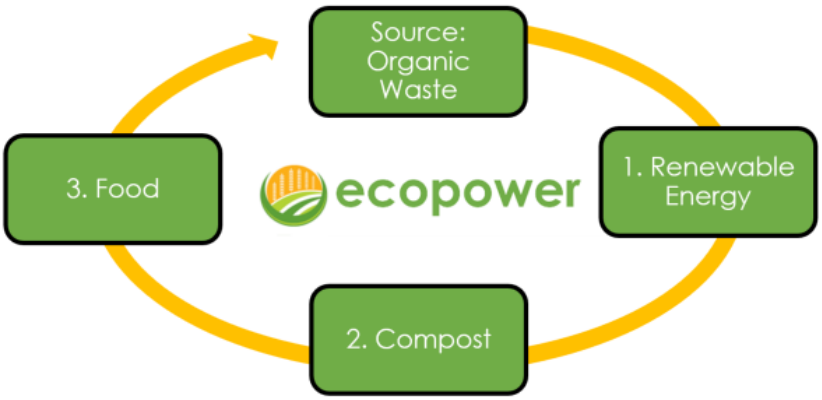
This is where EcoPower will separate itself from the competition – we will ensure that each unit of biofuel sold is truly eco-friendly and derived from organic waste. In addition, EcoPower will produce nutrient-rich soil after the post-treatment of renewable energy to eventually sell the compost as a secondary product (see Section VI). In analysis, our unique value proposition within the fuel market, we reached three conclusions.

1. **Results:** EcoPower's unique cycle transforms organic waste it into renewable energy through a biological refinery process (see Section VI). The compost byproduct **can be used to grow food**, concluding the cycle.
2. **Opportunity:** Unlike other biofuel production companies, EcoPower's use of organic waste as the primary ingredient to its biofuel contributes directly to the environment. Turning food waste into biofuel is a proven commodity, but its potential has not been realized in the Australian marketplace, **an incomparable opportunity**.
3. **Flexibility:** Fuel prices across the world are dictated by the availability and market price of crude oil. Australia is the ninth largest energy producer in the world but would run out of gasoline in just three weeks if imports were interrupted.[18] This is a major cause for concern as Australia's dependency on foreign countries for oil further amplifies the effects of oil prices on gasoline. EcoPower's biofuel is produced with sustainable materials, and thus acts independent of the crude oil trade. This means that while competitors' prices remain uncertain at the whim of suppliers, **EcoPower's prices are set in-house**, providing our company and consumers flexibility.

VI. SOLUTION

EcoPower provides a variety of features within its materials, each with an overall goal in mind: **creating sustainable and affordable biofuel**. We will enter an industry with a relatively small, yet with large potential, eco-friendly energy market in East Australia, with an opportunity to assert our brand and set the stage for future expansion. Our company will capitalize on this opportunity by primarily marketing a modern and affordable waste management system with three key features to our target market – renewable energy, economical compost, and the opportunity to create more food, all sourced from organic waste. Our three-pronged solution is as follows:

[18] "Australia Nearly Completely Dependent on Imported Fuel." *Radio National*. ABC Online, 17 Mar. 2014. Web. 20 Nov. 2016.



Source: Organic Waste

EcoPower will collect wasted food from Canberra restaurant owners, schools, and households at an affordable price, under a weekly contracted truck pickup system. Restaurant owners, schools, and Canberra citizens will be participating in an eco-friendly campaign, while EcoPower can receive the primary ingredients needed for creating biofuel.

1. **Renewable Energy:** Using a process called **anaerobic digestion**, which combines organic material and heat in a digestion tank, EcoPower will produce biogas that can be converted into energy-efficient products including:

    - **Renewable Biogas:** Given the versatile nature of EcoPower biogas, it can be refined into pipeline quality renewable biogas and sold into natural gas pipelines, a currently dire need in Australia. Although this isn't our current focus, this gives EcoPower a possible expansion opportunity, while our current emphasis is on compressed biogas, the product of pressurizing renewable biogas.
    - **Compressed Biogas (Biofuel):** The renewable biogas can be further refined and compressed into compressed biogas, more commonly known as biofuel. Biofuel is an environmental alternative to transportation fuels and industrial operations, and is coveted for its relatively low carbon footprint.

2. Compost: After the renewable energy has been taken from the organic waste, the remaining organic matter will be used in an extraction process which will produce rich soil with a myriad of environmental benefits. The aeration of EcoPower's process initiates a highly effective composting method. Heat, a byproduct of the composting, ensures complete purification and evaporation of excess humidity, staying true to our commitment to sustainable practices.

3. Food: As a result of EcoPower's trademark process, nutrient-rich soil is created. This soil can be used in a multitude of ways, including as a fully declared fertilizer and in premium turf solutions. Compost creates healthy soil conditions, thus enabling productive, efficient plant growth without the use of chemical fertilizers. Dubbed EcoSoil, our company will market this soil for its organic origins and its effective role as a compost fertilizer.

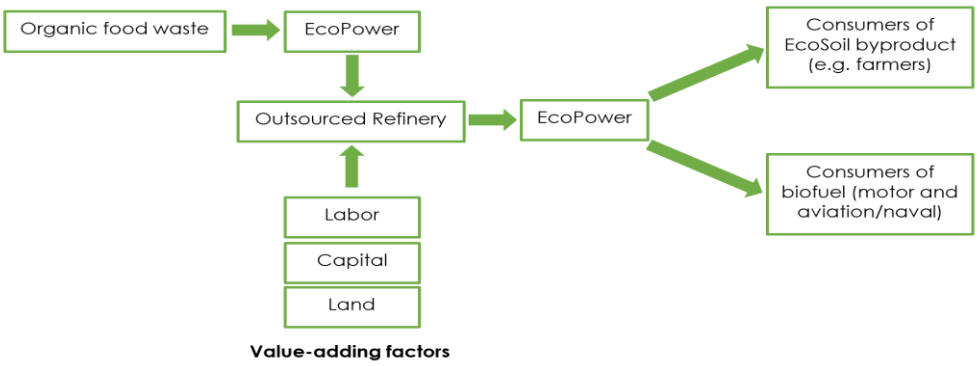
Channel Selection:

To take advantage of these market trends, EcoPower will employ several online promotion tactics. A key element of this plan is **Search Engine Optimization (SEO)**, which ensure that EcoPower will appear high on a list of results under the general categories related to the biofuel and fuel industries. Additionally, **Google PPC advertising** tracks visitors to our website and targets them with ads across the internet, since they have indicated a specific interest in our business. This strategy cuts out excess ad costs by targeting potential customers more efficiently without exorbitant spending. Furthermore, EcoPower will heavily network within the Canberra metropolitan region, especially within start-up and fuel/energy industry conventions. The table below summarizes our forms of online marketing and their benefits.

EcoPower Main Forms of Online Channel Marketing		
Forms	**Description**	**Benefit**
Facebook Page/Website	• Access to persuasive product advertisements and basic product and purchasing information	• Easy reference point for potential customers
Google+ Business Account	• Contains detailed company information • Built-in feature that recommends page during searches	• Recommended page feature targets potential customers
Google PPC Advertising	• Tracks visitors to website and Google+ account • Displays internets ads to tracked website visitors for 30 days	• Cuts out excess ad costs • Follow-ups on site visits/interest
Search Engine Optimization	• Ensures that EcoPower website appears high on list of results returned by a search engine	• Maximizes number of visitors to EcoPower website

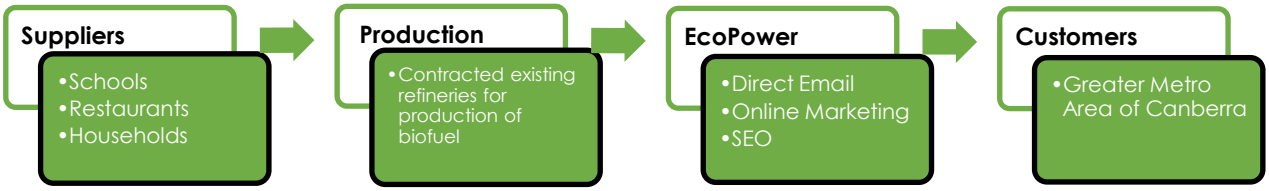
Distribution Intensity:

EcoPower will use a form of **exclusive distribution intensity**. Our company is the outlet that connects the customer and the restaurant; we do not have a true communication intermediary between our business and the customer, only an in-house sales force that will act as a department within our organizational structure. However, to manage startup finances, **EcoPower will outsource synthesis of the biofuel to a contractor with the production capabilities. Our main rationale is to preserve future assets by not over-expanding our reach too quickly**. We want to see steady and sustainable growth, which comes through measuring demand and adjusting to it adequately, along with developing strong relationships with our customers and contractors. Below is a visual representation of our distribution model.



Channel Integration:

EcoPower's channel structure will resemble a **contractual vertical marketing system (VMS)**, where members of the channel maintain independence while adhering to the specific quotas and obligations under contracts. In our channel structure, the most prevalent part of a contractual VMS is the role of our suppliers and a contractual production system for developing our biofuel at existing refineries. EcoPower will buy directly from our suppliers, but outsource the actual synthesis and production of our biofuel to a Canberra biofuel refinery. A contract is the primary way for our business to manage and track the performance of the firm before biofuel can be sold to our customer segments. Our purchases from its suppliers will also need to be contract-based, specifically for shipments and quotas of waste.



VIII. REVENUE STREAMS

ecopower

A. What is the revenue model?

Our firm's pricing objectives are based on the tenets of **value-based pricing** – pricing focused on providing customers with a greater value than alternatives. This is further supplanted by our overall use of penetration pricing, which is used to appeal to the masses at a lower cost, while still providing superior value in quality. We will usher in these pricing methods by having a two-phase strategy **utilizing dynamic pricing, a method that changes our prices based off market demand**. For EcoPower's first year of sales in 2017, we will use a lower price to garner higher bulk sales. We will need immediate returns to combat high initial expenses (See Section IX), and thus we will focus on the quantity of biofuel barrels sold and total revenue, not individual profit margins. From then on, **EcoPower will maximize our gross profit margins (See Section VIII, D) by steadily increasing prices by 3.5% annually until 2020**, while still being more cost-efficient than traditional fuel. The following chart outlines our pricing based on these objectives.

EcoPower 3 Year Pricing Model				
Product	**2017 Price**	**2018 Price**	**2019 Price**	**3 Year Pricing Increase (%)**
Barrel of Aviation/Naval Biofuel	$130	$134	$143	7.0%
Barrel of Motor Biofuel	$125	$133	$143	7.0%
EcoSoil (in square yards)[19]	$33	$35	$38	7.0%
Average Fuel[20]	$153	$164	$173	5.6%
Average Diesel[21]	$166	$175	$185	5.6%
Average Biofuel[22]	$137	$145	$153	5.6%

[19] "Compost Cost Guide." *2016 Compost Prices*. CraftJack, 23 May 2016. Web. 20 Nov. 2016.
[20] "Canberra Cost of Living." *Price of 1 Liter (1/4 Gallon) of Gas in Canberra*. Expatistan, n.d. Web. 20 Nov. 2016.
[21] Lekakis, George. "Why Diesel Drivers Are Being Slugged at the Bowser" *The New Daily*. N.p., 03 Jan. 2016. Web. 20 Nov. 2016.
[22] ibid

The above chart also details the expected price per product segment for each revenue stream. **It will cost $79.49 to produce a barrel of motor biofuel (42 gallons), thus we determined our base price in 2017 to be $125**, maintaining a sustainable gross profit margin, while still being substantially lower than the opposition (See Section VIII, D). We underwent a similar process for our aviation and naval biofuel, which is slightly different from motor biofuel, as it must be chemically treated, resulting in a moderately higher cost than motor biofuel ($82.49). EcoSoil pricing, our nutrient-rich refined compost, was determined by comparing it to the typical cost of compost.

It is crucial to note that while a typical barrel of biofuel or regular fuel is usually measured as 42 gallons in the United States, we must convert from gallons to liters for our operations, due to Australia being a metric country. Additionally, for the sake of clarity, all our statistics within this paper are in U.S. dollars and the U.S. measurement system, with Australian taxes factored into the sales prices.

Our pricing model demonstrates the price differences between our biofuel and the standard costs of biofuel, diesel, and regular fuel in Australia. A barrel of our motor biofuel is significantly less than the competition, **with average savings of $17.46 to $45.96 per barrel depending on fuel type, 18.3% more cost effective than regular fuel**. The model below summarizes savings projections by purchasing EcoPower motor biofuel compared to traditional fuel.

Fuel Savings Projections by Amount of EcoPower Biofuel Used					
Company	**Annual Fuel Needed**	**Cost Using 100% Fuel**	**Cost Using 90% Fuel & 10% Biofuel**	**Cost Using 75% Fuel & 25% Biofuel**	**Cost Using 60% Fuel & 40% Biofuel**
Sample A	10000 barrels	$1,528,800	$1,500,920	$1,459,100	$1,417,280
Sample B	5000 barrels	$764,400	$750,460	$729,550	$708,640
Sample C	1000 barrels	$152,830	$150,092	$145,910	$141,728
Sample D	500 barrels	$76,440	$75,046	$72,955	$70,864

With these sample calculations, the model represents how much more companies will save by purchasing biofuel instead of regular fuel. It is unlikely that a company will switch 100% to biofuel immediately, rather switching gradually, as EcoPower will not have that level of production capability initially. Thus, we reflected the cost savings above by substituting 10-40% of a company's overall fuel usage with EcoPower biofuel. The samples that we chose, in the amount of fuel needed annually, represent the scope of the industrial companies that EcoPower will initially target. Savings are more prominent for larger companies, about $28,000 by switching to just 10% biofuel for a company requiring 10,000 barrels, but it is more likely that our first customers are in the 500-1000 barrel range. However, these smaller industrial companies are likely more willing to switch to a higher percentage of biofuel. As a start-up, we will focus on establishing a customer base with small and mid-size companies, before penetrating the large-scale industrial market.

Finally, the base price may slightly fluctuate based off production efficiency or shipping costs to a long-distance destination. As illustrated in the price positioning map below, EcoPower has a unique combination of high quality at a

low price compared to other major biofuel firms globally, due to our **streamlined contractual production process**, **lowering the unit cost per each barrel of biofuel.**

B. What are the lifetime values?

Lifetime Values (LTV), are a benchmark that projects how much revenue a business can expect from an average customer segment. It correspondingly aids the business in understanding how much it can spend on advertising versus maintaining a healthy cash flow. To accurately calculate this value, we must consider numerous relevant factors, including customer lifespan, sale value, repeat transactions, and profit margins. To account for these factors, we will calculate our LTV by using the standard formula of **LTV**= (**t** x **s** x **c** x **p**), as shown in the table below.

EcoPower LTV Variables					
Variable	**Description**	**Equation Application**	**Industrial Organizations**	**Naval/Aviation Organizations**	**Farming Organizations**
T	Average Customer Lifespan	(Projected Long-Term Trade Value) / (Transactional Value)	15.4 Years	9.2 Years	11.6 Years
S	Average Sale Value	(Annual Fuel Usage) x (Desired Fuel Efficiency Percentage)	$17,563	$26,863	$3,423
C	Annual Number of Transactions	(Annual Fuel Usage) / (Average Sale Value)	2.3	3.1	1.7
P	Profit Margin per Customer	(Gross Profit) / (Sales Revenue) x 100%	36.4%	36.5%	75.8%

After substituting the above values into our LTV equation for each customer segment, our output revealed that the **projected LTV for the industrial organization segment was $226,437 and $279,638 for our naval/aviation organizations**. Additionally, our farming customer segment has a projected LTV of $51,166. This data reveals that our most profitable customer segment is our naval/aviation segment by about $53,000. However, industrial organizations are easier to retain as customers (15.4 years versus 9.2 years). Since customer retention costs are far less expensive than acquisition costs, industrial organizations present a more attractive business priority in the short-term, compared to the other segments. Additionally, that market is easier to penetrate than that of the naval/aviation industry, due to less industry barriers, so in the short-term we must gain a strong foothold in the industrial market to stabilize profitability, before devoting more of our resources toward the naval/aviation industry. With this analysis, EcoPower must develop an

effective promotion plan primarily targeting small to mid-size industrial companies (See Section IX, A), while also beginning to network and form relationships with larger companies in the Canberra metropolitan region.

C. What is the revenue?

Operational selling officially begins in 2017, with biofuel production starting in January of that year. Thus, our sales will be lower in January and February, but will increase in the spring as our production capability grows. Also, **fuel consumption has two regular seasonal peaks**. The largest peak occurs during the winter, when cold weather increases the demand for fuel and gas for heating and a smaller peak occurs in the summer, when air conditioning use and demand increases, which is increasingly being provided by biofuel-compatible generators.[23] Revenue will also come from selling **EcoSoil**, the byproduct of the biofuel production process, to local farming organizations and individual farmers.

With these considerations in mind, we modeled a three-year sales forecast that outlines monthly sales projections in 2017 and annual forecasts for 2018 and 2019. We have anticipated sales of 26,630, 35,070, and 42,360 barrels of biofuel and EcoSoil in 2017, 2018, and 2019 respectively. **Our sales revenue is projected to increase from $2,821,865 to $4,883,669 by 2019**. Motor biofuel barrels make up the majority of sales, accounting for 50.1% of total revenue in 2017. While our projected financial statements are in U.S. dollars, transactions will be performed in Australian dollars. The global marketplace is often a very unpredictable place to do business, and financial projections are consequently speculative. Thus, we used a **bottom-up** and **data-driven** approach which led to realistic sales forecasts (see below).

Three Year Sales Forecast — EcoPower — Fiscal Year Begins Jan-17

	12-Month Sales Forecast for 2017													Annual Sales Forecast	
	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Annual Totals	2018	2019
Aviation/Naval Biofuel barrels sold	375	410	640	625	815	875	910	860	770	915	940	980	9115	11560	12530
Sale price @ unit	130	130	130	130	130	130	130	130	130	130	130	130		139	149
Aviation/Naval Biofuel TOTAL	48,750	53,300	83,200	81,250	105,950	113,750	118,300	111,800	100,100	118,950	122,200	127,400	1,184,950	1,607,996	1,864,965
Motor Biofuel barrels sold	500	540	750	890	975	1070	1120	1010	980	1040	1210	1425	11510	14450	17960
Sale price @ unit	125	125	125	125	125	125	125	125	125	125	125	125		134	143
Motor Biofuel TOTAL	62,500	67,500	93,750	111,250	121,875	133,750	140,000	126,250	122,500	130,000	151,250	178,125	1,438,750	1,932,688	2,570,256
EcoSoil containers sold	245	255	465	470	520	615	715	685	600	510	480	445	6005	9060	11870
Sale price @ unit	33	33	33	33	33	33	33	33	33	33	33	33		35	38
EcoSoil Total	8,085	8,415	15,345	15,510	17,160	20,295	23,595	22,605	19,800	16,830	15,840	14,685	198,165	319,909	448,449
Monthly Totals: All Models	119,335	129,215	192,295	208,010	244,985	267,795	281,895	260,655	242,400	265,780	289,290	320,210	2,821,865	3,860,592	4,883,669

D. What is the gross margin?

Gross margin (GPM) is the difference between net revenue and cost of goods sold (COGS) divided by revenue, expressed as a percentage. **EcoPower's projected GPM for 2017 sales is 38.4% combined for all products**. In

[23] "U.S. Energy Independent Statistics and Analysis." *Natural Gas: Two Seasonal Peaks*. U.S. Energy Information Administration, n.d. Web. 20 Nov. 2016.

comparison to the competition in the Australian fuel market, EcoPower stacks up well. One of the premier firms in the Australian fuel market, Caltex garnered a GPM of 31.8% for the 2015 fiscal year. over 6.6% lower than EcoPower, primarily due to the Australian governments adding excise taxes on crude oil products.[24] By using independent contractors and not setting up its own biofuel production process, EcoPower can free up additional capital that would be going toward COGS, further increasing its advantage over the traditional fuel revenue model.

EcoPower Conservative Product Mix For the Year Ending 2017							
	Forecasted	Unit		Total			
Product Lines	Units	Sales Price	Cost	Sales	COGS	GP $	GP %
Aviation/Naval Biofuel	9,115	130	82.49	$1,184,950	$751,896	$433,054	36.50%
Motor Biofuel	11,510	125	79.49	1,438,750	914,930	523,820	36.40%
EcoSoil	6,005	33	12.00	198,165	72,060	126,105	63.60%
			Totals	**$2,821,865**	**$1,738,886**	**$1,082,979**	**38.4%**

As EcoPower continues to expand its scope in the Canberra metro area, one of our major goals is to further increase our gross profit margin (GPM) – which frees up cash to pay operating expenses and reinvest in our business's development and growth. To create a sustainable plan for the future, EcoPower will focus on two main operational objectives to increase this margin. The first is procuring higher amounts of revenue; the second is reducing production costs. The graphic below explicates the specific strategies that our firm will undertake to fulfill these goals. Note: EcoPower will raise selling prices by 3.5% annually to increase its GPM (See Section VIII, A).

Raising Revenue

- **Raise selling prices** - may deter customer loyalty due to conflict with brand identity
- **Seek alternative revenue streams** - costly to establish new revenue stream

Reducing Prouction Costs

- **Renegotiate** with our outsource partner - get more favorable credit terms
- **EcoPower production facility** - Once we gain enough capital, this can eliminate intermediary costs

IX. COST STRUCTURE

ecopower

A. What are the customer acquisition costs?

EcoPower will target our primary customer segments, industrial companies, along with our potential waste sources (households, restaurant owners, etc.) by using a promotion plan headlined by press releases, networking, direct email, and online channel marketing. Press releases in Canberra typically get distributed by over 30,000 websites,

[24] "Oil and Gas Taxation in Australia." *Fuel and Energy Abstracts* 36.6 (2015): 412. Deloitte. Web. 19 Nov. 2016.

newspapers, blogs, and journals.[25] Press coverage is a way for our business to gain exposure to a wider audience beyond Canberra, with an average cost of around $400 per ad; direct email has the same purpose – build our firm's brand by spreading awareness at a low cost ($0.45 per message).[26]

Our business will utilize specific customer segment-oriented media as well. EcoPower will target potential customers and waste sources primarily using online channel marketing, consisting of Google PPC advertising and Search Engine Optimization (SEO). Due to the proportional aspect of our segments, with industrial businesses requiring motor biofuel constituting 50.1% of our revenue, our promotion plan will have a greater amount of online marketing geared toward that customer segment. Additionally, our Google Pay Per Click (PPC) advertisements and SEO system will enable EcoPower to cut down on the amount spent on online advertising. **Networking will be the most crucial part of our customer acquisition process, as it stimulates early demand and connects us with larger potential buyers**. These costs will come from dispatching agents to large business and tech conventions in the region, such as the Lean Start-Up Workshop at the National Convention Centre, hosting over 200+ businesses in 2015.[27] However, while networking is a customer acquisition cost, we will move it into our human resource costs section as part of our sales agent salaries, as there is no direct ad/acquisition cost from networking. The first table below details advertising costs, while the other focuses on other web promotional costs with longer lifespans that are not necessarily ads, but instead have development and maintenance costs. EcoPower will utilize **lean budgeting** techniques to achieve highly leveraged sales returns, allowing the growth of eco-friendly technology to create new opportunities and marketing channels.

EcoPower Promotion Plan – Advertising Costs[28]							
Activity	**Time Frame**	**Development Cost**	**Single Ad Cost**	**Monthly Ads**	**Monthly Cost**	**Annual Cost**	**3-Year Cost**
Press Releases	2017-18	$1,330	$400	2	$800	$9,600	$10,930
Direct Email	2017-21	$700	$0.45	4,000	$180	$2,160	$7,180
SEO	2017-21	$1,700	N/A	N/A	$600	$7,200	$23,300
Google PPC	2017-21	$2,600	$1.50	4,094	$6,140	$73,680	$223,640
Totals	2017-21	$6,330	N/A	N/A	$12,520	$92,640	$265,050

EcoPower Promotion Plan – Web Design and Maintenance Promotion Costs[29]					
Activity	**Time Frame**	**Development Cost**	**Monthly Maintenance Cost**	**Annual Maintenance Cost**	**3-Year Cost**
Facebook Page	2017-21	$40	$25	$300	$940
Google+	2017-21	$56	$45	$540	$1,676
Website	2017-21	$14,000	$750	$9,000	$41,000
Totals	2017-21	$14,096	$820	$9,840	$43,616

[25] "Navigating The New Digital Divide." *Issaquah Connect*. Deloitte Digital. n.d. Web. 10 Oct, 2016.
[26] Beasly, Laura. "Why Direct Mail Still Yields Lowest Cost-Per-Lead and Highest Conversion Rate." *Online Marketing Institute*. Online Marketing Institute. 13 Jun, 2013. Web. 23 Nov, 2016.
[27] "A Convention Centre with a Difference." *National Convention Centre Canberra*. N.p., n.d. Web. 19 Nov. 2016.
[28] "Navigating The New Digital Divide." *Issaquah Connect*. Deloitte Digital. n.d. Web. 10 Oct, 2016.
[29] ibid

EcoPower's total promotion plan budget is $308,666 over three years, a significant investment in customer acquisition. To evaluate the plan's success, our business will continually calculate each activity's CPM, which measures the cost of promotion per one thousand viewers. The table below summarizes our initial findings – our most cost-efficient forms of marketing are our direct email, press releases, and website, and Google PPC – which will headline our integrated promotion plan.

EcoPower Promotion Plan – Measurement of Effectiveness[30]			
Activity	**Time Frame**	**Monthly Scope/Circulation**	**CPM**
Press Releases	2017-18	60,000 channels – 220,000 viewers	$37.50
Direct Email/Mail	2017-21	4,000 recipients	$10.00
SEO	2017-21	8,750 viewers	$60.00
Google Pay Per Click (PPC)	2017-21	4,094 viewers	$52.58
Facebook Page	2017-18	900 viewers	$166.66
Google+ Business Account	2017-21	1,500 viewers	$67.38
Website	2017-21	15,100 viewers	$41.00

B. What are the distribution costs?

As mentioned in Section VII, EcoPower will have three main activities going into our total distribution costs, primarily waste collection and transportation, barrel handling, and our final distribution to our end customers. We will be measuring these costs by barrel of biofuel or compost transported, with a typical barrel consisting of 42 gallons. Additionally, we are expecting to increase the number of barrels transported each year in accordance with our rise in sales. Over the first three years of our business, we are projecting a total distribution cost of $520,300.

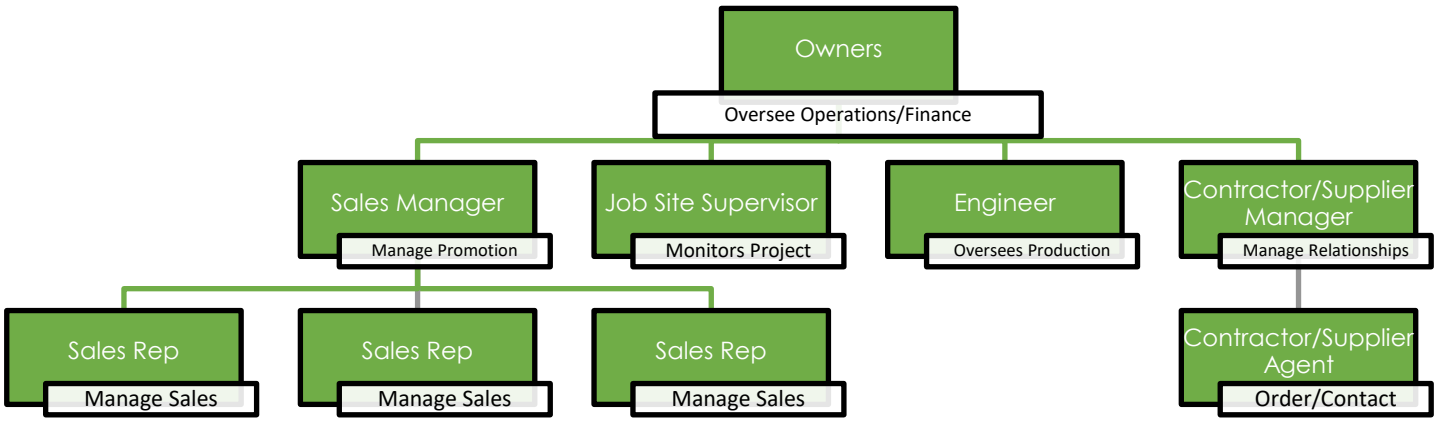
EcoPower – Distribution Costs[31]					
Activity	**Cost Description**	**Cost per Barrel (42 Gallons)**	**2017 Projected # of Barrels Transported**	**2017 Cost**	**3-Year Cost**
Transportation to Facility	Collecting and transporting waste from sources using contracted waste disposal team	$1.50	26,630	$39,945	$156,090
Barrel Handling	Cost of loading barrels with biofuel	$1.00	26,630	$26,630	$104,060
Customer Distribution	Transportation from facility to customer using contracted truck delivery system	$2.50	26,630	$66,575	$260,150
Totals	N/A	$5	26,630	$133,150	$520,300

C. What are the human resource costs?

EcoPower will have a centralized organizational structure, with the owners making the final decision over all major operational and financial management. Additionally, by retaining control within the company and not over expanding our organizational structure, we will minimize costs, while not sacrificing productivity. The following chart gives a brief overview of our organizational structure and general descriptions of our different positions. While this chart

[30] ibid
[31] Derven, Ron. "On Business: Leveraging the Total Cost of Distribution." NAIOP. Development Magazine. 2012. Web. 23 Nov, 2016.

details our projected structure, it is likely that EcoPower will need to expand its workforce and departments in accordance with increases in operational selling, as we expand the scope of our business.



EcoPower's organizational structure expects to have an annual payroll expense of $595,000 and a total salary burden of $184,750 when factoring in cumulative payroll tax and cumulative benefits.

EcoPower Organizational Salaries				
Position	**Hourly Rate**	**Hours Per Month**	**Monthly Payroll Expense**	**Annual Payroll Expense**
Owner and CEO	N/A	N/A	$6,666	$80,000
Owner and COO	N/A	N/A	$6,666	$80,000
Owner and CFO	N/A	N/A	$6,666	$80,000
Contractor/Supplier Manager	$30.30	165	$5,000	$60,000
Engineer	$35.25	130	$4,583	$55,000
Job Site Supervisor	$27.77	165	$4,583	$55,000
Sales Manager	$23.12	165	$3,816	$45,800
Sales Rep. #1	$19.33	150	$2,900	$34,800
Sales Rep. #2	$19.33	150	$2,900	$34,800
Sales Rep. #3	$19.33	150	$2,900	$34,800
Contractor/Supplier Agent	$19.33	150	$2,900	$34,800
Totals	N/A	N/A	$49,583	$595,000

EcoPower Organizational Payroll Tax and Benefits				
Position	**Annual Payroll Tax**	**Cumulative Payroll Tax[32]**	**Cumulative Benefits Rate[33]**	**Total Salary Burden**
Owner and CEO	$80,000	9%	21%	$24,000
Owner and COO	$80,000	9%	21%	$24,000
Owner and CFO	$80,000	9%	21%	$24,000
Contractor/Supplier Manager	$60,000	9%	16%	$15,000
Engineer	$55,000	9%	16%	$13,750
Job Site Supervisor	$55,000	9%	16%	$13,750
Sales Manager	$45,800	9%	16%	$11,440
Sales Rep. #1	$34,800	9%	16%	$8,700
Sales Rep. #2	$34,800	9%	16%	$8,700
Sales Rep. #3	$34,800	9%	16%	$8,700
Contractor/Supplier Agent	$34,800	9%	16%	$8,700
Totals	$595,000	N/A	N/A	$184,750

[32] The **Cumulative Payroll Tax Rate** includes the employer's portion of Social Security (6.2%, limit $118,000), Medicare (1.45%, no limit), and State Unemployment (.2%), plus an estimate for Federal Unemployment (.8%, limit 7,000) and Workman's Compensation
[33] The **Cumulative Benefits Rate** includes medical and dental at various levels depending on the position.

D. Additional costs?

EcoPower will purchase certain assets to manage daily business operations, along with leasing office space and a warehouse in downtown Canberra. The warehouse will store waste and finished biofuel products, either in preparation for being sent to our contracted biofuel refineries or being shipped to the final customer. Leasing these buildings on two year renewable leases offers EcoPower the most preferable payment terms and flexibility in obtaining this space. Currently, a 2,000 square meter office in downtown Canberra goes for $4.00 a square meter which would be around $8,000 per month.[34] On a three-year renewable lease, the office would cost about $288,000 or $96,000 a year.[35] After the first couple years of operations, we will have flexibility in determining whether our office remains in the same place, or move to accommodate the size of our business. Similarly, a 3,000 square meter warehouse in downtown Canberra is around $3,700 /month. Under a three-year lease, the total cost of the warehouse would be $135,720.

Finally, EcoPower will need to purchase several standard fixed assets, which are owned for three or more years, for our office building and daily operations. These include office tables, chairs, racks, whiteboards, and technology such as computers, printers, and copiers. The following model summarizes the cost of these fixed assets and their expected deprecation and salvage value.

EcoPower
Fixed Asset and Depreciation Schedule
For the Period Beginning January 2017

Fixed Asset				Acquisition		Life	Salvage	Annual Straight Line Depreciation	
Number	Class	Description		Date	Cost	in Years	Value	Value	Expense
1	Fixtures	Storage Racks		12/28/2016	1,100	4	400	700	175
2	Fixtures	Whiteboards		12/27/2016	300	4	100	200	50
3	Furniture	4 8' X 3' Office Tables		12/22/2016	1,600	4	800	800	200
4	Furniture	4 Office Chairs		12/22/2016	1,600	4	800	800	200
	Total Furniture and Fixtures				5,000			2,700	675
5	Office Equipment	Canon Copier		12/25/2016	4,000	4	600	3,400	850
6	Office Equipment	Canon Printer		12/25/2016	4,000	4	600	3,400	850
7	Office Equipment	3 Dell Computers		12/25/2016	6,000	4	400	5,400	1,350
	Total Office Equipment				14,000			12,200	3,050
	Total All Fixed Assets				**19,000**				**3,725**

[34] "14 Moore Street, City, ACT 2601." *Real Commercial*. Colliers International, n.d. Web. 10 Nov, 2016.
[35] ibid

X. DETAILED FINANCIALS

A. Projected income and expenses

1. Projected income statements by month for the first year's operation

EcoPower
Forcasted Statement of Income
For the years ended December 31, 2017, 2018 & 2019

	Jan '17	Feb '17	Mar '17	Apr '17	May '17	Jun '17	Jul '17	Aug '17	Sep '17	Oct '17	Nov '17	Dec '17	Totals 2017	Totals 2018	Totals 2019
Operating Revenue															
Aviation/Naval Biofuel	$ 48,750	$ 53,300	$ 83,200	$ 81,250	$ 105,950	$ 113,750	$ 118,300	$ 111,800	$ 100,100	$ 118,950	$ 122,200	$ 127,400	$ 1,184,950	$ 1,607,996	$ 1,864,965
Motor Biofuel	62,500	67,500	93,750	111,250	121,875	133,750	140,000	126,250	122,500	130,000	151,250	178,125	1,438,750	1,932,688	2,570,256
EcoSoil	8,085	8,415	15,345	15,510	17,160	20,295	23,595	22,605	19,800	16,830	15,840	14,685	198,165	319,909	448,449
Total Operating Revenue	**$ 119,335**	**$ 129,215**	**$ 192,295**	**$ 208,010**	**$ 244,985**	**$ 267,795**	**$ 281,895**	**$ 260,655**	**$ 242,400**	**$ 265,780**	**$ 289,290**	**$ 320,210**	**$ 2,821,865**	**$ 3,860,593**	**$ 4,883,670**
Cost of Goods Sold:															
Aviation/Naval Biofuel	30,933	33,820	52,793	51,556	67,229	72,178	75,065	70,941	63,517	75,478	77,540	80,840	751,890	$ 953,584	$ 1,033,599
Motor Biofuel	39,745	42,924	59,617	70,746	77,502	85,054	89,028	80,284	77,900	82,669	96,182	113,273	914,924	1,069,140	1,422,130
EcoSoil	2,940	3,060	5,580	5,640	6,240	7,380	8,580	8,220	7,200	6,120	5,760	5,340	72,060	108,720	142,440
Total Cost of Goods Sold	**$ 73,618**	**$ 79,804**	**$ 117,990**	**$ 127,942**	**$ 150,971**	**$ 164,612**	**$ 172,673**	**$ 159,445**	**$ 148,617**	**$ 164,267**	**$ 179,482**	**$ 199,453**	**$ 1,738,874**	**$ 2,131,444**	**$ 2,598,169**
Gross Profit															
Motor Biofuel	17,817	19,480	30,407	29,694	38,721	41,572	43,235	40,859	36,583	43,472	44,660	46,560	433,060	654,412	831,366
Aviation/Naval Biofuel	22,755	24,576	34,133	40,504	44,373	48,696	50,972	45,966	44,600	47,331	55,068	64,852	523,826	863,548	1,148,126
EcoSoil	5,145	5,355	9,765	9,870	10,920	12,915	15,015	14,385	12,600	10,710	10,080	9,345	126,105	211,189	306,009
Total Gross Profit	**$ 45,717**	**$ 49,411**	**$ 74,305**	**$ 80,068**	**$ 94,014**	**$ 103,183**	**$ 109,222**	**$ 101,210**	**$ 93,783**	**$ 101,513**	**$ 109,808**	**$ 120,757**	**$ 1,082,991**	**$ 1,729,149**	**$ 2,285,501**
	38%	**38%**	**39%**	**38%**	**38%**	**39%**	**39%**	**39%**	**39%**	**38%**	**38%**	**38%**	**38%**	**45%**	**47%**
Operating Expenses															
Payroll	49,583	49,583	49,583	49,583	49,583	49,583	49,583	49,583	49,583	49,583	49,583	49,583	594,996	612,846	631,231
Payroll taxes and benefits	15,395	15,395	15,395	15,395	15,395	15,395	15,395	15,395	15,395	15,395	15,395	15,395	184,740	190,282	195,991
Lease/ Triple net fees	29,770	29,770	29,770	29,770	29,770	29,770	29,770	29,770	29,770	29,770	29,770	29,770	357,240	367,957	378,996
Interest Expense	2,750	2,723	2,697	2,670	2,643	2,616	2,589	2,562	2,534	2,507	2,479	2,451	31,221	27,206	22,938
Taxes and Licensing	2,387	2,584	3,846	4,160	4,900	5,356	5,638	5,213	4,848	5,316	5,786	6,404	56,437	77,212	97,673
Depreciation	310	310	310	310	310	310	310	310	310	310	310	310	3,720	3,720	3,720
Insurance	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	12,564	12,941	13,329
Office Supplies	320	320	320	320	320	320	320	320	320	320	320	320	3,840	3,955	4,074
Utilities	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	28,200	29,046	29,917
Advertising	18,850	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	156,570	161,267	166,105
Web design and maintenar	14,096	820	820	820	820	820	820	820	820	820	820	820	23,116	23,809	24,524
Repairs	46	46	46	46	46	46	46	46	46	46	46	46	552	569	586
Professional Fees	5,600	6,025	9,275	9,925	11,050	12,800	13,725	12,775	12,175	12,325	13,205	14,270	133,150	175,350	211,800
Miscellaneous	210	210	210	210	210	210	210	210	210	210	210	210	2,520	2,596	2,673
Total Operating Expenses	**$ 142,714**	**$ 123,703**	**$ 128,189**	**$ 129,126**	**$ 130,964**	**$ 133,143**	**$ 134,323**	**$ 132,921**	**$ 131,928**	**$ 132,519**	**$ 133,841**	**$ 135,496**	**$ 1,588,866**	**$ 1,688,756**	**$ 1,783,558**
Income/ Loss before tax	**(96,997)**	**(74,292)**	**(53,884)**	**(49,058)**	**(36,950)**	**(29,960)**	**(25,101)**	**(31,711)**	**(38,145)**	**(31,006)**	**(24,033)**	**(14,739)**	**(505,875)**	**40,393**	**501,943**
Tax Expense	(19399.34)	(14858.46)	(10776.78)	(9811.64)	(7389.94)	(5991.98)	(5020.18)	(6342.22)	(7629.00)	(6201.12)	(4806.56)	(2947.84)	(101175.06)	8078.60	100388.68
Net Income [Loss]	**$ (77,597)**	**$ (59,434)**	**$ (43,107)**	**$ (39,247)**	**$ (29,560)**	**$ (23,968)**	**$ (20,081)**	**$ (25,369)**	**$ (30,516)**	**$ (24,804)**	**$ (19,226)**	**$ (11,791)**	**$ (404,700)**	**$ 32,314**	**$ 401,555**
	-65%	**-46%**	**-22%**	**-19%**	**-12%**	**-9%**	**-7%**	**-10%**	**-13%**	**-9%**	**-7%**	**-4%**	**-14%**	**1%**	**8%**

2. Projected cash flow for the first year

EcoPower
Forcasted Statement of Cash Flows
For the years ended December 31, 2017, 2018 & 2019

	Fiscal Year 2017												Annual	
	Jan '17	Feb '17	Mar '17	Apr '17	May '17	Jun '17	Jul '17	Aug '17	Sep '17	Oct '17	Nov '17	Dec '17	2018 Total	2019 Total
Beginning Cash Balance	**$ -**	**$ 748,429**	**$ 683,994**	**$ 635,860**	**$ 591,559**	**$ 556,918**	**$ 527,842**	**$ 502,627**	**$ 472,096**	**$ 436,390**	**$ 406,368**	**$ 381,897**	**$ 364,833**	**$ 331,657**
Cash Inflows:														
Owner Funds	300,000													
Loan Proceeds	550,000													
Sales	119,335	129,215	192,295	208,010	244,985	267,795	281,895	260,655	242,400	265,780	289,290	320,210	3,860,593	4,883,670
Total Cash Inflows	**969,335**	**129,215**	**192,295**	**208,010**	**244,985**	**267,795**	**281,895**	**260,655**	**242,400**	**265,780**	**289,290**	**320,210**	**3,860,593**	**4,883,670**
Available Cash Balance	**969,335**	**877,644**	**876,289**	**843,870**	**836,544**	**824,713**	**809,737**	**763,282**	**714,496**	**702,170**	**695,658**	**702,107**	**4,225,426**	**5,215,327**
Cash Outflows														
Equipment Purchases	5,000													
Furnature and Fixtures	14,000													
Inventory Purchases	73,618	79,804	117,990	127,942	150,971	164,612	172,673	159,445	148,617	164,267	179,482	199,453	2,131,444	2,598,169
Payroll	49,583	49,583	49,583	49,583	49,583	49,583	49,583	49,583	49,583	49,583	49,583	49,583	612,846	631,231
Payroll taxes and benefits	15,395	15,395	15,395	15,395	15,395	15,395	15,395	15,395	15,395	15,395	15,395	15,395	190,282	195,991
Lease/Triple net fees	29,770	29,770	29,770	29,770	29,770	29,770	29,770	29,770	29,770	29,770	29,770	29,770	367,957	378,996
Taxes and Licenses	2,387	2,584	3,846	4,160	4,900	5,356	5,638	5,213	4,848	5,316	5,786	6,404	77,212	97,673
Insurance	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	12,941	13,329
Office Supplies	320	320	320	320	320	320	320	320	320	320	320	320	3,955	4,074
Utilities	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	29,046	29,917
Advertising	18,850	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	161,267	166,105
Web design and maintenance	14,096	820	820	820	820	820	820	820	820	820	820	820	23,809	24,524
Repairs	46	46	46	46	46	46	46	46	46	46	46	46	569	586
Professional Fees	5,600	6,025	9,275	9,925	11,050	12,800	13,725	12,775	12,175	12,325	13,205	14,270	175,350	211,800
Miscellaneous	210	210	210	210	210	210	210	210	210	210	210	210	2,596	2,673
Tax Expense	(19,399)	(14,858)	(10,777)	(9,812)	(7,390)	(5,992)	(5,020)	(6,342)	(7,629)	(6,201)	(4,807)	(2,948)	8,079	100,389
Subtotal	212,872	185,616	232,395	244,277	271,592	288,837	299,077	283,152	270,072	287,767	305,727	329,240	3,797,353	4,455,457
Other Cash Outflows														
Loan Principal	5,284	5,311	5,337	5,364	5,391	5,418	5,445	5,472	5,499	5,527	5,554	5,582	69,210	73,478
Loan Interest	2,750	2,723	2,697	2,670	2,643	2,616	2,589	2,562	2,535	2,507	2,480	2,452	27,206	22,938
Subtotal	8,034	8,034	8,034	8,034	8,034	8,034	8,034	8,034	8,034	8,034	8,034	8,034	96,416	96,416
Total Cash Outflows	**220,906**	**193,650**	**240,429**	**252,311**	**279,626**	**296,871**	**307,111**	**291,186**	**278,106**	**295,801**	**313,761**	**337,274**	**3,893,769**	**4,551,873**
Ending Cash Balance	**$ 748,429**	**$ 683,994**	**$ 635,860**	**$ 591,559**	**$ 556,918**	**$ 527,842**	**$ 502,627**	**$ 472,096**	**$ 436,390**	**$ 406,368**	**$ 381,897**	**$ 364,833**	**$ 331,657**	**$ 663,454**

3. Projected cash flow by month for the first year's operation

The above cash flow statement (Section X, B) includes both EcoPower's cash flow for the first three years of our business and a detailed monthly forecast for 2017, our first year of operations. Please see Section X, E and Section X, F for more detailed narrative descriptions for our cash flow forecast in relation to our three-year plan.

4. Projected balance sheet, end of first year

EcoPower Balance Sheet As of 12/31/2017				
Assets			**Liabilities**	
Current Assets:			Current Liabilities:	
Cash	364,833		Accounts payable	329,249
Accounts Receivable	320,210		Other Current Liabilities	238,072
Inventory	199,453		Current Portion Long Term Loans	69,210
Other Current Assets	47,655		Total Current Liabilities	636,531
Total Current Assets	932,151			
			Long Term Loans	415,600
Fixed Assets	9,000			
Less: Accumulated Depreciation	(3,720)		**Total Liabilities**	**1,052,131**
Net Fixed Assets	15,280			
			Equity	
			Share Capital	300,000
			Retained Earnings	(404,700)
			Total Equity	**(104,700)**
Total Assets	**$947,431**		**Total Liabilities and Equity**	**$947,431**

5. Projected three-year plan

See Section XV, Appendix B for an infographic detailing our three-year plan of the business, with recaps of key data from our financial statements from Section X, A-D.

6. A brief narrative description of the planned growth of the proposed business, including financial resources and needs

As EcoPower achieves its sales projections from 2017 to 2019, we expect to see a few major financial trends. Our forecasts anticipate an overall net profit increase from **-14% ($-404,700) to 8% ($401,555) in 2018.** This steady growth is emblematic of the growing demand in the energy industry for cleaner and more cost-efficient fuel. In our first year of operations, EcoPower is expected to sell 26,630 barrels, primarily from our motor biofuel product segment, which composes 50.1% of sales. While sales increase across the whole product range over the three-year plan, we anticipate the motor biofuel revenue to grow in further proportion, making up 52.6% of revenue in 2019. With a greater demand for motor biofuel, higher numbers of that segment's sales will heavily increase our firm's net profit in 2019, coupled with our strong aviation/naval biofuel sales. Our tertiary product segment, EcoSoil, will make up 9.1% of our revenue in 2019,

a significant contribution. As it is largely a byproduct of our main biofuel production process (see Section V), EcoSoil has a higher gross profit (63.6% compared to 36.4% and 36.5%) and will benefit our overall gross profit margin (47% in 2019).

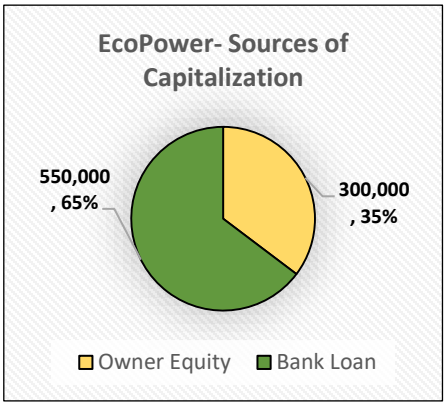
To fulfill our targeted sales and profit objectives, EcoPower will adhere to our promotion plan laid out in Section IX, A. The plan illustrates our initial focus on viewer volume using mass media, before segmenting our targeted advertisements down onto potential customers. We expect our 2017 sales to consist of mostly industrial companies, due to their greater clean-energy needs. Our targeted advertising and networking later in the process will attract more of the aviation/naval company segment, a long-term process aimed at large-scale fuel users from the likes of Australian commercial airliners or the United States Navy, and thus achieve higher profitability. **While our operating expenses and COGS should remain relatively level throughout the first three operational years, EcoPower will need an initial cash influx to jumpstart our business**, in addition to our own funds. This investment will maintain our business's financial stability as we start out. Furthermore, the seasonality of the fuel sales will affect how we monitor our stability. Fuel sales are strongest in the winter, with a smaller peak in the summer, while decreasing in the spring and fall. EcoPower must constantly monitor and evaluate to ensure our protection from irrecoverable losses.

B. Projected plan to meet capital needs

1. Personal and internal sources

As the owners of this business, we (Brendan, Nishi, and Brandon) will collectively invest $300,000 between the three of us into EcoPower. Each of us will invest $100,000 to meet our goal. These funds will consist of our own personal savings, along with a portion coming from immediate family members.

2. Earnings, short-term and long-term borrowing, long-term equity



EcoPower will use two main sources of capital for our first three years of operations. The first will be personal savings, due to their availability and the lack of dependence on an outside source. Externally, the best type of capital for our business is bank loans. By using loans, we the owners will be able to better protect our personal assets while also maintaining our desired level of control over EcoPower, one that would have been threatened if we had used outside investors. This long-term borrowing technique will require constant monitoring and updating as the business goes through its operations, so we can ensure that the loan is repaid in a timely manner. The chart below

further details the advantages and disadvantages of each potential source of capital, giving a deeper insight into our decision to seek out a bank loan.

EcoPower – Potential Sources of Capital[36]		
Sources of Capital	**Advantages**	**Disadvantages**
Personal Savings & Assets	• Minimal Acquisition Costs • No Interest/No Sharing Returns	• Little Protection
Investors	• Shared Risk • Active/Silent Partners	• Lose certain element of control • Need to satisfy investors/Share profits
Bank Loans	• Operating/Survival Capital • May be able to protect personal assets (declare bankruptcy)	• May have to leverage assets • Paying Interest • Regular Payments
Government Grants and Loans	• Very low interest rates	• Availability of Funds Questionable

3. External sources

Based on our previous analysis and projected financial statements, we are requesting a $550,000 bank loan to be repaid over 7 years beginning in January 2017 with an interest rate of 6.0%. This will be our primary source of capital, aside from personal owner funds, and we are confident in our business's operational strategy in order to repay the loan in a timely and consistent manner.

4. Repayment plans

In terms of repaying our own initial capital investment, we the owners will not take money out of the business to reimburse the $300,000 that we originally put into the business. Instead, our salaries will cover the investment, to ensure our ability to properly distribute cash to its most pressing financial needs. We value our firm's profitability and success over our personal needs, and hope to instill this company-first perspective in our organization.

5. Plan to repay borrowed funds or provide return on investment to equity funds

EcoPower will repay our loan to the bank in a timely and efficient manner, with monthly payments of $8,034 lasting from January 2017 to December 2023. Over the course of the loan, **we expect to pay back an included $81,369 in interest over the first three years alone, which will provide an immediate return on investment** for you, the bank. The amount of principal paid annually will rise from $65,189 in 2017 to $93,354 in 2023 to pay off the loan. The following tables detail our amortization and payment schedules:

EcoPower – Amortization Schedule			
Loan Amount	**Interest Rate**	**Term**	**Start Date**
$550,000	6.0%	7 Years	Jan 2017
Summary of Payments & Interest			
Monthly Payment will be	$8,034		
Total Interest Paid over Life of Loan	$124,915		
Interest Paid in 2017	$31,221		
Interest Paid in 2018	$27,205		
Interest Paid in 2019	$22,937		

[36] Jennings, Rob. "Sources of Finance and Their Advantages & Disadvantages." *Small Business Chron*. Demand Media. n.d. Web. 30 Nov, 2016.

EcoPower Payment Schedule				
Year	**Annual Principal Paid**	**Annual Interest Paid**	**Total Interest Paid**	**Loan Balance**
Begin	$0	$0	$0	$550,000
2017	$65,189	$31,221	$31,221	$484,810
2018	$69,210	$27,206	$58,432	$415,599
2019	$73,478	$22,938	$81,369	$342,120
2020	$78,011	$18,405	$99,774	$264,108
2021	$82,822	$13,593	$113,368	$181,285
2022	$87,931	$8,485	$121,853	$93,354
2023	$93,354	$3,061	$124,875	$0
Totals	N/A	N/A	$124,875	$0

As EcoPower pays off the loan over 7 years, the relatively low monthly payments of $8,034 will also contribute to maintaining our financial security by not compromising our business's cash flow. Furthermore, our projected financial growth indicates the reliability of our firm in repaying the loan according to schedule.

XI. KEY METRICS

To ensure that EcoPower is hitting each of our financial benchmarks, we will maintain a series of metrics evaluating our finances, operations, and industry position. We will calculate these ratios and percentages based off our monthly financial statements to have a constant and consistent process updating the performance of the business.

EcoPower – Financial Metrics				
Metrics	**Purpose**	**Calculation**	**Benchmark**	**How to Improve**
Profitability (Income Statement):				
Revenue	Monitor market acceptance and share	SP X Quantity sold	• 2018 $4.8 million	• Evaluate customer acquisition strategies
Gross Profit Margin (%)	Measure profit from product sales and ability to cover operating expenses	(Rev - COGS) / Rev	• Industry: 25% • 2018: 50%	• Increase sales price/quantity sold • Decrease Cost of Goods
Net Profit	Measure overall performance including operating expenses	GP – Expenses – Interest - Taxes	• Industry: 7% • 2018: 10%	• Gross Profit strategies above • Decrease operating expenses
Efficiency (Balance Sheet):				
ROCE	Measure efficiency of capital invested	Net Profit / (LT debt + Equity)	Industry: 20%	• Improve profitability • Pay down debt
Days A/R Outstanding	Measure how fast A/R is collected	(A/R / Credit Sales) X 365	< 30 days	• Draw in credit sales – negotiate with customers
Days A/P Outstanding	Measure how fast A/P is paid	(A/P / COGS) X 365	> 30 days	• Extend credit purchases – negotiate with suppliers
Cash Cycle	Measure time to turn inventory into cash	Inventory turns + DSO - DPO	Industry: 83 Days	• See ROCE, DSO, and DPO
Inventory Turns	Measure how fast inventory is being sold	COGS / Average Stock	Industry: 0.8 Weeks	• Increase buying frequency • Smaller quantities
Liquidity:				
Working Capital Ratio	Indicates if there are enough short term assets	CA / CL	2:1	• Increase amount of cash or A/R • Decrease short term loans
Acid Ratio	Measures ability to use quick assets to pay current liabilities immediately	(CA – Stock) / CL	1:1	• Increase amount of cash or A/R • Decrease amount of short-term loans or A/P
Net Cash Flow	Cash inflows and outflows difference	Cash in – cash out	Industry: $200,000	• Increase revenue • Reduce expenses/costs

EcoPower – Operating Metrics				
Metrics	**Purpose**	**Calculation**	**Benchmark**	**How to Improve**
Customer:				
Lifetime Value	Projects the revenue a customer will generate during their lifetime	(Average value of sale) X (Number of repeated transactions) X (Average retention time)	$200,000	• Create Brand Loyalty • Upsell and Cross-Sell • Increase number of repeated transactions
Acquisition Cost	Determine how much of an investment is made	See Section IX A	$5,000	• Use more targeted media • Decrease expenses
Satisfaction Score	Reveals satisfaction with the product	Sated customers / starting customers	>90%	• Reliability of response time • Improve quality

Employees:				
Satisfaction Score	Reveals satisfaction with working conditions	Sated employees/starting employees	> 90%	• Critically evaluate for prioritizing
Staff Cost Ratio	Measures cost of PR staff relative to sales	(PR + PR Tax) / Sales	Industry: 2.8%	• Reduce employee salaries • Reduce budget expenses

EcoPower – Industry Specific Metrics				
Metrics	**Purpose**	**Calculation**	**Benchmark**	**How to Improve**
Fuel Quality Standards Act	Sets Australian fuel quality standards	Parameters to set the standard < 50 mg/kg	Industry: Rating of 70 (out of 100)	• Consistent evaluations of biofuel
Energy Efficiency Rating	Measures efficiency of energy produced	Energy = [(Principal input) / (efficiency)] x time	Industry: Rating of 75 EcoPower: Rating of 90	• Improve quality of fuel • Decrease speed of production
TAR (Turnaround Refinery) System	Measures product cycles	(Cost of goods) / (Sales) x 100	Industry: ~32 % EcoPower: ~ 45 – 50%	• Increase sales of product • Decrease cost of goods

Using these metrics, EcoPower will be able to evaluate our business's operations, and modify our strategies if needed. Of our variety of metrics, several of the most important are our customer and employee satisfaction scores. These responses have a direct, but often unseen, impact on our business's financial performance in a multitude of areas – such as sales and our employees' efficiency.

XII. COMPETITIVE ADVANTAGE

EcoPower distinguishes itself from not only the renewable energy market, but also the energy market in general, with its unique forms of customer acquisition and diversified product mix. Thus, EcoPower will use the precepts of the "**Disruptive Innovation" business model**, which creates a new market (Biofuel from Food Waste) and eventually displaces an existing market, in this case the wider Australian energy market. As no Australian commercial organization has harnessed the energy yielded by food waste to create fuel, EcoPower will be the first to take advantage of this market opportunity. In order to obtain raw material, the most significant cost in our competitors' biofuel production, we will use green marketing to target Canberra households, local restaurants, and schools to obtain organic food waste, our raw material. Our marketing will stress that by disposing food waste with EcoPower, **consumers can reduce their amount of regular waste tonnage, which often gets charged exorbitant landfill gate fees using a pound-for-pound charging system**. Additionally, EcoPower will work with the Australian government to reward industrial customers for participating in this green practice through **government subsidization**. This model is enticing, as not only does it save EcoPower significant costs in resource acquisitions, but it also saves our three target markets an estimated average of 47% in waste disposal costs. Unlike other mainstream fuel production companies, EcoPower offers a myriad of consumer-oriented benefits. As highlighted in Section X, we can offer our biofuel at a price point noticeably lower than our competitors: **18.3% less than the conventional Canberra fuel dispensary**. To meet the compatibility requirements of our airline and naval partners, we must add the readily available chemical TEL to our biofuel mixture to improve burn efficiency, a negligible cost in our production. Due to our different approach to energy production, EcoPower will

penetrate the market, while still maximizing profit margins with our outsourced contractual biofuel production agreement, allowing us to dedicate more attention to customer acquisition and retention. In summary, EcoPower's three-pronged competitive advantage is as follows:

- EcoPower will be **the first in Australia** to create biofuel from organic food waste.
- EcoPower's biofuel price point is noticeably lower than competitors: **18.3% less** than the conventional Canberra fuel dispensary.
- In order to obtain raw material, the most significant cost in our competitors' biofuel production, we will target **Canberra households, local restaurants, and schools.**

XIII. CONCLUSION

We believe that EcoPower will develop into a thriving start-up in the Canberra metropolitan area with a loan of $550,000 to be repaid over 7 years at 6.0% interest. Our expected financial performance projects a steady rise as we establish a presence in the Australian clean energy market and expand to new ventures. As our start-up matures and further increases the scope of our operations and profitability, we believe that the following primary factors, summarized in the table below, will contribute to our financial success.

EcoPower – Factors Contributing to Development		
Factor	**Feature**	**Benefit**
Availability of Eco-Waste	Acquired from Canberra restaurants, schools, and households	Allows EcoPower to generate revenue while attaining the necessary food waste to create the biofuel product
Biofuel Demand	High demand for biofuel within Australia	High growth potential for EcoPower to financially flourish in the Australian environment
Contractual Production System	Average COGS: $79.82	Ensures healthy GPM and lowers need for a costly manufacturing system
Eco-Friendly Focus	Use food waste instead of detrimental ingredients to produce biofuel, which creates an eco-friendly soil byproduct	Cost-effective incentive for customers to buy, while also appealing to modern environment-first mindset
Targeted Advertising	Google PPC, SEO, and Direct Email	Reduces the cost of exorbitant spending on people that will not likely be potential customers
Tax-Break Incentives	Incentivizes companies to utilize eco-friendly methods in business	EcoPower qualifies for various Australian tax-break incentives (Section II.A.3)

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XV. APPENDIX

Appendix A: SWOT Analysis with PRIMOF and PESTLE Elements

SWOT Analysis for EcoPower Operations	
With stiff competition from traditional biofuel manufacturers, our start-up must have a deep understanding of what will shape our operations in the market. This SWOT analysis examines the internal strengths, weaknesses, and external opportunities, and threats to EcoPower.	
Strengths	**Weaknesses**
People ▪ Succinct and concise organizational structure streamlines communication and management ▪ Friendly workforce which creates team environment	**People** ▪ Numerous requirements on use of Canberra labor and restrictions on foreign labor
Resources ▪ Outsourcing biofuel costs to an existing manufacturer lowers production costs ▪ Use of food waste as primary ingredient in biofuel maintains an ecofriendly product	**Resources** ▪ Canberra warehouse space can only store up to 3000 square feet of product at one time
Innovation and Ideas ▪ Selling the remaining compostable soil after biofuel production serves as a unique value proposition ▪ EcoPower processes include a unique cycle of: **food waste → biofuel → compost**	**Innovation and Ideas** ▪ Low budget dedicated to innovation and ideas ▪ Not as established as other existing companies (ex: AR Fuels)
Marketing ▪ **Targeted web advertising** (Google PPC and direct email) reduces mass media costs. ▪ Markets advantage of ecofriendly product	**Marketing** ▪ Harder to use mass media outlets for building more public information besides a set allotment of press releases ▪ Local marketing scope limits initial expansion possibilities
Operations ▪ Abundance in geographic proximity within foreign operations ▪ Canberra economy makes it an ideal location	**Operations** ▪ Lack of relationship with suppliers of eco-friendly materials ▪ Target market unwilling to partake in EcoPower's operations
Finance ▪ In comparison to its competitors, EcoPower offers **inexpensive prices** for customers ▪ Outsourcing production **increases annual retained earnings**	**Finance** ▪ Small budget to improve unexpected factors of the business ▪ Limited resources to expand as a company

Opportunities	Threats
Political ▪ Australian Prime Minister Malcolm Turnbull continues to seek new ways to conserve energy, benefitting EcoPower's operations	**Political** ▪ Shift in future political power could affect EcoPower's ability to attain food waste from restaurants and homes
Economic ▪ Economically affluent city with stable economic system stemming from international trade ▪ Canberra population has adequate disposable income, allowing customers to purchase products	**Economic** ▪ Potentially high tax rate in Australia would take away from business earnings ▪ Changes in manufacturing regulations would affect EcoPower's operational strategies
Social ▪ Australia has **instituted initiatives to lower waste costs**, making EcoPower an attractive option ▪ Social media promotional strategies ensure reach	**Social** ▪ New service that might face initial difficulties getting off the ground
Technological ▪ Technologically affluent area ▪ Internet frequently used, which could be used with the potential mobile application	**Technological** ▪ Larger biofuel manufacturing companies could use technology to make their fuel cheaper and more efficient
Legal ▪ Advantageous **federal and provincial economic tax incentives**	**Legal** ▪ Strict regulation of tax incentives could prevent EcoPower from saving money if current regulations are changed
Environmental ▪ Abundance of eco-friendly resources ▪ No other local companies offer a similar service	**Environmental** ▪ Still high cost of converting natural materials into manufactured goods

Appendix B: EcoPower Three Year Plan