En Avant Energy Solutions, LLC

A sustainable Energy Consulting Firm

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Table of Contents

Table of Contents	2
Executive Summary	3
Assessment of the Business Environment	5
Products and Services	8
Marketing Plan	10
Operational Plan	13
Management	15
Financial Plan	17
Strategic Plan	18
Facility Layout	19
Sources	20
Appendix A	22
Appendix B	22
Appendix C	23
Appendix D	23
Appendix E	24
Appendix F	25
Appendix G	26
Appendix H	26

Executive Summary

Company Description

En Avant Energy Solutions, LLC is a sustainable energy systems consulting firm founded and equally owned by Risto Rushford, Adam McCary, Omar Sadek, Clayton Harley, Amanuel Ketema, James Gallagher and Andrew Stafford. Each are stakeholders and full partners within the firm who specialize in specific areas within the Sustainable Energy Market. Our primary service offered is project advising and management for commercial building energy efficiency and regulatory compliance.

Management Plan

EAE will be a Limited Liability Company founded by Risto Rushford and co-owned by Adam McCary, Omar Sadek, Clayton Harley, Amanuel Ketema, James Gallagher and Andrew Stafford. We will operate with a matrix structure which is ideal for being contracted into various types of projects. Risto will act as the day-to-day Operations and Functional Manager. On one margin of the matrix structureⁱ are the Engineers who specialize either in 1) Electricalⁱⁱ, 2) Heating, or 3) Alternative Energy supply. On the other margin will be our 1) Market Analyst, 2) LEEDⁱⁱⁱ and Government Compliance specialist and 3) Business Analyst. An outside accountant will be hired as necessary. Annual salaries and medical plans will be provided for each employee.

Marketing Plan



EAE's initial customer base will be Portland Metro Regional businesses. Our target group is commercial and industrial businesses of over 20,000 sq. feet which are directly targeted by Portland's City Climate Action Plan and required to perform a yearly energy use analysis^{iv}. We will also focus on smaller businesses and consumers to help them to achieve the city's goals of a 62%

reduction of energy use by 2030. There are an estimated 1,000 commercial buildings currently affected by Portland's Climate Action Plan^v, with at least an additional 4,000 which will fall under regulation in future years. Of these, fewer than 100 are ENERGY STAR certified.

Financial Plan

Initial startup capital for EAE will come from an initial investment of \$10K from each of the seven owners. After this we will apply for small business loans and grants through the SBA^{vi} and local financial institutions to cover additional costs. This capital will be used to cover our initial startup costs of \$26,834 to pay for consulting equipment and certifications as well as membership in the Portland Business Alliance, City Club and to become an Energy Trust of Oregon^{vii} certified contractor. Agents within the company will earn an initial salary of between \$60K and \$90K annually which breaks down to an

additional \$50K per month on wages giving us a monthly expense of about \$56K. Assuming we maintain 3 clients per consultant per week with an average of 23 hours per consultant per week at an hourly rate of \$140 per hour we anticipate revenue of \$90,160 per month minus the monthly expenses we would break even at the fourth week of each month (see Break Even Analyses in Appendices D and E). Given these projections, an annual profit of at least \$414,033 is expected.

Strategic Plan

En Avant Energy's long term strategic goal is to become an integrated household name throughout Portland. We aim to do this by adding value to everything we do, from empowering our employees as individuals and as a company to give back to the communities, to participating in editorial and city planning discussions on long term sustainability, to embedding within our business practices the core of what we are about: providing truly sustainable energy solutions to our clients based on their specific needs.

Legal Form of Ownership

En Avant Energy is a Limited Liability Company^{viii} with seven owners acting as partners in the firm's operational structure. We have chosen this model for the limited liability and tax advantages that it offers for a small firm like ours over a partnership or corporate structure.

Assessment of the Business Environment

Economic Environment

Sustainable energy solutions are quickly being recognized locally, nationally and even globally as essential to the survival of the planet as we know it. That said, many business and government entities are unaware of how to make the transition from traditional practices to more sustainable ones. That, or they are more interested in maintaining the status quo. But the industry of renewable and sustainable energy is growing nonetheless and its importance will only continue to grow.

The US and the world continue to grow out of the economic recession, and more technical jobs will be made available to Oregon and US labor markets as the sustainable energy market's share of the GDP grows^{ix}. The strength of the US dollar and its staid position as the world's reserve currency also gives us an advantage in the world marketplace, enabling us to reach out to firms and researchers internationally which have developed effective products and help them to navigate their way to the Portland, Oregon marketplace when their products offer the best solution to our customer's needs. This will contribute to the balance of trade and help to progress the world to a more positive image of globalism.

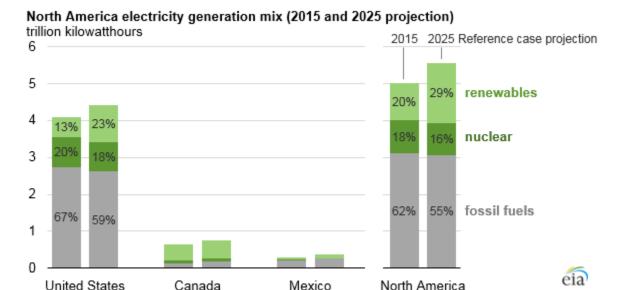
Industry Environment

As per the Energy Trust of Oregon website, there are 196 total companies in Portland offering energy analysis services to Commercial and Industrial clients, and 388 which offer such services to residential clients. The dominant players in the Industrial and commercial sector are firms such as Imagine Energy, Christenson Electric, Inc. and Oregon Electric Group. Within the residential sector of the market there are no discernable dominant players although there are several well-established firms.

History of the Market

The market for sustainable energy consulting has been growing in Portland, Oregon since 1980 when the city released its Comprehensive Plan, but the growth has been slow and limited to a few firms. In recent years, a greater emphasis on the need for sustainable energy alternatives to oil, coal and gas to mitigate the growing climate change crisis has prompted city and state governments to put in place measures to promote and incentivize adoption of sustainable energy methods. Now that "green energy" products are becoming cheaper and more abundant it has become clear that many consumers are ready to switch to affordable alternatives.^x

The Market Now and in the Near Future



We will be one of many small contracting firms providing energy consulting to local businesses and residences, however Portland has been proactive in putting in place policies specifically to drive growth in this sector. Due to last year's (2015) Energy Reporting^{xi} requirements put into place, many commercial businesses are eager to improve efficiency and to take advantage of incentives. Similarly, for residences, certain cash incentives are available to home owners for switching to more sustainable energy alternatives. We see that many consumers find themselves being forced to make a switch from older energy usage patterns to new ones. There are many options available, but consumers may find it difficult to discern which changes are best to make to stay in compliance.

As a small firm in a fast-growing market, we anticipate a huge potential for growth as we seek to offer data driven solutions tailored to our customers' specific needs and goals.

Barriers to Growth

Some potential barriers are:

- High capital costs We will need to hire engineers and other specialists in their field.
- High marketing costs While there are a variety of consultants in the market today, few are well marketed. This may give us an initial advantage if we market ourselves well.
- Consumer acceptance and brand recognition We would also need to seek Energy Trust certification to join the largest local network of contractors in the field.

- Training and skills Consultants need to hold engineering, business analytics or related science degrees and would preferably have related field experience.
- Additional Certifications LEED certification, ENERGY STAR and other Government Compliance training.

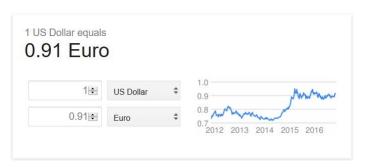
Addressing those Barriers

Initial startup costs and gaining customer recognition will be our largest hurdles. We believe that if we can secure our first few customers, then we will be able to build our reputation as a trustworthy and competitive contractor. To give ourselves a boost in this area each agent of EAE will be encouraged to participate in blogging, writing columns in opinion editorials, and attending city hall meetings as ways to get our brand name out there. Since we are a service based firm which is focused on bringing innovative new technologies to consumers, then long term changes in technologies are positive factors for our business. Likewise, with government regulations, the need for sustainable energy increasingly becomes a factor. The biggest threat at this point would be a significant change in the economy. With an economic downturn, businesses would cease to hire outside contractors to make major renovations to their facilities in an uncertain economic climate.

Global Environment

One of En Avant's Goals is to promote truly sustainable and innovative new technologies in the Portland marketplace, even when those technologies are developed in other countries. One such product is the Wattway solar brick manufactured by The Colas Group^{xii} based in Boulogne, France. This innovative new product holds a lot of potential to revolutionize the way Americans think about where they get their energy. France has long been a close ally of the United States and shares many cultural similarities. While a part of the European Union, France still must maintain its own

balance of trade. But France's GDP is forecasted only to rise 1.5% in 2017^{xiii}. Currently, the US dollar is trading very close to the Euro (\$1 = €0.91) and historically the two rates have been relatively stable compared to most currencies. Due to France's



need to increase exports, we anticipate little risk or difficulty in coordinating importation of Colas' product.

Products and Services

Service Description

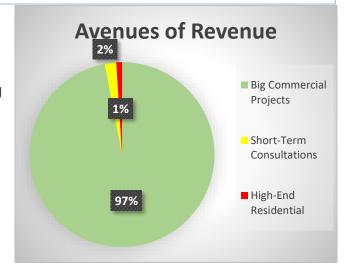
En Avant Energy Solutions (EAE) offers complete consulting services to our clients, both residential and commercial, to inspect and analyze their existing energy consumption and advise how to meet government regulations, maximize incentives and reduce overall energy related costs.

Our consulting services include:

- ✓ Project management including pricing cost and impact analysis
- ✓ Strategic alternatives development
- ✓ Energy efficiency planning
- ✓ Pairing clientele to their best alternative choices in installation and product sourcing.

Our Avenues of Revenue are:

- ❖ 97% Big Commercial Projects
- 2% Short Term, one or two day, jobs which are more for Marketing than immediate profit.
- 1% High End Residential



Project management



Our company has several agents who specialize in the fields of Electrical, Heating and Alternative Energy Sources. These agents are paired with experts in market and business analysis and LEED or other Government certification and compliance. We will also work in conjunction with construction and installation companies to ensure that energy concerns are being met during the building process.

Inspection Services



We will provide inspection services to existing and prospective small businesses and homeowners to advise of electrical and heating system improvements, including setting them up with a plan for total home energy control!

Sales literature



We will develop an EAE website and blog which will provide educative information on our industry and fully developed descriptions of our services with ease of contact for potential customers both within and outside of the Metro area. For more information check out our Promotional Plan below.

Technology



EAE will be focused on providing quality service in conjunction with cutting edge technology to perform detailed energy usage analysis and modeling. This will include thermal imaging and electrical testing equipment as well as analytical and modeling software from the office to get the most accurate picture of what the client really needs to meet their goals.

Future services

As a growing company, we will expand our reach beyond central Portland into the surrounding counties and other Oregon cities. It is also our goal to extend our scope of service beyond commercial businesses to large scale manufacturing firms and governmental clients as well.

Competitive Comparison

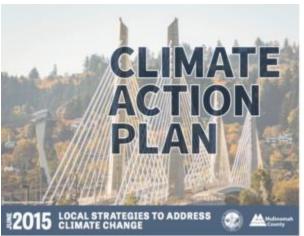
While there are comparable consulting firms in the Portland Metro Area, we will set ourselves apart by our unbiased and reliable consultations without pushing the customers to buy unnecessary products and pairing them with the cheapest (when possible) and most reliable products and services to meet their individual needs. We will also be more outspoken in our city and communities, ensuring that ours is a voice that will be heard and our name will be known in every home.

Marketing Plan

1. Target Market:

Overview: Innovative Energy Solutions would mainly focus in the greater Portland region. Our clients will be owners of residential homes and business' but will primarily consist of small business owners looking to cut back on energy emissions and save money by using renewable energies.

Demographic



With the placement of the City's Climate Action Plan, Portland businesses are required to make greener changes to help cut back on carbon emissions. The plan states that they want Portland to have an 80% cut back on carbon emissions from the 1990s in 2050. This is where En Avant Energy Solutions comes in. We plan on capitalizing on commercial and industrial businesses of upwards of 20,000 square feet that need to make a change. We will offer our service of recommending different

ways to cut down their power bill to save them money and to help the environment. We will offer our services to residents in the local area as well. There are 2.35 million residents as of 2015 in the Portland Metro Area according to oregonmetro.gov.xiv

Geography

Our company doesn't have a physical limit on how far we can go, but in the near term we will keep it in the Portland Area due to the City's Climate Action Plan. Also, since we don't handle our own product and don't do installations we must put our trust in local distributors and installers. If we should go out of the area, we would have to find new distributors and installers with whom we have no prior relationship or rapport.

2. Competitor SWOT Analyses:

Imagine Energy, LLC^{xv} 2409 N Kerby Ave Portland, OR 97227

Strength: Imagine Energy has a bias when installing solar panels and HVACS because they will only install their own product. We won't manage any products and will recommend the most costefficient company.

Opportunities: Some people prefer not to deal with larger companies like Imagine Energy and could potentially come to us.

Weakness: Imagine Energy has a much larger size and market-share. For EAE it is a true David versus Goliath scenario.

Threats: A massive threat is that we don't have a foothold in the market yet and our lack of experience could drive customers away.

Karl Friesen and Associates, LLC (KFAA)xvi

1822 SW Madison Street Suite 222 Portland, OR 97205

Strength: This company is built around Karl Friesen, which can be deemed unattractive to certain customers.

Opportunities: Karl Friesen and Associates' office is in Goose Hollow, which is just outside of downtown Portland, which could be difficult to find.

Weakness: His company is similar to ours in size, creating competition for our small company look.

Threat: Karl Friesen's firm has more experience than we do, so when in direct competition for a client, they might prefer his company.

3. Promotional Plan:

Promotion by referral is the preferred method at EAE; however, promotion through Social media outlets, websites, trade shows, and direct mail will be crucial. Our website will be our home base. All traffic and information will be directed towards the website via links in social media outlets, flyers/brochures, but due to a tight budget, Google AdWords and SEO'sxvii which can cost an average of \$2,000 per month as well as trade shows, which can cost anywhere between \$3,000 and \$4,000 for a small-scale exhibitxviii at an event will be a future method of promotion as well as a future expense.

Through Wordpress.com, we can build a free professional looking website with easy to use templates that look great across any size screen. Godaddy.com will host our site for \$4.99 per month. This will include unlimited websites, unlimited storage, unlimited bandwidth, email and a domain name. We will use our website to publish white papers

written by our agents and to provide additional information to our customers about our company and our industry.

These and other low cost advertising tools such as an effective Social media presence, word-of-mouth and cold-calling will be utilized and managed by our team within our first year of business. Logo design and printing of brochures and letterhead will be used as follows: 100 8.5 x 11 Tri Fold Brochures Printed on 100lb gloss paper featuring our company statement, expertise, technologies and contact information will be mailed, delivered and handed out at future conventions and Trade Shows to all prospective clients.xix

At EAE, we pride ourselves on professionalism. Our appearance and our work ethics will reflect that pride. Nevertheless, to keep costs at a minimum, all professionals at EAE have Home Offices instead of a central office location. All meetings, consultations and or demonstrations will be held at the client's place of business.

EAE is striving for a referral based business, to facilitate this, we plan to pay incentives to clients or friends in the form of gifts or cash payouts of \$100 to all who refer us to committed new business partners.

*Please refer to Appendix A for the Promotional Budget spreadsheet

4. Monthly Sales Forecast (with Revenue):

Based on the hourly rate of \$140 per hour (unit), an average of 23 units billed per consultant and maintaining 3 clients per week, our monthly revenue would be \$90,160.

Monthly Sales Forecast				
Charge per Unit	\$140.00			
Weekly Units per Consultant	23			
Monthly Units per Consultant	92			
Total Monthly Units (x7)	644			
Revenue (charge per unit x total monthly units)	\$90,160.00			

5. Pricing Structures and Strategy

Through research, we found that consultants can choose to charge for services in a variety of ways; an hourly method; a fixed rate method, and a daily rate. **About 73% of consultants preferred billing customers at an hourly rate. Quoting a fixed price was second at 19% according to a survey conducted by IEEE-USA**i. On average, 14% of consultants also admitted to having trouble getting paid for work performed under contract. Consultants also billed an average of 23 hours which is considerably less than the typical 40-hour work week.***ii

During the same survey, the median hourly rate for a consultant was determined to be \$125 per hour and varying depending on experience and education and region. The Pacific region showed a higher median of about \$140 per hour. Based on the hourly rate of \$140 per hour, an average of 23 hours billed per consultant and maintaining 3 clients per week, our monthly income would be

 $$140 \times 92 \text{ hr } \times 7 \text{ consultants} = $90,160 \text{ monthly}.$

Operational Plan

Service Techniques and Cost

Our services are offered with thermal imaging, electrical diagnostic and other field equipment as well as analytic and modeling software. Operationally we will also utilize conventional office equipment such as cell phones, computers, fax machines, and printers.



Quality Control

by employing highly trained and certified Engineers and Business professionals we guarantee quality service based on a thorough knowledge and understanding of home and commercial energy systems and how to reduce cost in a way that is most beneficial to the customer and to the environment. Each employee will stay actively involved in researching their areas of expertise in order to stay up to date. It is our goal to look out for the best interests of our clients, that is the basis of our customer service.

1. Location

Due to the nature of our business our agents will primarily work out of their homes to save on startup costs. As the company grows we will investigate renting out a larger office space and hiring a secretary as is necessary.

2. Legal Environment



Because we intend to join the Energy Trust network, a nonprofit reporting directly to the Oregon Public Utility Commission, we will meet the requirements of membership which will meet or exceed state and city regulated minimums:

• Licensing and bonding requirements – The State of Oregon requires^{xxiii} a prelicense training (\$129), testing (\$60) and license registration (\$325). An additional Energy Efficiency and Sustainable Technology Contractor Certification is required (\$50 yearly).^{xxiv}

- Additionally, Licensed CCB contractors are required to hold a \$30,000 bond on public works projects of \$100,000 or more and it must be filed before work on the project starts. This is in addition to the CCB License bond and may be purchased through our insurance agent.
- Permits In addition to Oregon CCB licensing requirements, Electrical, Mechanical and Plumbing permits are offered through the State of Oregon via Permits Online.xxv These permits are determined on a per job basis based on size and cost of the project.
- Health, workplace, or environmental regulations Our employees will each be trained to follow OSHA^{xxvi} construction site regulations and will review best practices before the start of each project.
- Zoning or building code requirements EAE will comply with all building code requirements as outlined in the State of Oregon codebooks.xxvii
- Insurance coverage we are required to purchase an occurrence based
 Commercial General Liability insurance policy with a minimum limit of \$1,000,000
 per bodily injury and property damage occurrence with an aggregate limit of at
 least \$1,000,000 with Energy Trust listed as an additional insured. Worker's
 compensation insurance may also be required.xxviii A certificate of insurance must
 be kept to show that we are meeting these minimum requirements.
- En Avant Energy will be trademarked through the Oregon Secretary of State
 Office with a processing fee of \$50.xxix

3. Personnel

Only seven employees will work directly for En Avant Energy Solutions. However, outside contractors will be used for jobs that include additional needs. Although we do not currently plan to add any employees to our company, we must consider that one day we may need to replace or advance the position of our existing employees. To find highly skilled employees, will be direct hiring through recruiting, and networking.

Approximate Taxes for an employee paycheck employed in Oregon for a \$60,000 annual paycheck.

Payroll Calculation:

Date paid: 11/21/16 Filing status: Single - 1 Pay period: Monthly

Year: 2016

Gross	5,000.00
FICA	310.00
Medicare	72.50
Federal withholding	766.00
Oregon withholding	349.00
Workers compensation	2.64
Net pay	3,499.86

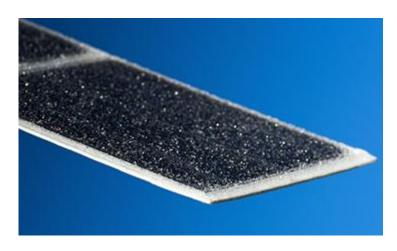
Responsibilities- Each employee will act as an individual agent as well as on a team.

An agent who secures a job will have first choice of being project manager. The contract may be passed on to another member of the firm should they be willing to take on the responsibility for the job. Also, each member of the team will work with the project managers, and the functional manager/CEO to coordinate jobs. This allows the Matrix structure to overlap each member/department with one another.

*Please refer to Appendix B for our PERT Diagram

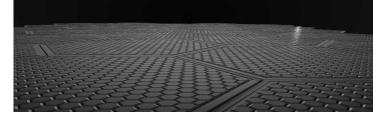
4. Key Supplier and Backup Supplier for Product Marketing

Although EAE does not manufacture the products that we source to our customers, we actively engage and build partnerships with the companies that do so that we can help our customers get the best deals possible for their needs. We are also interested in bringing



promising new green technologies to market in Portland. For example:

- The Colas Group in Boulogne, France
- Has produced the Wattway solar paneled road bricks (pictured above).
- Colas has been in the industry of mining and transportation since the 1920's and is well regarded worldwide.
- The only known alternative supplier available at this time for this specific type of product, is in development in Idaho called Solar Roadways^{xxx} (left) which is currently funded by the USDOT to



- test their products in certain locations. We have also reached out to the Idaho firm to extend marketing opportunities in Portland when the product is ready.
- With international shipping of limited items, it will be inevitable at times that these
 items are in short supply. Our initial market for this product will be high end
 residences until the supply improves. In the long term, we will attempt to pair
 Wattway with a local solar installation company to act as a local supplier rather
 than relying solely on just-in-time shipments.

Management Plan

- 1. Human Resources –For an LLC with less than 50 employees we are not required to provide health insurance. However, we do have insurance needs: General business liability insurance also known as Commercial general liability insurance (CGL) is the most basic form of business liability insurance. Employment practices liability insurance (EPLI) is another form of liability insurance for your business that is becoming more important as technology changes. EPLI provides protection from claims and lawsuits brought against a business, its officers or directors, or its employees and managers for discrimination, wrongful termination, sexual harassment, and other employment-related allegations.xxxi
- 2. In 2015, the average premium for single coverage was \$521 per month, or \$6,251 per year. The average premium for family coverage was \$1,462 per month or \$17,545 per year. xxxii

These amounts are generally split by the employer and employee. On average, employers pay:

- \$5,179 annually (83 percent of the premium) to cover a single employee
- \$12,591 annually (72 percent of the premium) to cover a family
- \$36,253-\$151,092 range depending on family sizes. Currently all employees are on the single plan bringing the average costs to approximately \$36,253.
- The remaining amount is covered by employees, typically through a payroll deduction.

Organizational Structure and Chart

Our business will be a modified version of a Matrix Structure. With how small our company will be and with us being equal partners we must function with our CEO operating as a functional manager.

*Please refer to Appendix C for our Organizational Chart

Each founding agent is an Equal Partner: with our procedures for promoting or hiring new management written into the bylaws: Either unanimous agreement to hire a new CEO or a vote in process to agree upon a new CEO and Hire a replacement for the lost position. With a small business, our CEO will act as a Functional Manager running day to day operations until we can produce revenue to hire a new functional manager as needed.

The Operations, or Functional Manager needs to display strong leadership and customer relationship management skills as well as a full working knowledge and

competency with the systems used by each of the agents as he may be called to take part in some of the projects.

In this way, we will have many different crossing points in which we can develop teams for different Assignments that are landed. Each Member of our team will act as an Agent trying to land contracts. Any agent to land a contract will also serve as the Project Lead Manager for the Job from start to end, and work with the Functional Manager/CEO to co-ordinate the needs for the project. Should the agent already have a full workload or is otherwise unprepared to manage the project, then the Functional Manager will reassign the project to another agent.

Financial Plan

*Please refer to Appendices D - H for Financial Plan Spreadsheets

Feasibility

The initial startup will cost \$82,491 including the startup and first month's expenses. This will cover expenses for wages, equipment, office supplies, and transportation among other things. There are seven founders who will each invest \$10,000 to cover initial costs as well as the monthly cost covered for the first month of operation. If need be we may also take out a small business loan. Our sales projections place our breakeven point in our third week of operation. We anticipate becoming profitable in our 4th week of operation.

Our target customer base will primarily be commercial businesses in the Portland Metro area. With the city's Climate Action Plan, Portland businesses are required to make efficient changes to cut back on carbon emissions. The state would like Portland to have an 80% cut back on carbon emissions by 2050. We plan on capitalizing on this by targeting commercial and industrial businesses, upwards of 20,000 square feet. We will offer our consulting services to help them save money and meet or exceed government regulatory standards. There is an estimated 1,000 commercial buildings currently affected by the Climate Action Plan, with an additional 4,000 which will have to abide by the new regulation in future years.

We currently have a high-expected growth rate in the industry and with a growing demand for companies to become more energy efficient we are certain that our sales

projections are reasonable. Our yearly projections for maintaining at least three clients weekly will generate \$1,081,920 in revenue and profit of about \$414,033.

Initial Costs

The initial costs for En Avant Energy Solutions will be \$26,834. \$24,500 for office supplies and field equipment, \$1,150 to join the Portland Business Alliance, \$1,184 for startup advertising and \$615 to pay for legal fees.

Monthly Cost

The projected monthly costs to keep the business running total at \$55,657. These expenses will cover wages, utilities, advertising, transportation, payroll taxes and variable costs. The fixed cost of \$53,257 is crucial for Innovative Energy Solutions because it pays our employees and keeps the business operating by covering utilities. The variable costs are considerably less because they only cover transportation, petty cash, and the thermal kits that will be used in the field. The total variable cost per month is \$2,400. This brings up to a total monthly cost of \$55,657.

Sales Projections

En Avant Energy Solutions will initially focus on clients in Portland. The majority of our clients will be commercial businesses. We will also provide residential services and small consultation projects. We will charge a base rate of \$140/hr plus immediate expenses. Assuming we can maintain 3 clients per week with an average of 23 hours per consultant per week, we can anticipate revenue of \$90,160 a month. With our monthly expenses at about \$55,657 and our initial start-up of about \$26,834 we will break-even at the fourth week of the first month. We expect to become profitable in our third week of each month after that, provided that we maintain 3 clients per week.

Strategic Plan

We will offer our clientele an assessment of their energy consumption patterns to help them to implement effective solutions based on government regulations, incentives and the customer's own goals. Our firm will be promoted through a sustained advertising campaign as well as work on our agents' part to participate in public discussions, blog posts (white paper publications), and city planning sessions, especially when energy is part of the discussion. We have a focused message: Don't buy into "Greenwashed" products and methods**xxiii. Find the solutions which the data has proven to make a

difference! Each employee is expected to bring value to the company by continuously pursuing knowledge in their field and actively pursuing a positive relationship with the city and the local communities both to improve our image and grow our customer base. This value added will result in growth as residents and firms see how committed we are not just to making a profit but making a better world for our community. As we grow, we may expand our existing office to cover new locations in Salem and Eugene. With further growth, we will cross state boundaries and become a national company. Our long-term goals are:

- In one year to increase our market share and make sure that everyone who is paying attention has heard our message about buying true sustainability, and not "Green Washing" their homes or businesses with falsely advertised products.
- In five years to have grown substantially enough to be able to open offices in other Oregon cities and even in Washington, California and Idaho.
- In ten years to grow beyond national borders and to begin to work in developing countries to provide sustainable energy solutions in places like China and India where pollution remain still as ever growing concerns.

Facility Layout

We will be working either at job sites or out of home offices, no facility layout is needed.

Sources

- ix U.S. Energy Information Administration, www.eia.gov/ Accessed 30 Oct. 2016
- x "Renewables share of North America electricity mix expected to rise" *U.S. Energy Information Administration*, http://www.eia.gov/todayinenergy/detail.php?id=27332 Accessed 28 Nov. 2016
- xi "Use Portfolio Manager" *ENERGY STAR*, <u>www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager?s=mega</u> Accessed 30 Oct. 2016
- xii Wattway by Colas, www.wattwaybycolas.com/en/ Accessed 30 Oct. 2016
- ^{xiii} "France Economic Outlook" *Focus Economics*, 25 Oct 2016, <u>//www.focus-economics.com/countries/france</u> Accessed 30 Oct. 2016

J. Tuenge, USDOE Consultant, personal communication, 15 Nov. 2016

^a A. Wilkerson, USDOE Lighting Specialist, personal communication, 15 Nov. 2016

iii LEED, www.leed.usgbc.org/ Accessed 30 Oct. 2016

iv "Energy Reporting How-To-Guide" *City of Portland* Jan 2016, www.portlandoregon.gov/bps/article/560330 Accessed 30 Oct. 2016

[&]quot;Climate Action Plan" City of Portland, Jun. 2015, www.portlandoregon.gov/bps/article/531984
Accessed 2 Nov. 2016

vi U.S. Small Business Administration, <u>www.sba.gov/loans-grants/see-what-sba-offers/sba-loan-programs</u> Accessed 31 Oct. 2016

vii Energy Trust of Oregon, www.energytrust.org/ Accessed 30 Oct. 2016

viii "LLC Advantages and Disadvantages: Overview" *LegalZoom.com*, https://www.legalzoom.com/knowledge/llc/topic/advantages-and-disadvantages-overview Accessed 31 Oct. 2016

xiv "Portland region nears 2.4 million residents, growing by 41,000 last year" *OregonMetro.gov*, http://www.oregonmetro.gov/news/portland-region-nears-24-million-residents-growing-41000-last-year Accessed 21 Nov. 2016

xv Imagine Energy, http://www.imagineenergy.net/ Accessed 21 Nov. 2016

xvi KFAA Engineering, http://www.karlfriesen.com/ Accessed 21 Nov. 2016

xvii "SEO Pricing in 2016" Webpage FX, http://www.webpagefx.com/SEO-Pricing.html Accessed 22 Nov. 2016

xviii "Costs of a Trade Show" *E&E Exhibit Solutions*, http://www.exhibitsusa.com/average-costs-to-display-attend-trade-shows, Accessed 26 Nov. 2016

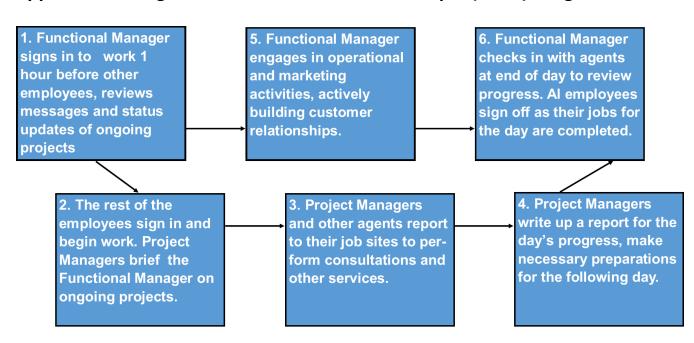
- xix Next day flyers, http://www.nextdayflyers.com/brochure-printing/8.5x11-brochures.php, Accessed 26 Nov. 2016
- xx "Setting Consultant Fee Rates" *Consultant Journal*, www.consultantjournal.com/blog/setting-consulting-fee-rates Accessed 30 Oct. 2016
- xxi "IEEE-USA Consultants Fee Survey Reports" *IEEE USA* 2015, www.ieeeusa.org/business/documents/IEEEUSAConsultantsFeeSurveyReport2015.pdf Accessed 31 Oct. 2016
- xxii "Consulting Fees" Fortune, 8 May 2014, www.fortune.com/tag/consulting-fees/ Accessed 30 Oct. 2016
- xxiii "Energy related certifications" *Oregon.gov,* http://www.oregon.gov/CCB/licensing/Pages/e-east.aspx Accessed 19 Nov. 2016
- **** "Application for Business Energy Efficiency and Sustainable Technology Contractor Certification" *Oregon.gov*,
- http://www.oregon.gov/CCB/Documents/pdf/energyefficiencyapplication.pdf Accessed 19 Nov. 2016
- *** "BDS Permits Online" *The City of Portland Oregon*, https://www.portlandoregon.gov/bds/42781 Accessed 19 Nov. 2016
- xxvi Oregon OSHA http://osha.oregon.gov/Pages/index.aspx Accessed 19 Nov. 2016
- xxvii "Oregon Codebooks Online" *Oregon.gov*, http://www.oregon.gov/bcd/codes-stand/Pages/adopted-codes.aspx Accessed 19 Nov. 2016
- xxviii "Energy Trust Trade Ally Contractor Help" *Energy Trust of Oregon*, http://energytrust.org/trade-ally/help/ Accessed 19 Nov. 2016
- xxix "Oregon Business registry Forms: Trademark Application" *Oregon Secretary of State*, http://sos.oregon.gov/business/Documents/business-registry-forms/trademark-appl.pdf Accessed 19 Nov. 2016
- xxx Solar Roadways http://www.solarroadways.com/ Accessed 31 Oct. 2016
- xxxi "3 Reasons Businesses Fail and How to Protect Yourself with Liability Insurance" Trusted Choice Independent Insurance Agents, https://www.trustedchoice.com/business-insurance/liability/ Accessed 26 Nov. 2016
- xxxii "Small Business Employee Benefits and HR Blog" Zane Benefits, https://www.zanebenefits.com/blog/faq-how-much-does-it-cost-to-provide-health-insurance-to-employees Accessed 26 Nov. 2016

Appendices

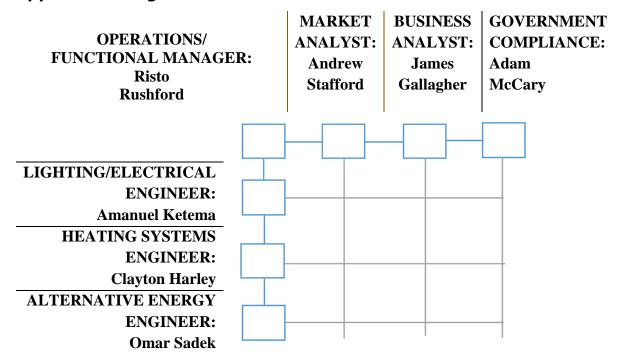
Appendix A: Promotional Plan Budget

Media	Cost	Frequency	Total 2017	Total 2018
Web Hosting	\$4.99	Monthly	\$59.88	\$59.88
Google AdWords	\$2,500	Monthly	0	\$30,000
Trade Shows estimate	\$18,500	Annually	0	\$18,500
Brochures	\$134.00	Quarterly	\$536.00	\$536.00
Referral Gifts	\$100	Bi-Weekly	\$2,400	\$2,400
SEO	\$600	Monthly	0	\$7,200
Total			\$2,995.88	\$58,695.88

Appendix B: Program Evaluation Review Technique (PERT) Diagram



Appendix C: Organizational Chart



Appendix D: Initial Cost Projection

Туре	Item	Qty	Un	it Price (\$)	To	tal Price (\$)
Initial Promotional Materials						
	Web Hosting	1	\$	4.99	\$	4.99
	Brochures	1	\$	178.67	\$	178.67
	Referral Gifts	10	\$	100.00	\$	1,000.00
	Total				\$	1,183.66
Equipment						
	Computers	7	\$	1,000.00	\$	7,000.00
	Thermal Imagers	7	\$	1,000.00	\$	7,000.00
	Electrical Modeling Software	7	\$	400.00	\$	2,800.00
	Company Cell Phone	7	\$	600.00	\$	4,200.00
	Office Supply Vouchers	7	\$	500.00	\$	3,500.00
	Total				\$	24,500.00
Miscellaneous Expenses						
	Licenses and other legal fees				\$	615.00
	PBA Membership	1			\$	1,150.00
	Total				\$	1,150.00
Total Opening Cost					\$	26,833.66

Appendix E: Monthly Cost Projection

Fixed/Variable	Expense	Item	Total Cost (\$)
		Alternative Energy Engineer	\$ 7,000.00
		Electrical Engineer	\$ 7,000.00
	Wages	Heating Systems Engineer	\$ 7,000.00
Fixed Costs		Market Analyst	\$ 5,107.00
		Business Analyst	\$ 4,463.00
		Government Compliance	\$ 7,000.00
		Functional Manager	\$ 6,000.00
	Employee Insurance		\$ 3,021.08
	Payroll Taxes	(FICA) 15.3%	\$ 6,666.21
	Advertising	\$ 1,150	
Total Fixed Cost			\$ 53,257.29
Variable Costs	Transportation		\$ 1,400.00
	Contingency	Petty Cash \$ 1,000.	
Total Variable Cost		\$ 2,400.0	
Total Monthly Cost			\$ 55,657.29

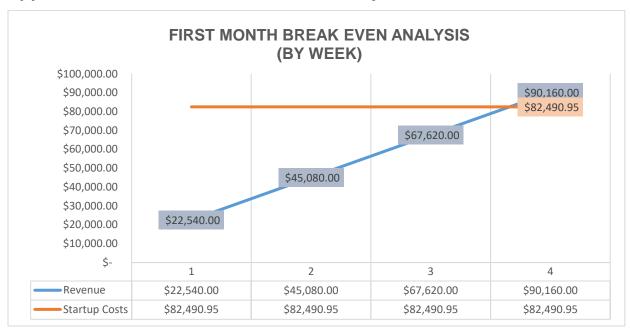
Appendix F: 12 Month Sales Projection

Month	January	February	March	May	June
Charge per Hour	\$140.00	\$140.00	\$140.00	\$140.00	\$140.00
Average Man Hours	644	644	644	644	644
Gross Revenue	\$90,160.00	\$90,160.00	\$90,160.00	\$90,160.00	\$90,160.00
Fixed Costs	\$53,257.29	\$53,257.29	\$53,257.29	\$53,257.29	\$53,257.29
Variable Costs	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00
Gross Profits	\$34,502.71	\$34,502.71	\$34,502.71	\$34,502.71	\$34,502.71

Month	July	August	September	November	December
Charge per Hour	\$140.00	\$140.00	\$140.00	\$140.00	\$140.00
Average Man Hours	644	644	644	644	644
Gross Revenue	\$90,160.00	\$90,160.00	\$90,160.00	\$90,160.00	\$90,160.00
Fixed Costs	\$53,257.29	\$53,257.29	\$53,257.29	\$53,257.29	\$53,257.29
Variable Costs	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00
Gross Profits	\$34,502.71	\$34,502.71	\$34,502.71	\$34,502.71	\$34,502.71

Year End Totals				
Total Man Hours Worked	7728			
Total Gross Revenue	\$1,081,920.00			
Total Costs	\$667,887.48			
Total Gross Profits	\$414,032.52			





Appendix H: Monthly Break Even Analysis

