A WORK PROJECT, PRESENTED AS PART OF THE REQUIREMENTS FOR THE AWARD OF A MASTERS DEGREE IN MANAGEMENT FROM THE FACULDADE DE ECONOMIA DA UNIVERSIDADE NOVA DE LISBOA

OmniFlow, Lda

FIELD LAB ENTREPENEURIAL INNOVATIVE VENTURES

Daniel Marques Afonso

432

A project carried out on the Field Lab in Strategy, with the supervision of:

Prof. Filipe Pamplona de Castro Soeiro

June 2010

Contents

Executive Summary

OmniFlow, Lda is a start up that will enter the Portuguese renewable energy market through the development, construction and implementation of the OmniFlow solutions which generate energy using the wind and/or co-generation processes. This innovative solution (already held the patent application), an electric energy generation device from an inert structure that direct the wind from any direction (omni directional) and speeds up towards a smaller high efficiency turbine, which has been proven in scale tests with the use of prototyping, more efficient than the average wind and solar solutions in the market. The advantages in the market for renewable energy from both microgeneration and major facilities are promising. The device is also capable of working in co-generation as it reuses flow streams resulting of air conditioned and forced air. This innovative device promises to change the renewable energy market due to its higher levels of energy production, lower construction costs, lower environmental/aesthetic impact and its lack of noise. OmniFlow's mission is to provide innovative and quality wind power solutions of low impact to benefit the environment and its clients.

This market is affected by different key drivers, related to political, environmental, legal, economical and technological issues. Concerning the political and legal aspects, this type of technology has been object of prioritization of the Government, being the actual legislation concerning the renewable sector promoting advantages to start businesses, rewarding the "green" producers with a 5 time payment of their energy contrasting with the normal energy paid to EDP. Both "Renováveis na Hora"[1] and Decreto-Lei nº 363/2007[2] are ways that the government found to promote renewable energies and simplify the process of licensing (via internet), enabling the selling of all the renewable energy production to EDP at a very attractive tariff.

Portugal is seen as an attractive market to invest in what concerns the renewable energy sector, due to its diversified range of available "green" energy sources (waves, wind, sun and biomass). Wind energy is currently in rapid growth, according to a forecast of the European Wind Energy Association (EWEA), wind energy will generate in 2020, from 14% to 18% of the electricity supply to households in the European Union[3]. In a market with expected growth of 12% a year, Portugal has exceeded all expectations with regard to wind energy.

[1] www.renovaveisnahora.pt
[2] http://dre.pt/pdf1sdip/2007/11/21100/0797807984.PDF
[3] http://www.ewea.org/

This device will compete with other micro-generation renewable energy devices such as vertical and horizontal axis wind energy generators and solar panels. This segment is part of the renewable energy sector, one in global expansion, OmniFlow will operate initially in the field of microgeneration trying to be a top 5 company in Portugal by 2017, proceeding in the long term to a major power premises application, where it aims to grow at an international level based on establishing partnerships with companies already recognized in the market.

OmniFlows cost structure is heavy due to the raw materials that are needed to build the solutions, in terms of total costs in the 1st year is 5.042.303, being 4.108.802 from raw materials. To face the initial costs a bank loan of 900.000 will be made, covering the needs of the first months.

In terms of revenues Omniflow estimates to have in the 1st year, 6.180.654 and in the following 4 years 9.067.813 (expected growth of almost 50%), 13.032.532, 14.336.592, and 16.011.190 respectively.

Concerning the economic results OmniFlow presents a Net Present Value of 10.493.667 € and a payback period of less than a year, with a capital opportunity cost rate of 11%.

Finally some steps will be taken before start producing. First the R&D concerning the technology will face its last stages, trying to optimize the solution before entering the market, until end of 2011. In the same year Omniflow will hire qualified personnel to join the company. After these steps being taken the product will be ready to enter the market and the production will start in 2012.

This Business Plan will support the design and launch of this business opportunity and will consider the following structure. Firstly a brief introduction of the company followed by the value preposition and the market assessment, how it is influenced by outside and inside forces. Than we will see how OmniFlow intends to use its strenghts, to come up with a strategy to deliver value and profit by that. Finally after analysing the financials we will access the risks inherant to this business and ofeer some possible solutions to overcome those problems.

Introduction

This business plan is about OmniFlow, Lda that is a Start Up, which will primarily aim to assert itself in the renewable energy market through the development and implementation of solutions to generate energy using the wind and Co-generation. From a concept idea, patented (already held the patent application for national), by Pedro Ruão Cunha this company was already created. Its innovative solution, based in shape design and specific positioning of the internal turbine, represents a huge advantage, enabling it to produce more electric energy in less time and lowering the

environmental and aesthetical impact, which results into a competitive advantage regarding the competition. The motivation for the project comes from the recognition of a need for innovation in the renewable energy market since in the urban / micro-generation, the conventional wind generators and photo voltaic panels have an efficiency and income below the desirable level. With advantages over the competition at both the micro-generation and when applicable to large installations. OmniFlow,Lda forecasts a positive growth nationally in the years to come, since it will offer competitive solutions in a market that is growing. The company will focus only in this segment first, to settle its business and get know-how, to after go international and expand for the large power installations. Betting in the first year of production and distribution, recurring to strategic partnerships, that will focus in capturing brand awareness to consequently improve its sales in the micro-generation sector. To achieve this, a strong marketing strategy will be made taking advantage of the growing interest in renewable energy, and the promise of offering innovative solutions with a competitive price/quality relation. OmniFlow wants to be a source of innovative solutions, and cost control to obtain energy "environment friendly" and based on that, to deliver those benefits to the market stakeholders.

Business Description

Historic

The idea of the OmniFlow solution appeared when Pedro Ruão Cunha licensed in Metalurgic and Materials Engineer by FEUP in 2005 entered the EDP Richard Branson competition (2009) [4]which awards innovative energy projects in the so-called cleaned technologies. Finishing in the top three gave him the boost to keep developing this promising solution.

Pedro started his company called OmniFlow, Lda which will develop, produce and sell the OmniFlow solution. After founding its company Pedro has signed for some funds of the European Union for the developing of promising technologies and it is in the last round for being chosen.

Until now he is the only person in the company, however after the developing of the business plan and the consequently grow of the business more people will be hired to the team to increase added value provided by its specific skills.

[4]http://www.edp.pt/pt/sustentabilidade/ied/premioinovacaorichardbranson/Pages/premioEDPInovacaoRichardBranson.aspx

Value of Proposition

OmniFlow, Lda is a Start Up that is developing and preparing to launch the OmniFlow, an innovative patentable solution that generates electrical energy through the wind, in the Portuguese renewable energy sector. Its solution, based in shape design and specific positioning of the internal turbine enables it to capture the wind coming from any direction accelerating than the wind through its lateral entries (tunnel effect) and then conducing them to multiple turbines strategic positioned inside the structure. This represents a huge advantage, enabling it to produce more electric energy in less time and lowering the environmental and aesthetical impact, which results into a competitive advantage regarding the competition. This will complement the market of renewable energy sector, more specifically the gap that there were in the wind solutions at urban centres.

People are starting more and more to bet in green energies. Not only to help the environment, but because this devices that produce "green energy" can be used as a source of revenues for people (all stakeholders, in general). The state supports this system giving a lot of benefits to people who sell this kind of electric energy. By observing this market trend OmniFlow, Lda decided to create a device that takes into account all the aspects that concern people nowadays when facing the choice of buying this kind of solutions. It created a device that has a return time of initial investment much shorter then the others, by producing more electric energy in less time and having small environmental/aesthetical impact. All of this was carefully studied, by running computer simulations and by building a prototype in the roof top of a building where due to the performance observed confirms these statements.

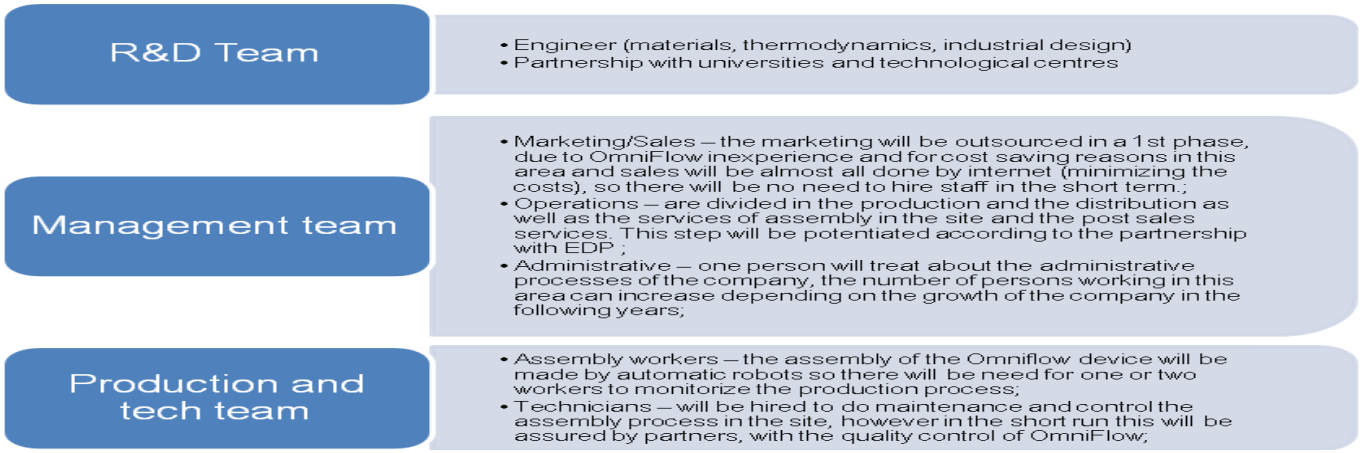
Omniflow is proposing to develop its business into a B2B (Business to Business) basis, although ultimately, OmniFlow will be focused in the B2C (Business to Consumer) segment being based on the business model described bellow. The B2C model approach will be possible thanks to the implementation of a partnership with EDP and a distributors network, which will carry on the distributions and logistics activities until the last mile, delivering the service to the consumer.

Business Model

The Business Model that is being designed is based in the environmental context and in the competitive advantages of the firm. The value proposition, in which the business model is supported, is based in an innovative solution that generates electrical energy through the wind at competitive market standards because of the higher levels of energy produced, the lower construction costs involved; and the lower environmental/aesthetic impacts. Moreover, there are

relevant pillars for the business model development, namely, talented people, partnerships, value chain activities and target markets. I will explore those features according to the following:

Talented People:



Partnerships:

- Universities (R&D) (Ex: Instituto Superior Técnico, FEUP, Universidade do Minho, Universidade de Aveiro)

- Energy companies both national and international (Ex: EDP in Portugal or EDF in UK)

- Scientific institutions (Ex: European Union Scientific Committee)

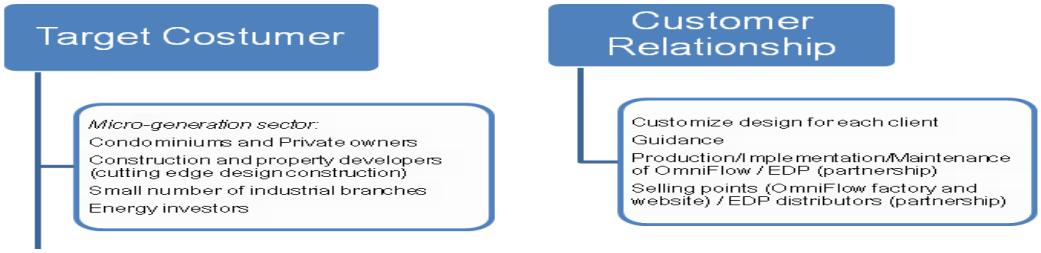
- Venture Capitals

- Business Angels (APBA – Associação Portuguesa de Business Angels)

Value Proposition:

OmniFlow is a solution that generates electrical energy through the wind. Its innovative shape and specific positioning of the internal turbine, should present an enormous revolution in this industry standards. It is expected a high acceptance by the consumer for this kind of technology that will be able to transform a no use roof top into a profit "environment friendly" power plant. This innovative device promises to change the renewable energy market due to its higher levels of energy production, lower construction costs, lower environmental/aesthetic impact and its lack of noise. With the positive growing interest in micro-generation and the support of the governement with programs helping this industry an innovative solution with a good price/quality relation will be able to captivate a large market share.

Business and Market Oriented:



Mission: OmniFlow, Lda provides technological innovative and high quality wind power systems of low environmental impact, aiming to achieve progress through the linkage of ecological and economic interests in order to benefit the environment and clients.

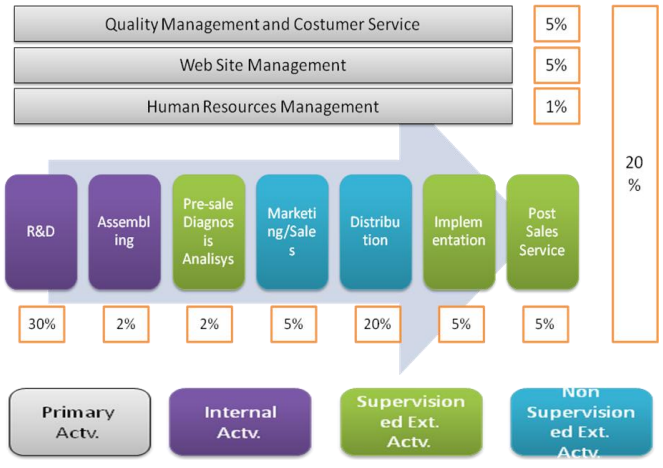
Vision: To develop the OmniFlow device and implementing it in the renewable energy market end of next year, with the objective of being one of the top companies in the micro-generation sector in the following five years, in Portugal.

Mantra: "Creating greener energy"

Strategic Objectives:

R&D	Operations/Distribution	Commercial	International Market
• Conclude and finish the technology's patent process by 2011 • Negotiate and close Technological partnerships with universities to ensure R&D activities until 2012 • Hire qualified staff reinforcing the engineering team in 2011	• Develop partnerships in areas such as operations and distribution (Ex: Consulting/EDP/Logistics)	• Enter the Portuguese renewable energy market in 2012 • Obtaining a competitive position in the market in 2014 • Achieve a market share of 20% by 2018	• Select international partners by 2017 • Internationalize for UK and Spain in 2017 • Be one of the top 5 European companies in micro-generation until 2022 • Be European market leader by 2025

Value Chain:



OmniFlow's value chain is composed by seven primary activities that are supported by three secondary activities. Two of these seven primary activities are internal and the other five are external.

- R&D is our core activity, it is here where OmniFlow will spend more money and the one that provides the main competitive advantage – the innovative energy generator and, ultimately, the specific know how. This activity is essential to OmniFlow in the development and upgrades of

better solutions for the renewable energy market enabling them to distinguish from the competitors. Some partnerships with universities and institutes will be made, so a small part of the R&D will be outsourced.

- Assembly is the construction of the equipment units by production robots. As we stated, there will be initially one robot operating what makes the manual labor to be almost none here. Both the first activities as well as this one are the core activities of the company being the two of them internal activities.

- Pre-Sale Diagnosis is an important area as well, consisting in going to the place where the clients want to install OmniFlow and we evaluate the viabilty of the solution in that place. Because the costs associated with dislocations are quite high and we are in the beginning of our business we decided to outsource this activity to a partner that has a good network through the country and can easily access the possible costumers.

- Marketing/Sales will be outsourced, because it's a cost that we don't need to have as an essential activity. The marketing area will have the objective to create an effective campaign around OmniFlow transmitting their core values and advantages to the clients. It is important that the marketing strategy is effective because it will be crucial to gain awareness that is almost none due to OmniFlow being a start-up.

- Distribution will be outsourced due to the extension of the country and the high investment that would be needed to acquire a fleet of trucks/cars. This specific activity has the function of delivering our products to the clients. A partnership with a company already in the market that knows the distribution channels specially in this specific market, and that has already some costumers associated to them that we can possible reach trough this new partner is preferable.

- Implementation will be made by certificated electricians or a company (ex: EDP), due to the easy assembly process, only to put the different blocks of the device together and then doing a normal electricity installation. Again the option of doing a partnership is the most wanted to assure the reliability and the quality of the job.

- Post Sales Services will be made by a company that will be chosen by us. This activity will serve to do some upgrades in the device or to correct any malfunction that happens through time. This area is very important in the optic of the costumer because it will be here that OmniFlow will differentiate from its competitors.

In the Pre-Sale Diagnosis, Implementation and Post-Sales Services OmniFlow through its area of Quality Management and Costumer Service will give coaching to the partners or companies hired, to assure the quality of service and consequently the costumer is satisfied.

Business Environment

Portugal is seen as an attractive market to invest in what concerns the renewable energy sector, due to its diversified range of available "green" energy sources (waves, wind, sun and biomass). Adding to this Portugal faces huge energy dependence from the exterior, due to its lack of non-renewable energy resources (gas deposits, oil wells and coal mines). Only the government has an annual energy consumption that reaches the 7 billion Euros[5]. Portugal needs to diversify its sources of energy urgently, in order to smooth the money spent in energy to the exterior as we have seen before. Because of this people in Portugal are being encouraged to invest in this kind of energy. The government has been having a crucial role in the increasing number of people producing "green" energy, by paying more for this kind of energy and easing the process of becoming producers of energy. Portuguese government has been supporting both the micro-generation and the massive production sector of renewable energy, not only because of the dependence on external energy but as well to respect some directives that come from worldwide environmental protocols, being the most important one the Kyoto Protocol that regulates the emissions thrown to the air and that causes the greenhouse effect.

Following this brief introduction to the business environment and in order to get a more precise look to the market, a market analysis, a PESTEL and a market dimension were performed.

Market Analysis

Renewable Energy Market in Portugal

In these last years, the national renewable energy sector has been having considerable levels of growth, being estimated that this levels maintain in the following years. Based in a co-study of APREN and Delloite[6] it is stated that in 2008, the national renewable energy sectors represented 51% of the total electric installed capacity, having an average annual growth of 10%. This growth was mainly caused by the growth of the wind energy's capacity installed in Portugal by 708 MW (due to construction of wind parks) and because the growth of the solar photovoltaic energy by 44 MW (construction of many solar photovoltaic centrals).

In 2008, Portugal was among the EU countries whose renewable energy weight in the total of electricity consumed was higher, corresponding in 38% of the national electric energy consumption. Nowadays the national installed

[5] Appendix 1

[6] http://www.apren.pt/fotos/noticias/apren_impacto_energias_renovaveis_1266829068.pdf

capacity of renewable energy sources is around 8.300 MW, being 4.872 MW from hydro energy and 2.858 MW from wind energy. The wind energy contributed with 92% for the growth of installed capacity of renewable energies, making clear the importance that this specific sector has been showing in national renewable energy mix.

In the year 2008 the production of renewable energy in Portugal was 28% superior compared with the production registered in 2005, passing from 16.300 GWh to 20.900 GWh, which means an average growth rate of 9% a year. Between 2005 and 2008 the wind sector assumed a more significant role in the national production mix of renewable energies.

At worldwide level, Portugal despite having a marginal representation has been increasing its weight relatively to the levels shown in 2005. Inside the EU, Portugal appears as one of the relevant players in the renewable energy sector, having positioned itself in 2008 as the 4th country with more weight in the electric consumption of renewable energies.

What concerns the weight of the renewable energies in the total consumption of electricity has been constant since 2005 until 2008 being 38%. However in this period the wind energy has increased its weight from 4% to 12%. This happens due to the growth of installed capacity of wind energy in Portugal in 708MW, new wind parks were build.

In the years to come, in terms of estimates for the installed capacity in Portugal the government continues to predict a significant growth in the renewable energy sector of 8% between 2008 and 2015. From the renewable energies the wind and biomass are the ones that are expected to grow more until 2015.

In 2015 is predicted that the national production of electricity from renewable energies grow approximately 14.000 GWh since 2008, what means an accumulated growth of 67%.

In conclusion taking into account the estimates of production of renewable energies for the next years and the growth of the country energy needs, it's predicted that in 2015 Portugal could produce 45% of the total national electricity production from renewable energies sources. The main sources of renewable energy will be the hydro and wind energy.

When watching the environmental impact of the energy industry we see that more and more the renewable sector gains importance in the attempt of reducing the gases emitted to atmosphere. In 2008, the renewable sector avoided the emissions of 9 million tons of CO2, being avoided financial costs superiors of 190 million euros. In 2015 it's estimated that this amount goes to 430 million euros. As well the energetic dependence by our country has been

smooth through the investment on renewable energies and the decrease in imports of energy and fossil combustibles. The production of renewable energy has contributed for the increase of the national auto-sufficiency levels. In 2008 the cost reduction was in the order of 1.270 million euros and in 2015 is estimated to be 1.900 million euros, meaning a considerable decrease in the imports of energy.

Pestel[7]

This market is influenced by several key drivers, related to political, environmental, social technological, economical and legal issues. To access the importance of each of one of these issues a PESTEL was made. Regarding political and legal aspects, the Portuguese government is encouraging the use of renewable energies, though programs such as "Renováveis na Hora" simplifying the process of licensing (via internet), enabling the selling of all the renewable energy production to EDP at a very attractive tariff (Decreto-Lei nº 363/2007).

The technological factors are related to the ongoing development of new technologies and market trends, as well as some support by the European Union to the development of renewable energy technologies, where were recently created some European funds given by the European Scientific Commission. In terms of environmental aspects Portugal has weather conditions for the production of electricity based on renewable resources with special emphasis on hydropower, wind, solar and waves. For more detailed information the extended version of the PESTEL is in attatchement.

Market dimension

Micro-generation Sector

Recent data (2008) published by INETI (national institute of engineering innovation and technology), referred that self electricity production creates an economic sector that can guarantee up to 5% of national consumption and that families can earn each year from 800 to 1,200 euros. The same source indicates that the micro-generation of electricity can create a market of one billion euros between 2008 and 2015. Already next year, shows a projection of INTELI (INTELI is a non-profit private Intelligence and Innovation Centre), the installation of solar photo voltaic and micro-wind turbines in Portuguese homes for electricity production can generate investment around €60 million. According to a forecast of the European Wind Energy Association (EWEA), wind energy will generate in 2020, from 14%

[7] Appendix 2

to 18% of the electricity supply to households in the European Union. In a market with expected growth of 12% a year, Portugal has exceeded all expectations with regard to wind energy.

The Portuguese Association for Renewable Energy (APREN), states that 13% of the energy consumed in Portugal in the first quarter of 2009 was wind generated. For us to see how viable the renewable energies are we just have to look for Denmark's example that is the only nation energetically independent from EU, thanks to a strong investment in wind energy and disseminated generation of electricity based on micro-generation. In fact, this last reference was responsible for the generation of nearly half the electricity consumed in 2005 and sent carbon emissions to the 1990 value.

Market Specifics

Market Segmentation

Segment of micro-generation

The target consumers for micro-generation market are those in the need for energetic self-sufficiency and ecological awareness. One must still consider the small and medium investors with medium term investment capacity based on achieving a long term cost reduction and also aiming to benefit through investment in ways of obtaining clean energy. The Portuguese market is valued in approximately 1 billion Euros, so Omniflow,Lda wants to capture a 20% share in the first 5 years of business.

Target Clients:

Condominiums and Private owners; Construction and property developers (cutting edge design construction); Small number of industrial branches; Energy investors

Marketing Trends

We are currently at a turning point given the need to respond to the challenge of climate change and the need to reduce the dependence on fossil fuels. However this challenge creates many opportunities: more investigation and technological development, more innovative investment and more jobs. Portugal has, over the last years, approved a comprehensive series of measures to promote renewable energies. Energy policy development derives from the

government's political will, expressed in Resolution 169/2005[8] of October 2005. The National Energy Strategy established various objectives, namely the creation of a stable, transparent organizational framework for the sector, permitting an unprecedented expansion of investment in renewable energies.

The European Union[9] has set ambitious goals to their country members concerning the investment in renewable energies as well, due to its concerns in this period that the renewable energies are so important. Their goals for 2020 were to: Reduce by 20% the emissions of greenhouse gases; Increase to 20% the share of renewable in energy consumption; Increase to 20% energy efficiency; Increase to 10% the incorporation of renewable in transport fuels;

Portugal following the Europe Union steps and because of its commitment to renewable energies, as a relevant means of limiting the economy's carbon intensity and as a significant contribution to the diversification and sustainability of the energy sector, made some objectives of their own based on the development of hydro and wind power, biomass, promotion of bio fuels and solar power.

Competitors | Market Rivalry

The direct OmniFlow competitor, regarding the installation in urban areas, is the sector of wind generators of vertical axis (VAWT's) as well as horizontal axis generators (HAWT's), both with lower performances in urban environments. They will be our direct competitors because they fill the same buyer need we fill, in the same way we fill it. Compared to the competitors, OmniFlow shows siginficant improvement in the main characteristics of this type of devices as shown in Appendix[10].

In terms of indirect competitors, we have the solar panels, which produces electricity as OmniFlow does, however using a different source of energy. The problem is that in urban areas the solar system is more effective than the previous wind devices, so in the urban areas we will compete a lot with the solar panels, having more advantages than them as well.

In the specific market of the micro-generation what happens is that due to the age of the market, which is very young there are not dominant companies which have significant market shares. Some companies were studied to acess the type of companies' existent in the micro-generation market, specialists on both solar and wind energy sector.[11][12]

[8] http://www.dre.pt/pdf1sdip/2005/10/204B00/61686176.PDF
[9] Appendix 3
[10] Appendix 4
[11] Appendix 5
[12] Appendix 6

Porter 5 Forces

Threat of new entrants – The Renewable Energy Market especially the sector of the micro-generation is a market in constant growth, where it is not that hard to enter. The product differentiation is not that big, with a few exceptions of new technologies that appear in the market. Companies try to differentiate with the services to the client, being the overall price all the same. It is needed some capital requirements to enter this market, especially due to the price of the materials that make part of the different energy devices. The distribution channels are easy to access, not existing a company that control them. On top of this, the government policies around this type of energy, giving benefits for those who produce this energy, make it attractive for people to buy these technologies, incentives numerous companies to enter.

Buyers' bargaining power – The bargaining power of the buyers in this industry is very high. Due to companies difficulty in differentiating their products offered. It is difficult for companies to compete in price, because lower price implies lower quality and it is difficult for companies in the Portuguese market to try to apply economies of scale. So the main differentiation comes from the services provided to the clients. Other difference is that depending on the nature of the energy some are suited more for countryside, some others are better for urban areas so here there is a difference in characteristics of the products. Other thing is that buyers have a lot of companies to choose from, increasing there power.

To minimize the buyer's power OmniFlow has to guarantee that their solutions have a good price/quality offering better services to the costumer. A strong marketing strategy is vital, for costumers to understand the advantages of the OmniFlow solution in comparison to its rivals.

Suppliers' bargaining power – Our suppliers have a low bargaining power due to the variety of companies offering these products. Mainly the suppliers will be for structural steel; turbines; composites: polyester/mold-open and epoxy/closed-mold; electrical components: generator and inverters. The only supplier that could have more power would be the one that provides the turbines, however due to the specific design of its turbines and to decrease the bargaining power OmniFlow prefers to do vertical integration and produce itself the turbines.

To minimize the power of our suppliers we may try to establish deals with small companies that need our money to survive and because of this get better deals.

Threat of substitute products – The most used renewable energies in this sector are the solar/photovoltaic and wind energy. So we can say that our substitutes are the solar panels. Although they have a larger time of investment return and are more expensive, they offer better performances in urban areas that the normal wind solutions, and were the first main renewable energy solution that enter this market, so there is a big acceptance by this kind of energy. We can say that the threat is high.

By investing in R&D OmniFlow can bring more advantages to the costumers and consequently decrease the threat of substitutes.

Rivalry among existing firms – In terms of rivalry we can say that in this market there are some firms, but there is not one that has clear advantage over the others. We are talking about small firms, which try to get as much clients as they can. As the products are quite similar between companies, they try to differentiate in the services offered, try to cut costs along the value chain and invest in R&D to try to find a new technology able to produce energy at lower cost with higher efficiency.

To surpass other companies in the market and have an advantage over them our main tool will be to focus on our core areas bringing added value to the market and creating a network of partnerships that make us a force of respect in a market that we are entering.

Distribution channels/options

OmniFlow due to its lack of know-how in this specific area will deliver this responsibility to a partner that will be chosen taking into account the experience, the quickness and the range that it can achieve in Portuguese market. Being an area of extremely importance to our business, because it will guarantee that our products are delivered on time and the right conditions to the client, this will be outsourced as was previously said. EDP could be an important partner in this area, due to its experience and power it can provide us with the best solutions in area of distribution channels. Because they are present all over the country they would be a valuable asset to us to make sure that our product would reach as many clients possible.

Purchase Policy

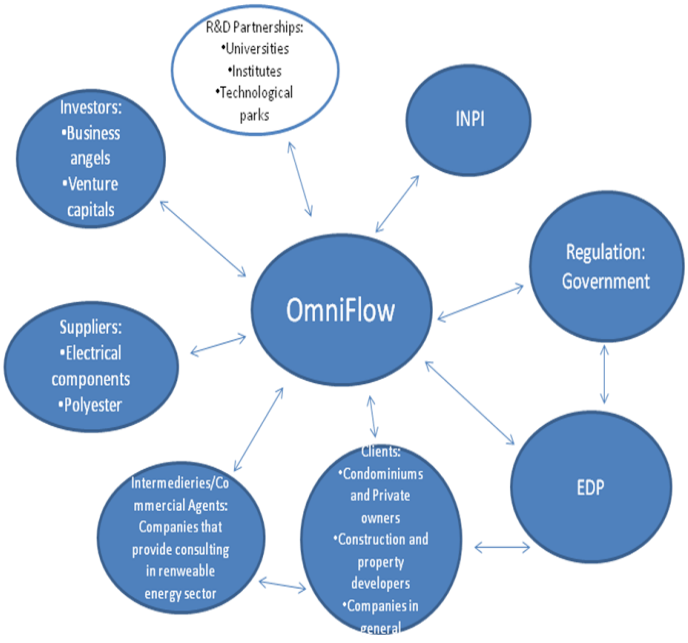
The purchase policy of the Omniflow will be developed according to the rational of achieving economies of scale and quantity discounts. The partnership with EDP will be explored too in order to access to some equipment suppliers and negotiate with them in a more favourable and competitive conditions.

SWOT Analysis

Strengths: • Ability of working in Co-generation • Higher Capacity Factor (actual annual energy output divided by the theoretical maximum output) is expected to be ~40% in comparison with the other wind devices in the market 25-30% • Efficiency of the structure with low wind speed. • Exceptional capacity for using turbulent wind from inconsistent directions, this presents a great advantage in urban environments where aero generators do not operate reasonably. • Structure of low visual and environmental impact through the design that merges harmoniously with the environment • Less erosion effect caused by the deforestation of hill tops as it occurs in normal aero generators implementation. • OmniFlow can be applied in larger scale power plants that provide a cheaper and cleaner way of producing energy. • Time of installation and competitive price in relation to production in kW. • Shorter payback time than the usual renewable energy solutions in the market, time estimated for OmniFlow is 3 years (usually 7-8 years) • Request for patented new technology	**Weaknesses:** • As a start-up OmniFlow lacks the experience in the renewable energy market. • Does not have know-how to achieve economies of scale and scope • Does not have the financial capability of other companies already established in the market • OmniFlow does not have brand awareness in the market
Opportunities: • Take advantage of the incentives that the government gives to people that want to produce renewable energy • The European Union created directives for the union members to achieve some objectives in the renewable energy production sector • Due to the crisis people are eager to found new ways of getting money, and the producing renewable energy is a guaranteed way of generating money • OmniFlow solution can operate in the micro-generation sector and can be adapted as well to high energy production like the big wind parks • Explore the urban market for wind energy solutions that was until now dominated by the solar/photovoltaic energy • Portuguese renewable energy market is expected to grow 12%	Threats: • The crisis affected the purchase power of the Portuguese people what can be bad news for the micro-generation sector in general due to the high initial investments needed • The crisis affected the investors willingness to invest in new business • Big international companies enter the Portuguese market bringing their experience, high brand awareness and huge financial power • The government freezing for some periods the requests for licences to produce renewable energy • Other companies can develop new technologies better than OmniFlow's surpassing us

Industry Mapping:

As a start-up OmniFlow will need capital injection from business angels, venture capitals or other investors to start the business and during the following years to accomplish the strategic objectives that the company set in its business plan. Being OmniFlow's main activity the R&D, it is crucial to established partnerships with institutes, universities and technological parks. Some of them are mainly

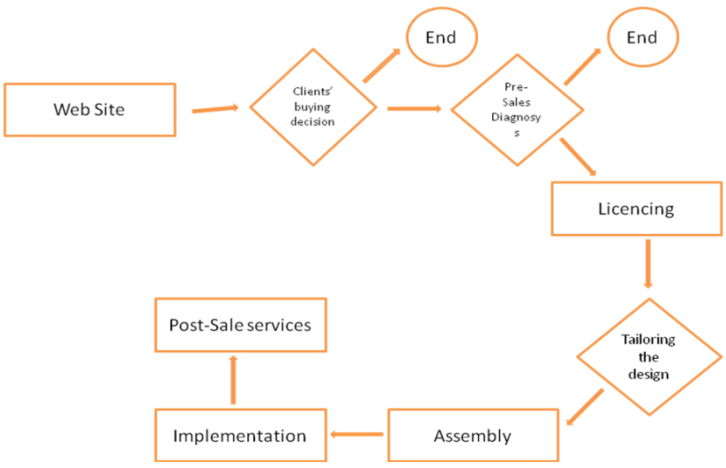


supported by the state, creating the perfect opportunity of price/quality that OmniFlow needs. This R&D development will enable OmniFlow to create new improvements in its already patent solutions and maybe create new patents that are certified by the INPI, the official organization for awarding the new patents. These patents are extremely important to avoid other companies to use our innovative technology and create competitive advantage for OmniFlow. Than we have how the industry works around OmniFlow and how it works itself. First there are the relations with the suppliers, where we buy some components as fibre, concrete and the small objects needed to build OmniFlow. Good relations have to be made with the suppliers to have some advantages in terms of prices. After we have the parts of the final product we have to wait for orders from the clients. Our clients are condominiums and private owners, construction and property developers, etc that will make their orders via our website. These clients can come directly to us or through some intermediate companies that ask for our products and then sell to their clients. When the clients contact us we as being part of our service, we deal with all the paper work needed to apply for the production of renewable energy with the government. The government through the DGEG will analyse the candidature and then register the name of the client as a producer of renewable energy, attributing to them a special tariff when they sell their electricity back to EDP that is obliged to buy by law. Being the regulator of this specific market the government plays an important role in this industry because it can suspend the licensing process for some periods and adjust the special tariffs for the producers. Another reason that makes EDP important is the fact that possible partnerships between Omniflow and EDP can be made, especially for the operations areas due to their strategic position through the entire country and already well developed know-how in the renewable energy market.

Competitive Strategy

General Strategy

When entering the market OmniFlow will face a lot of firms in the market. Being a start-up Omniflow will have some problems facing already established companies in the market, so it has to come up with a solid strategy of differentiation to attract more clients than its rivals.



OmniFlow due to its innovative solution will become immediately differentiated in the market however because the lack of brand awareness near the costumers, Omniflow will choose in the beginning to give the best price/quality relation in the market offering superior solutions at slightly below average price in the market.

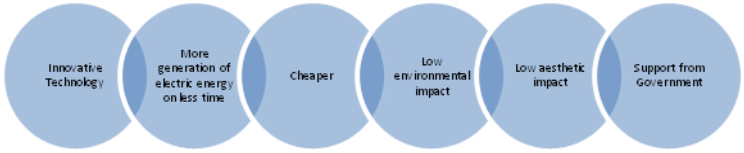
In a first phase OmniFlow will create a solid business plan, gather funding and partners, finishing the process of refining the solution and hiring the company staff.

In a second phase we will start to produce the OmniFlow and then launch the solution in the market, putting the marketing strategy in action to gather the maximum clients possible.

The third phase will be to expand the company and try to achieve the goals set in the business plan.

Key Success factors

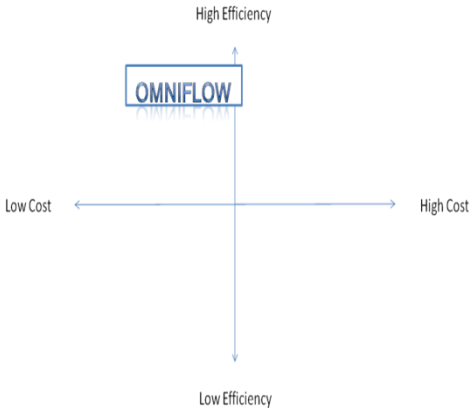
OmniFlow will launch its business in the renewable energy sector, creating the OmniFlow device that generates electrical energy through the wind. Being an innovative product OmniFlow wants to revolutionize the market offering a value preposition that will mainly be based in the following key success factors:



Marketing and Sales Strategy

Marketing Strategy

P&S Positioning



As we seen before the main characteristic of the OmniFlow solution is to bring to the market the best Price/Quality relation. This follows our mission statement that says “OmniFlow, Lda provides technological innovative and high quality wind power systems of low environmental impact, aiming to achieve progress through the linkage of ecological and economic interests in order to benefit the environment and clients.”

Promotion

Considering the characteristics of the target markets where OmniFlow intends to act, the company will strategically enhance the project, allowing at the same time the full understanding of all the benefits attached there to. Therefore a communication campaign was designed based on use of the following ways:

Participation in Fairs - National and international fairs of specialty;

Corporate Image - Developing a corporate image (logo, cards, paper, etc.) able to convey the philosophy, objectives and values of OmniFlow. A brochure will also be developed for the company institutional presentation;

Website - The website will be oriented to reflect the products philosophy of products, based on an harmonious and smooth design but also within the latest technologies in order to reach as many users as possible. In the website, the customer may make the on-line simulation of energy production with the introduction of average wind data for the installation site and make the sizing of the desired structure as well as the colour or finish. At the end of this simulation the costumer will be able to place an on-line order;

Advertising - Advertising campaigns will be placed in specialized magazines within the energy sector, as well as in national and international press.

Direct Marketing - For the major power premises segment the company will focus on holding presence meetings and presentation to potential customers.

Partnerships - Strategic partnerships will be developed with entities of national importance and international (partnerships with associations and organizations to promote activities and events pro-environment in the renewable energy sector).

Price

Omniflow strategy price will focus on the beginning of its life in a penetration strategy. The option of not choosing the skimming strategy, even though we are talking about an innovative and high quality technology product, is because we do not have the awareness that a normal company has to adopt this strategy. Possibly the skimming strategy will be adopted later when we can afford to choose higher prices in the beginning of our solutions life cycles charging the innovativeness of our solution and the as it moves to end of their lives we decrease the price accordingly and introducing new versions of this solutions. But for the short-run we opt for the penetration strategy that enables us to be competitive against our competitors, trying to catch more clients through the lower prices in comparison with the

competition. This strategy is the best solution for OmniFlow that due to its status of start-up does not have any kind of market share in the market, meaning no awareness near the costumers. So in opposition of the lack of awareness and the possibility to charge premium prices for its innovative technologies, it charges lower prices gathering more clients and building reputation with its good price/quality solutions.

After deciding the strategy applied we need to adopt a price for our solution. This price will be based in the costs associated with all the activities need to complete the solution and give it to the costumer and the standard price of similar solutions by our competitors. After this we came up with the final price that will be slightly below the average price of similar solutions by our competitors.

Product[13]

This product is being developed by the Omniflow, Lda , The Omniflow device is a motionless inert structure dome shaped with 4 lateral openings donors with large area of exposure to wind that direct the wind from any direction (omni directional) and promotes a "venturi" effect which speeds up towards a smaller high efficiency turbine that operates with a higher RPM. With the use of rapid prototyping technology, the scale models were tested and behaved in an exemplary manner both in terms of wind required to drive the turbine, as in terms of wind acceleration and the omni directionality where it runs perfectly stable even with strong and turbulent winds. The whole structure is scalable to the area available, needs required and can be installed in buildings to be built from scratch, already constructed buildings (if provided minimum area available at the top) and also on mountains/country fields/sea, etc.

Omniflow will have some services associated with its solution that will enable it to differentiate from the other competitors. The services associated with the product will be:

- Deal with paperwork concerning the request of licensing production of renewable energy;
- Customized solutions giving the possibility of fitting the clients' interests and blending the solution with the place where it would be installed;
- Studies of the environmental and aesthetical impact of the solution's implementation;
- Implementation on site of the OmniFlow solution;
- Upgrades for the OmniFlow solution. The department of R&D is always working to create new developments in the area of renewable energy production, so the solution keeps updated;

[13] Appendix 6

- Insurance and maintenance will be offered to OmniFlow clients';

Sales Strategy

Omniflow's sales strategy will be focus via internet. This strategy was chosen to reduce the costs associated with the selling process easing as well this process. OmniFlow's offers a self made product to our clients, where through the website the clients will be able to request OmniFlows services including an on-line simulation of energy production (needing average wind data) and the costumization of the desired structure. In the end of this simulation the costumer will be able to place an on-line order. The website is a way as well to reach more people in an easier way. Because everything is taken care online the will be no sales force.

The process of sales will start with an initial approach of the client that will see OmniFlow products in the website. After seeing them they can do there an on-line simulation of energy production with some information about the site where they want to install. They send an email showing interest in buying the OmniFlow or even place the order immediately. Then the clients will be contacted by a partner of our company responsible for the Pre-Sale Diagnosis which consists in going to the local of implementation with the costumer and checking the viability of the project and offering some suggestions. After checking the viability of the project if the answer is positive the order keeps going and OmniFlow starts dealing with the licensing of production of energy. At the time of the final requests from the client are received the design of the solution to the client desire. The assembly then start with all the parts and specific design of the solution and after concluded it is implemented in the site of the client choice, plus all the documentation in order. The last stage of the process is the Post-Sale Services where OmniFlow provides to their clients upgrades and maintenance in and outside the guarantee associated to OmniFlow. Both the Implementation and Post-Sale Services are guaranteed by partners of OmniFlow that are supervised by our company. Because of this our clients are not damage in the service quality offered by our partners and know that certified people are working to them.

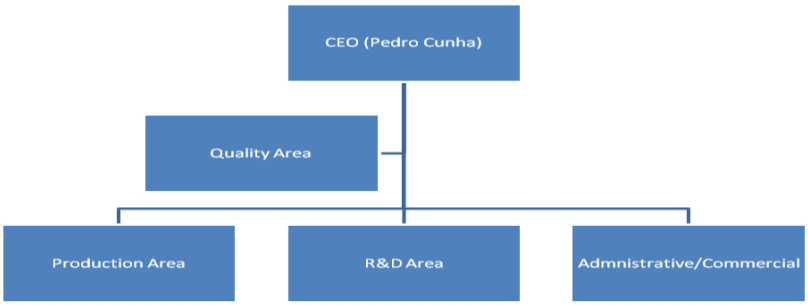
Processes and Operations

The processes and operations of OmniFlow will follow the diagram above. First the company will promote and receive the requests for buying the solution via website. After receiving the requests a pre-analysis diagnosis is performed to assure that the place for the solution is viable, than if everything is fine the solution is produced and the licensing is

taken care of. Finally the product is implemented in the place of the client choice with the guarantee of future maintenance and other post-sale services.

In this diagram we can state that the production of the solution and the post-sale services are critical, the first one assures the high quality of OmniFlow, every stage of the production has the supervision of qualified technicians and the quality department, and the second one differentiate OmniFlow from the other companies in the market offering high quality post-sale services. Even though the post-sale services is a primary activity, due to the geographically dispersion of OmniFlow's clients, OmniFlow decide to find a partner with the experience do this, however being at all time controlled by the Quality Management Department.

Management Structure | Management Processes and Human Resources Management



OmniFlow,Lda will be managed by one person, Pedro Ruão Cunha, that has the know-how and capabilities of designing and keeping improving this specific kind of product due to its background on engineering and product design. This background in Material Engineering will be very helpful in the R&D department as well as in the production process of OmniFlow and its quality control. I will be a business consultant responsible for some areas of expertise that Pedro Ruão is not so strong, such as turning his project attractive to other possible investors, focusing in the business side, as well as doing research of the market and analysing it, finding then the best ways to approach it. All of this will be all gathered in a business plan done by me. After the business plan is finished Pedro Ruão will be the CEO of the company and in future years with the growth of the company their will be a team supporting him in the management decisions.

Regarding the policy of human resources, the team should have to employ skills and training necessary to perform the varied functions needed in the company. In the area of R&D there will be three engineers working with expertise in materials and thermodynamics, one of them Pedro Ruão, another one that will have some work experience already and finally an emergent young mind that wants to work in this area. So we can balance the youth with the experience. In the Administrative/Commercial area there will be need of an experienced worker to deal with the burocracy and strategic decisions of the company, preferably a person with experience in the renewable energy market. This would

give OmniFlow a better understanding and knowledge of the competitors' products, gaining competitive advantage and insight on the market. Another employee would be hired to do the website supervision and deal with the OmniFlow orders, because this will be our way of commercializing the product. A continuous training policy is also to be provided within the company and some external training that normally our engineers may need to do during the years in its specific areas. The accounting of the company will be outsourced as well as some main activities such as the distribution and the post sales services, this last one would be monitored by the quality management department.

OmniFlow's remuneration system will be based in fix compensation, variable one and some benefits. Will be policy of the company to provide benefits for workers that are an example within the company, for example being on time and respect their responsibilities in the company. OmniFlow will give bonus as well to the engineers that discover new things that can be patented and add quality to the OmniFlow. For the management position a small percentage of the company could be given to attach the company performance to the manager.

A set of Key Performance Indicators will be implemented as a way to measure the efficiency, effectiveness and quality of the work developed by the company's employees.

Risk Analysis

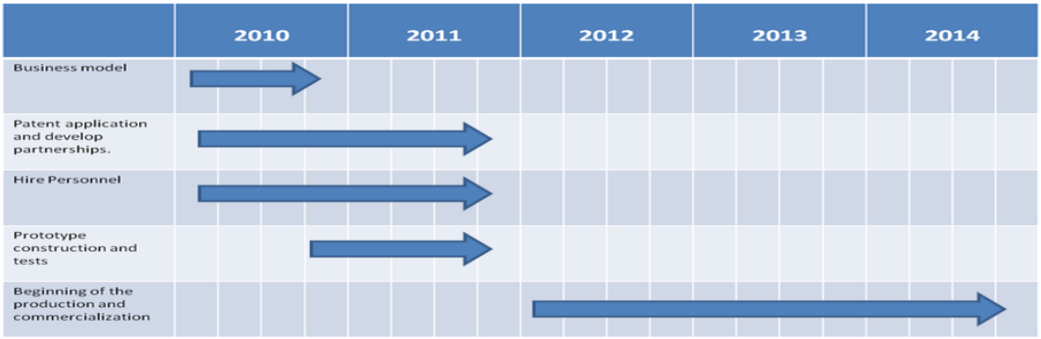
Omniflow is prepared to overcome some worst case scenarios concerning their strategy if they eventually happen. In this early stage, one of the most important things is to finish the optimization of this technology by continually doing the R&D and experiments for when it enter the market to be operating at the higher level and being difficult to copy by our competitors. The problem is to do this, is required high amount of financing to finish the last tests and building the final prototype. This financing of the prototype is almost certain to be given by some funds of the European Union, through a competition that OmniFlow entered and is in the final stage just waiting for the final answer. If this does not verified, a British institute is already interested in doing part of the R&D and the other part would be tried to get from the government trough universities funds for this kind of research.

When entering the market other problem that we may face is the possibility of our solution does not have the acceptance expected. For this we would try a different marketing approach and decrease our selling price, because our margins permit us to do so. If it continues we would shift our attentions to the external market specially the Spanish, where we have already a partner interested in introducing our solution in their market.

Another scenario is that if our solution is not making the sales that we were expecting in the micro-generation sector we can enlarge and diversify the production of our wind solutions, to solutions off-shore and/or go immediatly to the big wind parks segment, due to the versatility of Omniflow.

What concerns the possibility of some competitor to copy our technology, it is recommended that OmniFlow keeps on upgrading its own products and continue researching new technologies and solutions for this market, and obtainng patent registration as well.

Implementation Plan



Financial Analysis[14]

As we can see in the financial plan OmniFlow as a start-up does not have inital capital to invest in its business, so it will contract a bank loan of 900.000 in order to face the expenses of the 1st month and following ones. Our biggest investment will be made in the raw materials needed to build the OmniFlow. Only in the 1st year will be needed an investment of 4.108.802.

Other initial investment will be divided in tangible and intangible assets. The tangible assets are composed by the machines needed to the factory for the construction of the OmniFlow and some hardware for R&D purposes, as well as investment in quality certificates such as ISO 9001. Then the intangible assets will be constituted of some software, R&D papers and patents. This investment will round the 150.960 and 39.950 respectively.

OminFlow will have other costs, related to employees, outsourced services and other costs that will be approximately 918.428. So we can see that the biggest amount of investment will go to the raw materials and secondly to the other costs.

[14] Appendix 7

The investment in the beginning of the year will give the sufficient boost to launch the business that than will start generating money in the second month shortly after receiving the payment of the 1st devices.

In the end of the 1st year OmniFlow shows already positive results, reaching the break even within the 1st year. OmniFlow's net profit along the first 5 years is: 1.153.424 (year 1), 1.799.283 (year 2), 2.702.437 (year 3), 3.102.073 (year 4) and 3.684.363 (year 5). The years that follows are years of consistent growing, as the company penetrates deeper in the market.

Concerning the profitability of the project, we can see that is very profitable, having a Net Present Value of 9.375.892 and a payback time within one year. The capital opportunity cost of Omniflow was computed as well using as example 2 companies that were in the renewable market and were similar to us. Through this we could achieve our beta of 1,25.

To conclude a sensitive analisys[15] was made with two possible scenarios where the predicted sales growth changed. The first scenerio was the optimistic one, with growth rates extremely high during the next five years, and translating in a huge NPV (18.750.197). However our working capital was negative all the years what means that our ability to pay in the short-term was affected. The second scenario was the pessimistic with zero growth during the next five years. The NPV (5.363.118) decreased, altough it shows that it still worth to invest in this business.

Conclusion & Recomendations

After carefully analysing the company and the renewable energy market we can see that Omniflow has the pottential to succeed, making use of its key success factors and its competetive strategy, based in adding value to the client with an umbittable price/quality relation and its revolutionnary innovations. However OmniFlow's faces some problems being our main weaknesses about capabilities in some crucial areas of our business. To overcome them we will base mainly in partnerships with key players in the distinct areas of our market. So for the financial problems that we will face as a start-up OmniFlow will try to attract business angels and venture capitals as well as some support from the government for the SME's. For the operations/sales/marketing areas try to gather partners that are specialized in those areas and that can bring to the company added value. This of course will be applied in the short and medium run, then in the long run with the expected growth of the company OmniFlow will try through some R&D and from past experience expend its specialty areas and try to integrate some of these areas of business in its own structure. For

[15] Appendix 11

the low awareness that we have a fundamental tool will be an effective marketing effort from our company near the consumers and to associate with a well known brand in the market that the consumers know and trust to try to gain from there awareness in the market (Ex: EDP).

Our main threats are the excessive power of the government in this market, which during some periods can suspend the emission of production licenses. The solution for this is just to differentiate from the competitors selling more renewable solutions that enable us to have business even when the licensing is suspended. As well when we internationalize we can try to balance the lack of business here in Portugal with the international markets and we can think the same way with the market of large power plants that is micro generation but can use as well our solutions (adapted to the different needs of this market of course). The threat of big international companies to enter this market with big financial power and high awareness is or to partner with big companies that can provide us with power to "fight an even battle" or maybe think in a merger or an acquisition of another company, of course this would be in the long term, because now OmniFlow does not have the financial power to do that, being the first option the obvious one.

Bibliography

Books:

Jobber, David and Geoff Lancaster. 2006. Selling and Sales Management. 7th edition. England: FT Prentice Hall Pearson.

Kotler, Philip and Kevin Lane Keller. 2005. "Administração de Marketing". 12th edition. São Paulo: Pearson – Prentice Hall

Porter, Michael. 1985. Competitive advantage: creating and sustaining superior performance. New York: Collier Macmillan Inc.

Published Articles / Presentations:

Palma, Francisco Mendes. 2009. As energias renováveis em Portugal – Banco Espírito Santo.

Nascimento, Tânia. 2008. Dossier Extra – Microgeração. ABBC

EDP. 2007. Apresentação Plano de Negócios 2010.

Rodrigues, Álvaro. 2009. Energias Renováveis. FEUP

REN. 2008. Renewable Electricity - Make the switch.

Energias Renováveis em Portugal. 2007. Ministério da Economia e da Inovação

REN. 2008. Energia Eólica em Portugal.

ALEGRIA, CARLOS. 2009. O Futuro Energético em Portugal

Estanqueiro, Ana. 2008. Aproveitamento do Potencial Eólico Sustentável em Portugal. INETI

REN 21. 2009. Renewables Global Status Report.

Websites:

www.eco.edp.pt/

www.dgge.pt/

www.bes.pt

www.ineti.pt

www.dgge.pt/

www.apren.pt

www.ws-energia.com/

www.selfenergy.eu/

www.energiasrenovaveis.com/

www.renovaveisnahora.pt

www.min-economia.pt/

www.ine.pt

www.dre.pt

www.ewea.org/

www.ren.pt

www.windpower.org

www.nordex-online.com

www.gee.min-economia.pt/

www.adene.pt

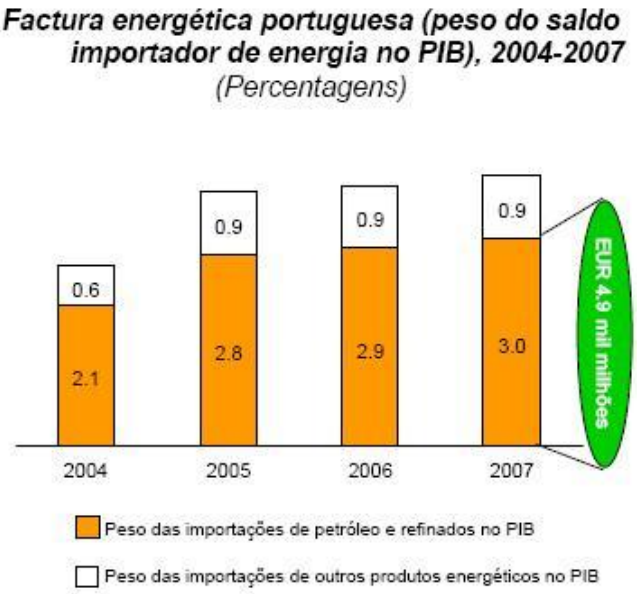
www.iberwind.com/#/mercado-portugus

www.energy.eu/

Appendixes

(some of the appendixes are primary to the BP, such as: competitor's appendixes, PESTEL and financials navigation; the other ones are complementary)

Appendix 1



Appendix 2

PEST Analysis:

Political

Portugal being a member of the EU enables us to strengthen key infrastructures sectors with impact on cost-competitiveness to facilitate trade flows and foster Foreign Direct Investment. The relevancy of renewable energies in Portugal reflects through the sustainable development of the country and in following the main European guidelines on energetic and environmental policies, namely in the decrease of polluting gas emissions, in the increase of electricity production based on renewable energy and in the reduction of external energy dependency. The initiative by the government "Renovaveis na Hora" simplifies the process of licensing (via internet), did not count to IRS the revenues coming from this kind of electricity and enables the selling of all the renewable energy production to EDP at a very attractive tariff. This has been generating more willingness to start producing electricity through micro-production units.

In terms of social policy the government has in its program to reduce the social costs, by focusing its policies on easing labour market regulations that hinder workers' mobility, while reinforcing the support to job losers. There are occurring some reforms and some more will happen such as the labour code, stronger controls of undeclared work, bringing the social security schemes of the private and public sectors closer and tighter eligibility conditions for unemployment benefits.

Economic

The crisis left some problems in the Portuguese finances, such as: state income went from 40.819 million euros in 2008 to 34.687,5 million euros in the following year; the unemployment rate reached the 9,5% in 2009 and being expected to grow more 0,3% in 2010; the Portuguese debt went to 76,6% of the GDP in 2009 and is expected to reach the 85,4% in 2010. However there are some signs of recovery, as we see in the Public Deficit that reached the 9,3% of the GDP in 2009 but is expected to go to 8,3% in 2010 and the Portuguese GDP that had decrease 2,6%in 2009 is expected to grow 0,7% in 2010. In 2008, the renewable

energy sector accounted for 1,3% of national GDP. In 2015, the sector is expected to double its value versus 2008, thereby representing 2,4% of national GDP. So we can see that renewable energies are currently one of the strongest engines of economic and social development for our country, given the volumes of investment they attract, the number of jobs they create and the industrial and research clusters they promote. All of these aspects are crucial for the regional development in the geographical locations where projects are held. In an international crisis scenario, renewable energies in Portugal have been providing good investment opportunities in clean technologies, leading simultaneously to the creation of a more sustainable and competitive economy.

Social

Portugal is ranked 25 in life satisfaction, here the people are really easy going, friendly, flexible and hard workers. Portugal has Oporto and Lisbon as main urban centres, Algarve for holidays and Alentejo as old fashioned Mediterranean style. The interior is most of it rural and having countryside lifestyle in opposition with the urban centres near the coast. In terms of the overall education we can see two main problems the low-skilled profile of the economically active population and the education system's incapacity to halt an early dropout from school.

Portugal at the end of 2008 had 10.627.250 inhabitants and it follows the same pattern than the other countries in Europe, the life expectancy is increasing both on men and women and the population is aging. The expected mean life time that in 2008 was 75years for men and 82 for women. By 2008, 15,3% of Portuguese populations had less than 15 years old, 17,6% had more than 65 and 67,1% had between 15 and 65 years old.

Technological

Portugal is a developed country that is in the vanguard of the new technologies. It has an internet penetration of 46,6% and 54,1% of the population uses computers. Portugal have a big concern on keep developing new technologies to foster competitiveness with the other countries, enabling Portugal to have a positive technology balance, where it becomes a technology exporter rather than an importer. However even having some of the best researchers in the world, Portugal fails to give the best conditions to these brilliant minds, resulting on them working abroad. Portugal in the last years have invest a lot in high tech industries under development as renewable energies, becoming now one of the top countries in Europe to produce green energy. There were recently created some European funds given by the European Scientific Commission to the development of renewable energy technologies. This shows the willingness of The European Union to develop this kind of technologies. Because Portugal has objectives to achieve established by itself and by the EU in terms of the renewable energies, due to the growing importance of this energy sector this creates room for new companies like OmniFlow to try to get this support and invest in this type of technology and market.

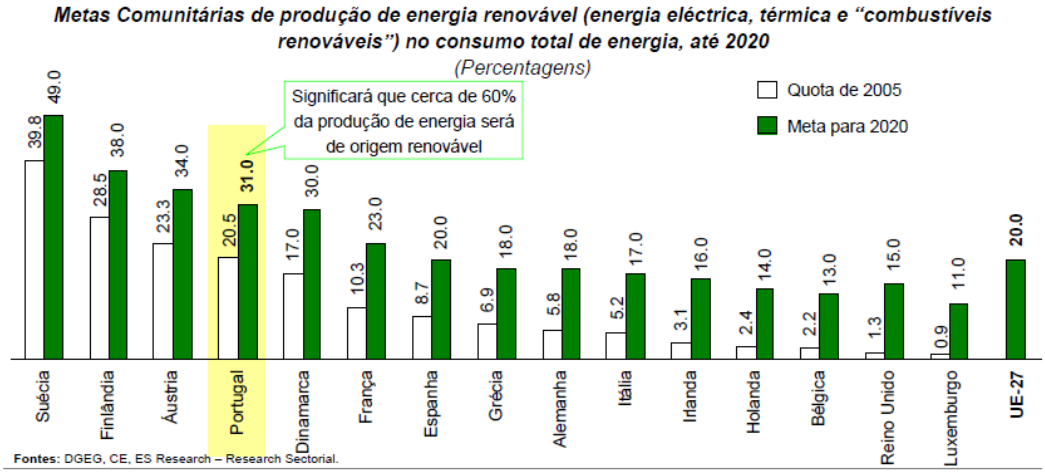
Environment

Portugal is situated in the west coast of Europe, having one of the best weathers in Europe. The average temperature is 13º in the north and 18º in the south. This makes Portugal as one of the main destinies for tourists to come, reaching in 2007 the 11,3 million of tourists. In terms of energy sources, Portugal is the 15th most expensive country in Electricity and the 22nd in Fuel prices for industrial uses, while for domestic use, it is the 12th more expensive country in Diesel, the 11th Electricity and the 8th in Gas. So as we see Portugal is basically an importer of energy, being very dependent from other countries, however as we have seen before due to its geographical characteristics Portugal is investing more and more in the greener energies.

Legal

In the year 2007 the government decided to implement a plan called "Simplex 2007" with the objective to simplify the business investment and approval measures. About our employee law, we have some inflexible employment regulations hinder overall productivity growth and employment opportunities. The non-salary cost of employing a worker is high and the rigidity of hiring and firing a worker creates a risk aversion. In terms of number of work hours the regulation is not flexible. One law that have affected the market of the renewable energy and consequently OmniFlow is the Decreto-Lei nº 363/2007 that incentive people to produce electricity through renewable energies, specifically, solar-photovoltaic, wind, hydro, co-generation and biomass. OmniFlow can clearly take advantage of this because this law creates extremely good opportunities for people to invest in this kind of technology. The tariff paid by EDP for the electricity produced by the renewable energies is more than 4 times the price of a normal electricity consumer. Being 0,6175 €/kWh in case of solar-photovoltaic energy and 0,432 €/kWh for wind energy.

Appendix 3



Appendix 4 – Wind Solutions Characteristics

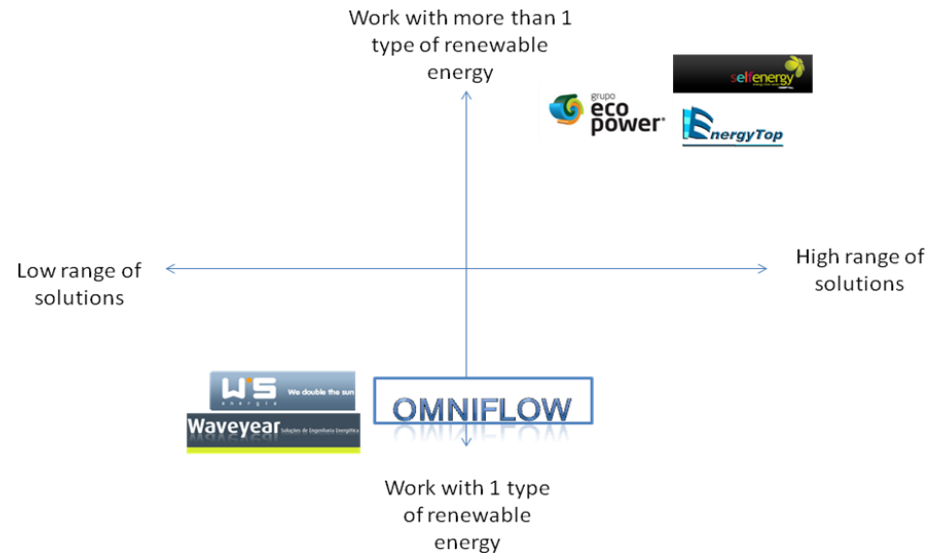
Horizontal Axis		Vertical Axis		OmniFlow	
Wind operation > 3-5m/s	**3**	**Wind operation > 3-4m/s**	**3**	**Wind operation > 1.5**	**5**
Significant noise	1	Less noise	4	Less noise	4
Do not operate with turbulent wind	1	Operates with omnidirectional winds	5	Operates with omnidirectional winds	5
Significant visual	2	Significant visual impact	1	Low visual impact	4
Significant ecosistem impact	2	Significant ecosistem impact	2	Low ecosistem impact	4
Hi power capacity	4	Low power capacity	3	Hi power capacity	5
Stop operating if wind > 20m/s	3	Stop operating if wind > 15m/s	2	Operates with higher wind limits	4
Conventional Design	3	Excentric Design	2	Merging ecosystem Design	4
No Cogeneration ability	No	**No Cogeneration ability**	No	**Cogeneration ability**	Yes

Bad 1 2 3 4 5 Very Good

Appendix 5 – Competitors Description

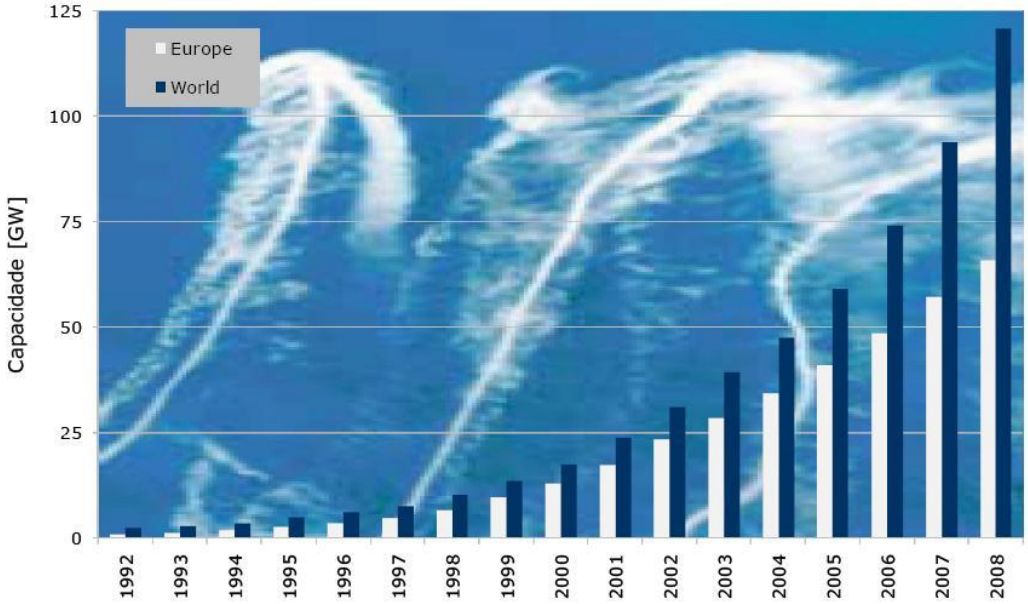
Energy Top – This company that works in the sector of the renewable energy is based in the North of Portugal and their objective is to construct and preserve all type of renewable energies. They project mini-hydro solutions, electric infrastructures in wind parks and micro-generation (solar-photovoltaic panels). They offer as well some maintenance to their products.	*Ecopower* – This company of equipments and service of renewable energy based in the centre of the country has as objective to distribute and install in the Portuguese market the international market leaders brands in this area. This company has already 11 years of experience in this sector working with all the types of renewable energies.	*Waveyear* – is a start-up in the area of solar energy, focused mainly in the experimental development and I&D. Their human resources background is very reach having more than 20 years in solar energy research. They offer as well solutions in the area of the solar energy.
WS energy – WS Energia was created in September 2006 by Joao Wemans and Gianfranco Sorasio supported by a NEOTEC project. It is located in Taguspark - Science and Technology Park-, Porto Salvo, Portugal. The first technology developed and patented by WS Energia was DoubleSun®, awarded as the Best Technology in Renewable Energy in 2006 in Portugal (BES06). WS Energia is a company with the purpose of creating leading edge technology and know-how in the solar energy sector.	*Self Energy* - Self Energy is a leader in Decentralised Energy generation. This company partner with energy users to facilitate lowering energy costs, lowering carbon emissions and ensuring a resilient power supply into their facility. They design, invest, implement, operate and maintain decentralized energy generation systems that utilise the leading proven technology to achieve costumers energy and carbon targets. This is a company with a big weight in our market, acting in all the country and even having internationalised already to UK.	

Appendix 6 – Competitors Perceptual Map



Appendix 7 - Product

Appendix 8 – Annualy Wind Energy Growth



Appendix 9

Table 1. Contribution of the Renewable Energy Sector to the National GDP

Figures in million Euros

	2008	2012	2015
Direct contribution to the National GDP	1,100	1,720	2,220
Indirect contribution to the National GDP	990	1,480	1,900
Total Contribution	**2,090**	**3,200**	**4,120**

Table 2. Employment created by the Renewable Energy Sector

Employment

	2008	2012	2015
Direct employment creation	2,400	4,800	5,800
Indirect employment creation	33,700	43,000	55,000
Total employment	**36,100**	**47,800**	**60,800**

Table 3. Cost avoidance by the Renewable Energy Sector

Figures in million Euros

	2008	2012	2015	Accumulated 2005-2015
Avoided costs of CO_2 emissions	195	230	430	2,200
Avoided Cost through Imports reduction	1,270	1,400	1,900	13,100
Total avoided costs	**1,465**	**1,630**	**2,330**	**15,300**

Appendix 10 - Financials

Income Statement					Un: Euros
Ir para Versão Web Original	Year 1	Year 2	Year 3	Year 4	Year 5
Costs	5.027.230	7.268.529	10.330.095	11.354.518	12.645.793
Cost of Goods Sold And Raw Materials	4.108.802	5.951.581	8.526.338	9.376.787	10.343.249
Outsourced Supplies and Services	88.188	102.171	121.259	157.493	213.969
Labour costs	110.912	112.575	114.827	117.123	136.650
Other Costs	719.329	1.102.201	1.567.672	1.703.115	1.951.924
Revenues	6.180.654	9.067.813	13.032.532	14.456.592	16.330.156
Sales of Products and Goods	6.180.654	9.067.813	13.032.532	14.336.592	16.011.190
Sales of Services	0	0	0	120.000	318.966
Other Sales	0	0	0	0	0
EBIT	1.644.885	2.584.130	3.806.421	4.331.557	5.105.680
NET PROFIT	1.153.424	1.799.283	2.702.437	3.102.073	3.684.363

Balance Sheet					Un: Euros
	Year 1	Year 2	Year 3	Year 4	Year 5
ASSETS	2.988.144	4.960.736	8.055.713	11.163.163	14.909.324
TOTAL ASSETS	2.988.144	4.960.736	8.055.713	11.163.163	14.909.324
Equity	1.158.424	2.957.707	5.660.144	8.762.217	12.446.581
Liabilities	1.829.720	2.003.029	2.395.569	2.400.945	2.462.744
TOTAL LIABILITIES + EQUITY	2.988.144	4.960.736	8.055.713	11.163.163	14.909.324

Investment Plan					Un: Euros
	Year 1	Year 2	Year 3	Year 4	Year 5
Tangible Fixed Assets	150.960	0	90.000	0	0
Intangible Assets	39.950	7.100	23.500	8.700	9.000
TOTAL INVESTMENT	190.910	7.100	113.500	8.700	9.000

Depreciation					Un: Euros
	Year 1	Year 2	Year 3	Year 4	Year 5
Tangible Fixed Assets	17.620	17.620	27.620	27.620	27.620
Intangible Assets	23.283	25.433	41.833	8.700	9.000
TOTAL DEPRECIATION	40.903	43.053	69.453	36.320	36.620

Financing Plan					Un: Euros
	Year 1	Year 2	Year 3	Year 4	Year 5
Own Capital	5.000	0	0	0	0
Medium/Long term Payables	900.000	0	0	0	0
Short term payables	0	0	0	0	0
TOTAL FINANCING	905.000	0	0	0	0

Treasury budget					Un: Euros
	Year 1	Year 2	Year 3	Year 4	Year 5
Total income	7.137.160	10.389.810	14.969.812	17.205.290	19.381.653
Total disboursements	5.358.489	8.689.206	12.324.200	13.920.094	15.491.720
Cashflow	1.778.671	1.700.603	2.645.612	3.285.196	3.889.934
Cash at beginning of period	0	1.778.671	3.479.274	6.124.886	9.410.082
CASH AT END OF PERIOD	1.778.671	3.479.274	6.124.886	9.410.082	13.300.016

Project Profitability Analysis				
Capital opportunity cost (rate)	11%			
Net present value	9.375.892			
Internal Profitability (Rate)	-------			
Payback Period	Nº Years:	Less than 1	Nº Months:	------

Ratios					
	Year 1	Year 2	Year 3	Year 4	Year 5
Return on sales	18,7%	19,8%	20,7%	21,5%	22,6%
Return on assets	38,6%	36,3%	33,5%	27,8%	24,7%
Financial autonomy	38,8%	59,6%	70,3%	78,5%	83,5%
Break even point (Euros)	707.849	853.868	859.546	664.901	609.625

Assumptions					
Go to Original web version	Year 1	Year 2	Year 3	Year 4	Year 5
Growth Rate of Sales Quantities					
Products					
OmniFlow 6m	-----	50,0%	50,0%	10,0%	10,0%
OmniFlow 10m	-----	40,0%	40,0%	8,0%	8,0%
OmnFlow Costumed	-----	30,0%	20,0%	4,0%	4,0%
Goods					
Good A	-----	0,0%	0,0%	0,0%	0,0%
Good B	-----	0,0%	0,0%	0,0%	0,0%
Good C	-----	0,0%	0,0%	0,0%	0,0%
Services					
Inspection	-----	0,0%	0,0%	0,0%	100,0%
Upgrading	-----	0,0%	0,0%	100,0%	50,0%
Repairs	-----	0,0%	0,0%	8,0%	8,0%
Growth Rate of Sales Prices					
Products					
OmniFlow 6m	-----	2,5%	2,0%	1,5%	3,0%
OmniFlow 10m	-----	2,5%	2,0%	1,5%	3,0%
OmnFlow Costumed	-----	4,0%	2,0%	1,5%	3,0%
Goods					
Good A	-----	0,0%	0,0%	0,0%	0,0%
Good B	-----	0,0%	0,0%	0,0%	0,0%
Good C	-----	0,0%	0,0%	0,0%	0,0%
Services					
Inspection	-----	0,0%	0,0%	3,0%	3,0%
Upgrading	-----	0,0%	0,0%	3,0%	3,0%
Repairs	-----	0,0%	0,0%	3,0%	3,0%
Growth Rate of Puchase Quantities					
Raw materials					
Resin Epoxy/Polyester	-----	44,0%	42,0%	9,0%	9,0%
Fiber carbon/glass	-----	44,0%	42,0%	9,0%	9,0%
Generators		44,0%	42,0%	9,0%	9,0%
Invertors		44,0%	42,0%	9,0%	9,0%
Fixation material		44,0%	42,0%	9,0%	9,0%
Goods					
Good A	-----	0,0%	0,0%	0,0%	0,0%
Good B	-----	0,0%	0,0%	0,0%	0,0%
Good C		0,0%	0,0%	0,0%	0,0%
Services					
Inspection		0,0%	0,0%	0,0%	100,0%
Upgrading		0,0%	0,0%	100,0%	50,0%
Repairs		0,0%	0,0%	8,0%	8,0%
Growth Rate of Puchase Prices					
Raw materials					
Resin Epoxy/Polyester	-----	1,0%	1,5%	1,5%	2,0%
Fiber carbon/glass	-----	1,0%	1,5%	1,5%	2,0%
Generators		1,0%	1,5%	1,5%	2,0%
Invertors		1,0%	1,5%	1,5%	2,0%
Fixation material		1,0%	1,5%	1,5%	2,0%
Goods					
Good A	-----	0,0%	0,0%	0,0%	0,0%
Good B	-----	0,0%	0,0%	0,0%	0,0%
Good C	-----	0,0%	0,0%	0,0%	0,0%
Growth Rate of Outsourced Services (except last 3 ones)	-----	2,0%	2,0%	2,0%	2,0%
Salaries Growth Rate	-----	-----	-----	-----	-----
Management	-----	1,5%	2,0%	2,0%	2,5%
R&D	-----	1,5%	2,0%	2,0%	2,5%
Commercial	-----	1,5%	2,0%	2,0%	2,5%
Site supervision	-----	1,5%	2,0%	2,0%	2,5%
Technical	-----	1,5%	2,0%	2,0%	2,5%
Social Welfare Rate	25,75%	25,75%	25,75%	25,75%	25,75%
Average Payment Time in days (0-360) for inventories	30	30	30	30	30
Average Payment Time in days (0-360) for outsourced services	30	30	30	30	30
Average Collection Time in days (0-360)	60	60	60	60	60
Average Inventory Rotation in days	0	0	0	0	0
VAT on Purchase of Inventories	21,0%	21,0%	21,0%	21,0%	21,0%
VAT on Purchase of Outsourced Services	21,0%	21,0%	21,0%	21,0%	21,0%
VAT on Sales of Products, Goods and Services	21,0%	21,0%	21,0%	21,0%	21,0%
VAT Difference	0	0	0	0	0
Income tax rate	27,5%	27,5%	27,5%	27,5%	27,5%
Provision For Bad Debts (% of sales)	2,5%	2,5%	2,5%	2,5%	2,5%

Sales of goods and services *Un: Eur*

Go to Original web version	Year 1													Year 2	Year 3	Year 4	Year 5
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total				
Sales																	
Products																	
Quantities																	
OmniFlow 6m	11	11	11	11	11	11	11	11	11	11	11	11	132	198	297	327	359
OmniFlow 10m	5	5	5	5	5	5	5	5	5	5	5	5	60	84	118	127	137
OmnFlow Costumized	4	4	4	4	4	4	4	4	4	4	4	4	48	62	75	78	81
Unit Sales Price																	
OmniFlow 6m	23750,32	23750,3	23750,3	23750,3	23750,3	23750,3	23750,3	23750,3	23750,3	23750,3	23750,3	23750,3	----	24.344,1	24.831,0	25.203,4	25.959,5
OmniFlow 10m	26107,94	26107,9	26107,9	26107,9	26107,9	26107,9	26107,9	26107,9	26107,9	26107,9	26107,9	26107,9	----	26.760,6	27.295,9	27.705,3	28.536,4
OmnFlow Costumized	30815,32	30815,3	30815,3	30815,3	30815,3	30815,3	30815,3	30815,3	30815,3	30815,3	30815,3	30815,3	----	32.047,9	32.688,9	33.179,2	34.174,6
Product Sales																	
OmniFlow 6m	261254	261254	261254	261254	261254	261254	261254	261254	261254	261254	261254	261254	3.135.043	4.820.128	7.374.796	8.233.959	9.329.076
OmniFlow 10m	130540	130540	130540	130540	130540	130540	130540	130540	130540	130540	130540	130540	1.566.476	2.247.894	3.209.992	3.518.793	3.914.306
OmnFlow Costumized	123261	123261	123261	123261	123261	123261	123261	123261	123261	123261	123261	123261	1.479.135	1.999.791	2.447.744	2.583.839	2.767.808
Sub-total	**515055**	**515055**	**515055**	**515055**	**515055**	**515055**	**515055**	**515055**	**515055**	**515055**	**515055**	**515055**	**6.180.654**	**9.067.813**	**13.032.532**	**14.336.592**	**16.011.190**
Goods																	
Quantities																	
Goods A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goods B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goods C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit Sales Price																	
Goods A	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	----	0,0	0,0	0,0	0,0
Goods B	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	----	0,0	0,0	0,0	0,0
Goods C	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	----	0,0	0,0	0,0	0,0
Goods sales																	
Goods A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goods B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goods C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total Sales of Goods and Proc	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**6.180.654**	**9.067.813**	**13.032.532**	**14.336.592**	**16.011.190**
Sales of Services																	
Quantities																	
Inspection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240
Upgrading	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240	584
Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	40
Unit Sales Price																	
Inspection	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	----	0,0	0,0	0,0	75,0
Upgrading	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	----	0,0	0,0	500,0	515,0
Repairs	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	----	0,0	0,0	300,0	309,0
Service Sales																	
Inspection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Upgrading	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.000
Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120.000	300.966
Total Service Sales	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**120.000**	**318.966**
Total	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**515.055**	**6.180.654**	**9.067.813**	**13.032.532**	**14.456.592**	**16.330.156**

Cost of Goods Sold And Raw Materials *Un: Eur*

Go to Original web version	Year 1													Year 2	Year 3	Year 4	Year 5
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total				
Raw Materials																	
Quantities																	
Resin Epoxy/Polyester	20	20	20	20	20	20	20	20	20	20	20	20	240	346	491	535	583
Fiber carbon/glass	20	20	20	20	20	20	20	20	20	20	20	20	240	346	491	535	583
Generators	20	20	20	20	20	20	20	20	20	20	20	20	240	346	491	535	583
Invertors	20	20	20	20	20	20	20	20	20	20	20	20	240	346	491	535	583
Fixation material	20	20	20	20	20	20	20	20	20	20	20	20	240	346	491	535	583
Unit Purchase Price																	
Resin Epoxy/Polyester	3666,7	3666,7	3666,7	3666,7	3666,7	3666,7	3666,7	3666,7	3666,7	3666,7	3666,7	3666,7	----	3.703,3	3.758,9	3.815,3	3.891,6
Fiber carbon/glass	2566,7	2566,7	2566,7	2566,7	2566,7	2566,7	2566,7	2566,7	2566,7	2566,7	2566,7	2566,7	----	2.592,3	2.631,2	2.670,7	2.724,1
Generators	3500,0	3500,0	3500,0	3500,0	3500,0	3500,0	3500,0	3500,0	3500,0	3500,0	3500,0	3500,0		3.535,0	3.588,0	3.641,8	3.714,7
Invertors	7020,0	7020,0	7020,0	7020,0	7020,0	7020,0	7020,0	7020,0	7020,0	7020,0	7020,0	7020,0		7.020,0	7.020,0	7.020,0	7.020,0
Fixation material	366,7	366,7	366,7	366,7	366,7	366,7	366,7	366,7	366,7	366,7	366,7	366,7		370,3	375,9	381,5	389,2
Purchase cost																	
Resin Epoxy/Polyester	73.333	73.333	73.333	73.333	73.333	73.333	73.333	73.333	73.333	73.333	73.333	73.333	880.001	1.279.873	1.844.681	2.040.863	2.269.032
Fiber carbon/glass	51.333	51.333	51.333	51.333	51.333	51.333	51.333	51.333	51.333	51.333	51.333	51.333	616.001	895.912	1.291.277	1.428.605	1.588.323
Generators	70.000	70.000	70.000	70.000	70.000	70.000	70.000	70.000	70.000	70.000	70.000	70.000	840.000	1.221.696	1.760.830	1.948.095	2.165.892
Invertors	140.400	140.400	140.400	140.400	140.400	140.400	140.400	140.400	140.400	140.400	140.400	140.400	1.684.800	2.426.112	3.445.079	3.755.136	4.093.098
Fixation material	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	88.001	127.988	184.470	204.088	226.905
Sub-total	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**4.108.802**	**5.951.581**	**8.526.338**	**9.376.787**	**10.343.249**
Goods																	
Quantities																	
Goods A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goods B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goods C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unit Purchase Price																	
Goods A	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	----	0,0	0,0	0,0	0,0
Goods B	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	----	0,0	0,0	0,0	0,0
Goods C	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	----	0,0	0,0	0,0	0,0
Purchase cost																	
Goods A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goods B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goods C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**342.400**	**4.108.802**	**5.951.581**	**8.526.338**	**9.376.787**	**10.343.249**

Outsourced Supplies and Services																	Un: Eur
	Year 1													Year 2	Year 3	Year 4	Year 5
Go to Original web version	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total				
Energy	500	500	500	500	500	500	500	500	500	500	500	500	6.000	6.120	6.242	6.367	6.495
Water	50	50	50	50	50	50	50	50	50	50	50	50	600	612	624	637	649
Rentals	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	24.000	24.480	24.970	25.469	25.978
Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Headquarters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insurance (liability)	935,94	0	0	930,59	0	0	930,59	0	0	930,59	0	0	3.728	3.802	3.878	3.956	4.035
Fuel	150	150	150	150	150	150	150	150	150	150	150	150	1.800	1.836	1.873	1.910	1.948
Communications	150	150	150	150	150	150	150	150	150	150	150	150	1.800	1.836	1.873	1.910	1.948
Representation costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Travelling, board and lodging	50	50	50	50	50	50	50	50	50	50	50	50	600	612	624	637	649
International partnership	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Royalties	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tools and Consumables	50	50	50	50	50	50	50	50	50	50	50	50	600	612	624	637	649
Technical publications	15	15	15	15	15	15	15	15	15	15	15	15	180	184	187	191	195
Office material	30	30	30	30	30	30	30	30	30	30	30	30	360	367	375	382	390
Legal expenses	250	250	250	250	250	250	250	250	250	250	250	250	3.000	3.060	3.121	3.184	3.247
Cleaning	125	125	125	125	125	125	125	125	125	125	125	125	1.500	1.530	1.561	1.592	1.624
Security Costs	60	60	60	60	60	60	60	60	60	60	60	60	720	734	749	764	779
Inspection, Upgrading and Repair of Equipn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30000	79742
Equipment transportation costs	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	30.000	43050	61185	66448	72191
Specialised Works	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chartered Accountant Costs	150	150	150	150	150	150	150	150	150	150	150	150	1.800	1.836	1.873	1.910	1.948
Other Outsourced Services - salespeople	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Comissions Paid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-contracts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Advertising costs	2000	1000	1000	1000	1000	1000	750	750	750	750	750	750	11500	11500	11500	11500	11500
Total	**9016**	**7080**	**7080**	**8011**	**7080**	**7080**	**7761**	**6830**	**6830**	**7761**	**6830**	**6830**	**88188**	**102.171**	**121.259**	**157.493**	**213.969**

Gross salaries

Go to Original web versio	Month 1			Month 2			Month 3			Month 4			Month 5			Month 6			Month 7			Month 8		
	Hc.	MGS	Total	Hc.	MGS	Total	Hc.	MGS	Total	Hc.	MGS	Total	Hc.	MGS	Total	Hc.	MGS	Total	Hc.	MGS	Total	Hc.	MGS	Total
Management	1	1.100	1.100	0	1.100	0	0	1.100	0	0	1.100	0	0	1.100	0	0	1.100	0	0	1.100	0	0	1.100	0
R&D	3	1.200	3.600	0	1.200	0	0	1.200	0	0	1.200	0	0	1.200	0	0	1.200	0	0	1.200	0	0	1.200	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site supervision	1	800	800	0	800	0	0	800	0	0	800	0	0	800	0	0	800	0	0	800	0	0	800	0
Technical	1	800	800	0	800	0	0	800	0	0	800	0	0	800	0	0	800	0	0	800	0	0	800	0
Total	**6**	**3.900**	**6.300**	**0**	**3.900**	**0**	**0**	**3.900**	**0**	**0**	**3.900**	**0**	**0**	**3.900**	**0**	**0**	**3.900**	**0**	**0**	**3.900**	**0**	**0**	**3.900**	**0**

	Month 9			Month 10			Month 11			Month 12			Year 2			Year 3			Year 4			Year 5		
	Hc.	MGS	Total	Hc.	MGS	Total	Hc.	MGS	Total	Hc.	MGS	Total	Hc.	RB	Total	Hc.	RB	Total	Hc.	RB	Total	Hc.	RB	Total
Management	0	1.100	0	0	1.100	0	0	1.100	0	0	1.100	0	0	13.200	0	0	13.200	0	0	13.200	0	1	13.200	13.200
R&D	0	1.200	0	0	1.200	0	0	1.200	0	0	1.200	0	0	14.400	0	0	14.400	0	1	14.400	14.400	0	14.400	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site supervision	0	800	0	0	800	0	0	800	0	0	800	0	0	9.600	0	0	9.600	0	0	9.600	0	0	9.600	0
Technical	0	800	0	0	800	0	0	800	0	0	800	0	1	9.600	9.600	1	9.600	9.600	0	9.600	0	0	9.600	0
Total	**0**	**3.900**	**0**	**0**	**3.900**	**0**	**0**	**3.900**	**0**	**0**	**3.900**	**0**	**1**	**46.800**	**9.600**	**1**	**46.800**	**9.600**	**1**	**46.800**	**14.400**	**1**	**46.800**	**13.200**

Remarks : The column "HC." is filled in only when a new worker is employed

The gross salary is per head. From the second year onwards is per head and per year.

Legend : Hc. = Headcount; MGS = Monthly Gross Salary; AGS = Annual Gross Salary

Labour costs

Go to Original web versio	Month 1			Month 2			Month 3			Month 4			Month 5			Month 6			Month 7			Month 8		
	MGS	SWC	Total	MGS	SWC	Total	MGS	SWC	Total	MGS	SWC	Total	MGS	SWC	Total	MGS	SWC	Total	MGS	SWC	Total	MGS	SWC	Total
Management	1.100	283	1.383	1.100	283	1.383	1.100	283	1.383	1.100	283	1.383	1.100	283	1.383	2.200	567	2.767	1.100	283	1.383	1.100	283	1.383
R&D	3.600	927	4.527	3.600	927	4.527	3.600	927	4.527	3.600	927	4.527	3.600	927	4.527	7.200	1.854	9.054	3.600	927	4.527	3.600	927	4.527
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site supervision	800	206	1.006	800	206	1.006	800	206	1.006	800	206	1.006	800	206	1.006	1.600	412	2.012	800	206	1.006	800	206	1.006
Technical	800	206	1.006	800	206	1.006	800	206	1.006	800	206	1.006	800	206	1.006	1.600	412	2.012	800	206	1.006	800	206	1.006
Total	**6.300**	**1.622**	**7.922**	**6.300**	**1.622**	**7.922**	**6.300**	**1.622**	**7.922**	**6.300**	**1.622**	**7.922**	**6.300**	**1.622**	**7.922**	**12.600**	**3.245**	**15.845**	**6.300**	**1.622**	**7.922**	**6.300**	**1.622**	**7.922**

	Month 9			Month 10			Month 11			Month 12			Total Year 1			Year 2			Year 3			Year 4			Year 5		
	MGS	SWC	Total	MGS	SWC	Total	MGS	SWC	Total	MGS	SWC	Total	RB	SWC	Total	RB	SWC	Total	RB	SWC	Total	RB	SWC	Total	RB	SWC	Total
Management	1.100	283	1.383	1.100	283	1.383	2.200	567	2.767	1.100	283	1.383	15.400	3.966	19.366	15.631	4.025	19.656	15.944	4.105	20.049	16.262	4.188	20.450	29.869	7.691	37.560
R&D	3.600	927	4.527	3.600	927	4.527	7.200	1.854	9.054	3.600	927	4.527	50.400	12.978	63.378	51.156	13.173	64.329	52.179	13.436	65.615	53.223	13.705	66.928	54.553	14.047	68.601
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site supervision	800	206	1.006	800	206	1.006	1.600	412	2.012	800	206	1.006	11.200	2.884	14.084	11.368	2.927	14.295	11.595	2.986	14.581	11.827	3.046	14.873	12.123	3.122	15.245
Technical	800	206	1.006	800	206	1.006	1.600	412	2.012	800	206	1.006	11.200	2.884	14.084	11.368	2.927	14.295	11.595	2.986	14.581	11.827	3.046	14.873	12.123	3.122	15.245
Total	**6.300**	**1.622**	**7.922**	**6.300**	**1.622**	**7.922**	**12.600**	**3.245**	**15.845**	**6.300**	**1.622**	**7.922**	**88.200**	**22.712**	**110.912**	**89.523**	**23.052**	**112.575**	**91.313**	**23.513**	**114.827**	**93.140**	**23.983**	**117.123**	**108.668**	**27.982**	**136.650**

Legend : AGS = Annual Gross Salary; SWC = Social Welfare Costs; MGS = Monthly Gross Salary

Auxiliary Calculations *Un: Eur*

Go to Original web version	Year 1													Year 2	Year 3	Year 4	Year 5
	1	2	3	4	5	6	7	8	9	10	11	12	Total				
Inventories (excl. VAT)																	
Raw materials																	
At the beginning of period	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purchases	342.400	342.400	342.400	342.400	342.400	342.400	342.400	342.400	342.400	342.400	342.400	342.400	4.108.802	5.951.581	8.526.338	9.376.787	10.343.249
Consumption	342.400	342.400	342.400	342.400	342.400	342.400	342.400	342.400	342.400	342.400	342.400	342.400	4.108.802	5.951.581	8.526.338	9.376.787	10.343.249
At the end of the period	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goods																	
At the beginning of period	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumption	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
At the end of the period	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suppliers (of Inventories)																	
Inventory at the end of the period (raw mater	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inventory at the end of the period (goods)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Payments of purchases during the period	0	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	4.557.347	7.015.600	10.057.247	11.260.158	12.417.880
Suppliers account at beginning of period	0	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	0	414.304	600.118	859.739	945.493
Suppliers account at end of period	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	600.118	859.739	945.493	1.042.944
Suppliers (of Outsorced Services)																	
Suppliers account at beginning of period	0	10.909	8.567	8.567	9.693	8.567	8.567	9.390	8.264	8.264	9.390	8.264	0	8.264	10.302	12.227	15.881
Purchases of outsourced services	10.909	8.567	8.567	9.693	8.567	8.567	9.390	8.264	8.264	9.390	8.264	8.264	106.707	123.627	146.723	190.567	258.902
Suppliers account at end of period	10.909	8.567	8.567	9.693	8.567	8.567	9.390	8.264	8.264	9.390	8.264	8.264	8.264	10.302	12.227	15.881	21.575
Payment of outsourced services during the p	0	10.909	8.567	8.567	9.693	8.567	8.567	9.390	8.264	8.264	9.390	8.264	98.443	121.589	144.799	186.913	253.208
Receivables																	
Receivables at the beginning of the period	0	623.216	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	0	1.246.432	1.828.676	2.628.227	2.915.413
Sales of products, goods and services	623.216	623.216	623.216	623.216	623.216	623.216	623.216	623.216	623.216	623.216	623.216	623.216	7.478.592	10.972.053	15.769.364	17.492.476	19.759.489
Receivables at the end of the period	623.216	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.246.432	1.828.676	2.628.227	2.915.413	3.293.248
Collection during the period	0	0	623.216	623.216	623.216	623.216	623.216	623.216	623.216	623.216	623.216	623.216	6.232.160	10.389.810	14.969.812	17.205.290	19.381.653
State (VAT)																	
Deductible VAT	73.797	73.391	73.391	73.586	73.391	73.391	73.534	73.338	73.338	73.534	73.338	73.338	881.368	1.271.288	1.815.995	2.002.199	2.217.016
Collected VAT	108.161	108.161	108.161	108.161	108.161	108.161	108.161	108.161	108.161	108.161	108.161	108.161	1.297.937	1.904.241	2.736.832	3.035.884	3.429.333
VAT to be paid/recovered	34.364	34.771	34.771	34.575	34.771	34.771	34.628	34.823	34.823	34.628	34.823	34.823	416.569	632.953	920.836	1.033.685	1.212.317
VAT final balance	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	69.646	369	537	603	707
VAT paid/recovered in the period	-----	-----	34.364	34.771	34.771	34.575	34.771	34.771	34.628	34.823	34.823	34.628	346.923	702.230	920.669	1.033.620	1.212.213
Salaries																	
Salaries paid during the period	7.922	7.922	7.922	7.922	7.922	15.845	7.922	7.922	7.922	7.922	15.845	7.922	110.912	112.575	114.827	117.123	136.650
Income tax																	
Net earnings before tax	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1.590.930	2.481.770	3.727.499	4.278.721	5.081.880
Income tax on current year earnings	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	437.506	682.487	1.025.062	1.176.648	1.397.517
Payment of income tax in the year	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	437.506	682.487	1.025.062	1.176.648

Investment Plan

Go to Original web version	Year 1													Year 2	Year 3	Year 4	Year 5
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 1	Month 11	Month 12	Total				
Tangible Fixed Assets																	
1) Land and Preparatory Works	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2) Buildings and Other Constructions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3) Equipment	121.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.580	1.580	140.960	0	80.000	0	0
. Production Equipment	120.000	0	0	0	0	0	0	0	0	0	0	0	120.000	0	80.000	0	0
- Hardware	20.000	0	0	0	0	0	0	0	0	0	0	0	20.000	0	0	0	0
SCE System	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CSWO System	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- Others	100.000	0	0	0	0	0	0	0	0	0	0	0	100.000	0	0	0	0
. Non Productive Equipment	1.700	1.700	1.700	1.700	1.700	1.700	1.700	1.700	1.700	1.700	1.500	1.500	20.000	5.000	5.000	5.000	5.000
- Ambient/Quality/Training (ISO 9001)	1.700	1.700	1.700	1.700	1.700	1.700	1.700	1.700	1.700	1.700	1.500	1.500	20.000	5.000	5.000	5.000	5.000
- Hardware (protective tools)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. Social	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
. Furniture and Administrative eq.	80	80	80	80	80	80	80	80	80	80	80	80	960	0	0	0	0
4) Tools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5) Transport and Handling eq.	10.000	0	0	0	0	0	0	0	0	0	0	0	10.000	0	10.000	0	0
6) Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Tangible Fixed Assets	**131.780**	**1.780**	**1.780**	**1.780**	**1.780**	**1.780**	**1.780**	**1.780**	**1.780**	**1.780**	**1.580**	**1.580**	**150.960**	**0**	**90.000**	**0**	**0**
Intangible Assets																	
1) Incorporation Expenses	2000	0	0	0	0	0	0	0	0	0	0	0	2.000	0	0	0	0
2) Studies and Analysis	2500	0	0	0	0	0	0	0	0	0	0	0	2.500	2500	2500	2500	2500
3) Intellectual Property Rights	10000	0	0	0	0	0	0	0	0	0	0	0	10.000	0	0	0	0
4) Technical Assistance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5) Software	25000	0	0	0	0	0	0	0	0	0	0	0	25.000	0	0	0	0
6) Training	150	0	0	0	0	300	0	0	0	0	0	0	450	600	1000	1200	1500
7) Research and Development	0	0	0	0	0	0	0	0	0	0	0	0	0	4000	20000	5000	5000
8) Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Intangible Assets	**39650**	**0**	**0**	**0**	**0**	**300**	**0**	**0**	**0**	**0**	**0**	**0**	**39.950**	**7.100**	**23.500**	**8.700**	**9.000**
Tangible Fixed Assets													**150.960**	**0**	**90.000**	**0**	**0**
Accumulated Tangible Fixed Assets													**150.960**	**150.960**	**240.960**	**240.960**	**240.960**
Intangible Assets													**39.950**	**7.100**	**23.500**	**8.700**	**9.000**
Accumulated Intangible Assets													**39.950**	**47.050**	**70.550**	**79.250**	**88.250**

Depreciation and Provisions *Un: Eur*

Go to Original web version	%	Year 1	Year 2	Year 3	Year 4	Year 5
Tangible Fixed Assets						
1) Land and preparatory works	0,00%	0	0	0	0	0
2) Buildings and other constructions	0,00%	0	0	0	0	0
3) Production Equipment	12,50%	17.620	17.620	27.620	27.620	27.620
4) Tools	50,00%	0	0	0	0	0
5) Transport and handling equipment	0,00%	0	0	0	0	0
6) Others	0,00%	0	0	0	0	0
Sub-total		**17.620**	**17.620**	**27.620**	**27.620**	**27.620**
Intangible Assets						
1) Incorporation expenses	100,00%	2.000	0	0	0	0
2) Studies and analysis	100,00%	2.500	2.500	2.500	2.500	2.500
3) Intellectual property rights	100,00%	10.000	10.000	10.000	0	0
4) Technical assistance	100,00%	0	0	0	0	0
5) Software	33,33%	8.333	8.333	8.333	0	0
6) Training	100,00%	450	600	1.000	1.200	1.500
7) Research and Development	100,00%	0	4.000	20.000	5.000	5.000
8) Others	100,00%	0	0	0	0	0
Sub-total		**23.283**	**25.433**	**41.833**	**8.700**	**9.000**
Total Depreciation		**40.903**	**43.053**	**69.453**	**36.320**	**36.620**
Anual Depreciation		**40.903**	**43.053**	**69.453**	**36.320**	**36.620**
Accumulated Depreciation		**40.903**	**83.957**	**153.410**	**189.730**	**226.350**
Provisions						
Provisions for bad debts		186.965	274.301	394.234	437.312	493.987
Accumulated provisions for bad debts		186.965	461.266	855.500	1.292.812	1.786.799

Financing Plan *Un: Eur*

Go to Original web version	Year 1													Year 2	Year 3	Year 4	Year 5
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total				
Own Capital																	
Share Capital	5.000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.000	-----	-----	-----	-----
Capital Increases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	**5.000**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5.000**	**0**	**0**	**0**	**0**
Medium/Long term Payables																	
Bank Loans	900.000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	900.000	0	0	0	0
Shareholders Loans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	**900.000**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**900.000**	**0**	**0**	**0**	**0**
Short term payables																	
Bank Loans	0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0	0	0	0	0
Shareholders Loans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total Financing	**905.000**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**905.000**	**0**	**0**	**0**	**0**

Short term Bank Loans

Term	1	Year

	Year 1	Year 2	Year 3	Year 4	Year 5
Loan amount	0	0	0	0	0
Annual interest rate	0,0%	0,0%	0,0%	0,0%	0,0%

Medium and Long Term Bank Loans

Utilisation period	1	semester
Deferral period	1	semester
Reimbursement period	8	semesters
Total term	10	semesters

	Year 1	Year 2	Year 3	Year 4	Year 5
Loan Amount	900.000	0	0	0	0
Annual Interest rate	11,0%	11,0%	11,0%	11,0%	11,0%
Semester instalment	142.078	0	0	0	0

Medium and Long term shareholders loans

	Year 1	Year 2	Year 3	Year 4	Year 5
Shareholders Loans	0	0	0	0	0
Reimbursement of Loans	0	0	0	0	0
Debts of the year	0	0	0	0	0
Accumalated debt	0	0	0	0	0

Short term shareholders loans

	Year 1	Year 2	Year 3	Year 4	Year 5
Shareholders Loans	0	0	0	0	0
Reimbursement of Loans	0	0	0	0	0
Debts of the year	0	0	0	0	0
Accumalated debt	0	0	0	0	0

Short term bank loans

Summary

	Year 1	Year 2	Year 3	Year 4	Year 5
Loan payments	0	0	0	0	0
Interest payments	0	0	0	0	0
Stamp tax payment	0	0	0	0	0
Debt at year end	0	0	0	0	0
Total payments	**0**	**0**	**0**	**0**	**0**

Loan Year 1	Interest	Payment	Stamp tax	Total	Year end debt
Loan Year 1	0	0	0	0	0
Loan Year 2	0	0	0	0	0
Loan Year 3	0	0	0	0	0
Loan Year 4	0	0	0	0	0
Loan Year 5	0	0	0	0	0

Medium and Long term Bank Loans

Summary

	Year 1	Year 2	Year 3	Year 4	Year 5
Loan payments	0	190.247	211.750	235.683	262.321
Interest payments	49.500	93.908	72.406	48.473	21.835
Stamp tax payment	4.455	8.452	6.517	4.363	1.965
Debt at year end	900.000	709.753	498.003	262.321	0
Total payments	**53.955**	**292.607**	**290.672**	**288.518**	**286.120**

Loan Year 1	Interest	Payment	Stamp tax	Instalment	End period debt
1º Semester (Year 1)	-----				900.000
2º Semester (Year 1)	49.500		4.455	53.955	900.000
3º Semester (Year 2)	49.500	92.578	4.455	146.533	807.422
4º Semester (Year 2)	44.408	97.669	3.997	146.074	709.753
5º Semester (Year 3)	39.036	103.041	3.513	145.591	606.712
6º Semester (Year 3)	33.369	108.708	3.003	145.081	498.003
7º Semester (Year 4)	27.390	114.687	2.465	144.543	383.316
8º Semester (Year 4)	21.082	120.995	1.897	143.975	262.321
9º Semester (Year 5)	14.428	127.650	1.298	143.376	134.671
10º Semester (Year 5)	7.407	134.671	667	142.744	0
Total	**286.121**	**900.000**	**25.751**	**1.211.872**	

Balance Sheet *Un: Eur*

Go to Original web version	Year 1	Year 2	Year 3	Year 4	Year 5		Year 1	Year 2	Year 3	Year 4	Year 5
ASSETS						**EQUITY**					
1. GROSS NET ASSETS						9. Share capital	5.000	5.000	5.000	5.000	5.000
Financial assets	0	0	0	0	0	10. Reserves	0	0	0	0	0
Tangible assets	150.960	150.960	240.960	240.960	240.960	11. Retained profits	0	1.153.424	2.952.707	5.655.144	8.757.217
Intangible assets	39.950	47.050	70.550	79.250	88.250	12. Net profit	1.153.424	1.799.283	2.702.437	3.102.073	3.684.363
Fixed assets in progress	0	0	0	0	0	**13. Total Equity**	**1.158.424**	**2.957.707**	**5.660.144**	**8.762.217**	**12.446.581**
2. PROVISIONS & DEPRECIATIONS	-40.903	-83.957	-153.410	-189.730	-226.350	(13=9+10+11+12)					
NET FIXED ASSETS	**150.007**	**114.053**	**158.100**	**130.480**	**102.860**						
3. CURRENT ASSETS						**LIABILITIES**					
Fin. & Semi-Fin Goods	0	0	0	0	0	14.MED.& LONG TERM LIABILITIES					
Raw materials	0	0	0	0	0	Bank loans	900.000	709.753	498.003	262.321	0
Products & work in progress	0	0	0	0	0	Shareholders loans	0	0	0	0	0
	0	**0**	**0**	**0**	**0**	Other loans	0	0	0	0	0
							900.000	**709.753**	**498.003**	**262.321**	**0**
4. ACC. RECEIVABLES M/L TERM	**0**	**0**	**0**	**0**	**0**						
5. ACC. RECEIV. SHORT TERM						15. CURRENT LIABILITIES					
Clients	1.246.432	1.828.676	2.628.227	2.915.413	3.293.248	Bank loans	0	0	0	0	0
Taxes	0	0	0	0	0	Suppliers	414.304	600.118	859.739	945.493	1.042.944
Other receivables	0	0	0	0	0	Taxes	507.152	682.856	1.025.599	1.177.251	1.398.224
Bad debts provisions	-186.965	-461.266	-855.500	-1.292.812	-1.786.799	Shareholders loans	0	0	0	0	0
	1.059.467	**1.367.409**	**1.772.727**	**1.622.601**	**1.506.449**	Other creditors	8.264	10.302	12.227	15.881	21.575
							929.720	**1.293.276**	**1.897.565**	**2.138.625**	**2.462.744**
6. CASH AND BANKS											
Cash	1.778.671	3.479.274	6.124.886	9.410.082	13.300.016						
Bank deposits	0	0	0	0	0	16. ACCRUALS & Deferments					
	1.778.671	**3.479.274**	**6.124.886**	**9.410.082**	**13.300.016**	Accruals in costs	0	0	0	0	0
						Antecipated income	0	0	0	0	0
7. ACCRUALS & DEFERMENTS							**0**	**0**	**0**	**0**	**0**
Accruals in income	0	0	0	0	0						
Deferred Costs	0	0	0	0	0	**17. Total Liabilities**	**1.829.720**	**2.003.029**	**2.395.569**	**2.400.945**	**2.462.744**
	0	**0**	**0**	**0**	**0**	(17=14+15+16)					
8. Total Assets	**2.988.144**	**4.960.736**	**8.055.713**	**11.163.163**	**14.909.324**	**18. Total Liabilities + Equity**	**2.988.144**	**4.960.736**	**8.055.713**	**11.163.163**	**14.909.324**
(8=1+2+3+4+5+6+7)						(18=13+17)					
Verifation (Assets - Equity - Liabilities) =	0	0	0	0	0						

Income Statement					*Un: Eur*
Go to Original web version	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
COSTS					
COGS	4.108.802	5.951.581	8.526.338	9.376.787	10.343.249
Outsourced services	88.188	102.171	121.259	157.493	213.969
Labor costs	110.912	112.575	114.827	117.123	136.650
Depreciation	40.903	43.053	69.453	36.320	36.620
Provisions	186.965	274.301	394.234	437.312	493.987
Sundry taxes	0	0	0	0	0
Other operational costs	0	0	0	0	0
(A)	**4.535.770**	**6.483.682**	**9.226.111**	**10.125.035**	**11.224.476**
Depre. & Prov. of Financial Investment & Apli.	0	0	0	0	0
Cash discounts conceded	0	0	0	0	0
Financial and interest charges	53.955	102.360	78.922	52.835	23.800
(C)	**4.589.725**	**6.586.042**	**9.305.033**	**10.177.870**	**11.248.275**
Costs and extraordinary losses	0	0	0	0	0
Costs of previous years	0	0	0	0	0
(E)	**4.589.725**	**6.586.042**	**9.305.033**	**10.177.870**	**11.248.275**
Income tax	437.506	682.487	1.025.062	1.176.648	1.397.517
(G)	**5.027.230**	**7.268.529**	**10.330.095**	**11.354.518**	**12.645.793**
REVENUES					
Sales of goods and products	6.180.654	9.067.813	13.032.532	14.336.592	16.011.190
Services	0	0	0	120.000	318.966
In-house Corporate Works	0	0	0	0	0
Subsidies	0	0	0	0	0
Other revenues	0	0	0	0	0
Production variation	0	0	0	0	0
(B)	**6.180.654**	**9.067.813**	**13.032.532**	**14.456.592**	**16.330.156**
Profit/loss from exchange differences	0	0	0	0	0
Cash discount obtained	0	0	0	0	0
Other interest & Fin. Earnings	0	0	0	0	0
(D)	**6.180.654**	**9.067.813**	**13.032.532**	**14.456.592**	**16.330.156**
Extraordinary Gains & Earnings	0	0	0	0	0
Earnings from previous years	0	0	0	0	0
(F)	**6.180.654**	**9.067.813**	**13.032.532**	**14.456.592**	**16.330.156**
OPERATIONAL EARNINGS (B-A)	**1.644.885**	**2.584.130**	**3.806.421**	**4.331.557**	**5.105.680**
FINANCIAL EARNINGS (D-B)-(C-A)	**-53.955**	**-102.360**	**-78.922**	**-52.835**	**-23.800**
CURRENT EARNINGS	**1.590.930**	**2.481.770**	**3.727.499**	**4.278.721**	**5.081.880**
EARNINGS BEFORE TAXES	**1.590.930**	**2.481.770**	**3.727.499**	**4.278.721**	**5.081.880**
NET PROFIT	**1.153.424**	**1.799.283**	**2.702.437**	**3.102.073**	**3.684.363**
Vendas =	6.180.654	9.067.813	13.032.532	14.456.592	16.330.156
EBIT =	1.644.885	2.584.130	3.806.421	4.331.557	5.105.680
Margem bruta em % =	29,1%	30,2%	30,6%	31,0%	32,3%
Margem Bruta =	1.796.699	2.739.759	3.990.701	4.485.000	5.278.950
VAB (-) =	1.983.664	3.014.060	4.384.935	4.922.312	5.772.938
VAB (+) =	1.983.664	3.014.060	4.384.935	4.922.312	5.772.938
Custos fixos =	205.770	257.988	263.202	206.278	197.070
Custos variáveis =	4.383.955	6.328.054	9.041.831	9.971.592	11.051.205
Ponto crítico =	707.849	853.868	859.546	664.901	609.625
Meios líquidos libertos =	1.381.292	2.116.638	3.166.124	3.575.705	4.214.970
Margem de segurança económica =	773,2%	962,0%	1416,2%	2074,2%	2578,7%
ROper./POper. =	26,6%	28,5%	29,2%	30,0%	31,3%

Treasury budget																	Un: Eur
Go to Original web version	Year 1													Year 2	Year 3	Year 4	Year 5
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total				
Operations income																	
Sales of goods and services	0	0	623.216	623.216	623.216	623.216	623.216	623.216	623.216	623.216	623.216	623.216	6.232.160	10.389.810	14.969.812	17.205.290	19.381.653
VAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other income																	
Share capital	5.000	----	----	----	----	----	----	----	----	----	----	----	5.000	----	----	----	----
Capital increases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shareholders loans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Short term bank loans	0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0	0	0	0	0
Medium/Long term loans	900.000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	900.000	0	0	0	0
Other income	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total income	**905.000**	**0**	**623.216**	**623.216**	**623.216**	**623.216**	**623.216**	**623.216**	**623.216**	**623.216**	**623.216**	**623.216**	**7.137.160**	**10.389.810**	**14.969.812**	**17.205.290**	**19.381.653**
Operations disbursements																	
Suppliers	0	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	414.304	4.557.347	7.015.600	10.057.247	11.260.158	12.417.880
Personnel	7.922	7.922	7.922	7.922	7.922	15.845	7.922	7.922	7.922	7.922	15.845	7.922	110.912	112.575	114.827	117.123	136.650
Other creditors (incl. outsourcing)	0	10.909	8.567	8.567	9.693	8.567	8.567	9.390	8.264	8.264	9.390	8.264	98.443	121.589	144.799	186.913	253.208
Income Tax	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0	437.506	682.487	1.025.062	1.176.648
VAT	-----	-----	34.364	34.771	34.771	34.575	34.771	34.771	34.628	34.823	34.823	34.628	346.923	702.230	920.669	1.033.620	1.212.213
Other disbursements																	
Investment in fixed assets	171.430	1.780	1.780	1.780	1.780	2.080	1.780	1.780	1.780	1.780	1.580	1.580	190.910	7.100	113.500	8.700	9.000
Payment of short term bank loans	----	----	----	----	----	----	----	----	----	----	----	0	0	0	0	0	0
Payment of medium/long term bank loans	----	----	----	----	----	----	----	----	----	----	----	53.955	53.955	292.607	290.672	288.518	286.120
Payment of medium/long term shareholders loans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Payment of short term shareholders loans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Payment of other Medium/Long term payables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Payment of other short term payables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total disbyrsements	**179.352**	**434.916**	**466.937**	**467.344**	**468.470**	**475.371**	**467.344**	**468.167**	**466.898**	**467.094**	**475.942**	**520.653**	**5.358.489**	**8.689.206**	**12.324.200**	**13.920.094**	**15.491.720**
Cashflow	**725.648**	**-434.916**	**156.279**	**155.872**	**154.746**	**147.845**	**155.872**	**155.049**	**156.318**	**156.122**	**147.274**	**102.563**	**1.778.671**	**1.700.603**	**2.645.612**	**3.285.196**	**3.889.934**
Cash at beginning of period	**0**	**725.648**	**290.732**	**447.011**	**602.883**	**757.629**	**905.474**	**1.061.346**	**1.216.395**	**1.372.712**	**1.528.834**	**1.676.108**	**0**	**1.778.671**	**3.479.274**	**6.124.886**	**9.410.082**

Working capital

Go to Original web version	Year 1	Year 2	Year 3	Year 4	Year 5
Operations needs					
Inventories	0	0	0	0	0
Receivables	1.246.432	1.828.676	2.628.227	2.915.413	3.293.248
Others	0	0	0	0	0
Total	**1.246.432**	**1.828.676**	**2.628.227**	**2.915.413**	**3.293.248**
Operations resources					
Payables	414.304	600.118	859.739	945.493	1.042.944
Public Administration	507.152	682.856	1.025.599	1.177.251	1.398.224
Others (including outsourcing)	8.264	10.302	12.227	15.881	21.575
Total	**929.720**	**1.293.276**	**1.897.565**	**2.138.625**	**2.462.744**
Working Capital	**316.712**	**535.399**	**730.662**	**776.788**	**830.504**
Working capital variation	-	218.688	195.262	46.126	53.716

Free cash-flow

Go to Original web version	Year 1	Year 2	Year 3	Year 4	Year 5
EBIT (Earnings Before Interest and Taxes)	**1.644.885**	**2.584.130**	**3.806.421**	**4.331.557**	**5.105.680**
Depreciation	40.903	43.053	69.453	36.320	36.620
Provisions	186.965	274.301	394.234	437.312	493.987
Potencial cash flow from operations before interest and taxes	**1.872.753**	**2.901.485**	**4.270.109**	**4.805.188**	**5.636.287**
Financial earnings from operation	0	0	0	0	0
Financial costs	53.955	102.360	78.922	52.835	23.800
Income tax (IRC)	437.506	682.487	1.025.062	1.176.648	1.397.517
Net earnings	**1.153.424**	**1.799.283**	**2.702.437**	**3.102.073**	**3.684.363**
Potential Cash-Flow from operations	**1.435.247**	**2.218.998**	**3.245.046**	**3.628.540**	**4.238.770**
Investment/divestment in Working Capital	**316.712**	**218.688**	**195.262**	**46.126**	**53.716**
Operational Cash-Flow	**1.118.536**	**2.000.310**	**3.049.784**	**3.582.414**	**4.185.054**
Investment/Divestment in fixed Capital	**190.910**	**7.100**	**113.500**	**8.700**	**9.000**
Free Cash-Flow	**927.626**	**1.993.210**	**2.936.284**	**3.573.714**	**4.176.054**

Net present value

Go to Original web version	Year 1	Year 2	Year 3	Year 4	Year 5
Capital opportunity cost (rate)	11%	11%	11%	11%	11%
Discount factor	0,8993	0,8088	0,7273	0,6541	0,5882
Present value of free cash flow	834.223	1.612.026	2.135.632	2.337.532	2.456.480
Net present value	**9.375.892**				

Internal Profitability (Rate)

Go to Original web version	
Internal Rentability (Rate)	-------

Payback Period

Go to Original web version	Year 1	Year 2	Year 3	Year 4	Year 5
Present Cash-Flow	834.223	1.612.026	2.135.632	2.337.532	2.456.480
Accumulated Present Cash-Flow	834.223	2.446.249	4.581.880	6.919.412	9.375.892
Payback Period		**Nº Years:**	Less than 1	**Nº Months:**	------

Project Profitability Analysis

Go to Original web version				
Capital opportunity cost (rate)	11%			
Net present value	9.375.892			
Internal Profitability (Rate)	-------			
Payback Period	**Nº Years:**	Less than 1	**Nº Months:**	------

Ratio

Go to Original web version	Year 1	Year 2	Year 3	Year 4	Year 5
Return on equity	99,6%	60,8%	47,7%	35,4%	29,6%
Return on sales	18,7%	19,8%	20,7%	21,5%	22,6%
Return on assets	38,6%	36,3%	33,5%	27,8%	24,7%
Financial autonomy	38,8%	59,6%	70,3%	78,5%	83,5%
Indebtness capacity	61,2%	40,4%	29,7%	21,5%	16,5%
Solvability	63,3%	147,7%	236,3%	364,9%	505,4%
General liquidity	305,3%	374,8%	416,2%	515,9%	601,2%
Gross margin	29,1%	30,2%	30,6%	31,0%	32,3%
Break even point (Euros)	707.849	853.868	859.546	664.901	609.625
Economical safety margin	773,2%	962,0%	1416,2%	2074,2%	2578,7%
Average inventory turnover (days)	0	0	0	0	0
Average collection time (days)	60	60	60	60	60
Average inventories payment time (days)	30	30	30	30	30
Cash cycle (days)	30	30	30	30	30

Appendix 11

Optimistic Analisys

Income Statement					*Un: Euros*
Ir para Versão Web Original	Year 1	Year 2	Year 3	Year 4	Year 5
Costs	5.004.575	8.053.905	11.425.644	16.252.089	23.442.099
Cost of Goods Sold And Raw Materials	4.108.802	6.612.868	9.340.276	13.193.279	18.692.064
Outsourced Supplies and Services	89.388	109.395	131.897	194.161	296.626
Labour costs	110.912	112.575	114.827	117.123	136.650
Other Costs	695.474	1.219.067	1.838.644	2.747.525	4.316.759
Revenues	6.180.654	10.339.284	15.086.344	22.095.485	32.927.196
Sales of Products and Goods	6.180.654	10.339.284	15.086.344	21.975.485	32.583.510
Sales of Services	0	0	0	120.000	343.686
Other Sales	0	0	0	0	0
EBIT	1.676.133	3.254.607	5.128.164	8.112.692	13.106.691
NET PROFIT	1.176.079	2.285.379	3.660.701	5.843.396	9.485.097

Balance Sheet					*Un: Euros*
	Year 1	Year 2	Year 3	Year 4	Year 5
ASSETS	2.527.178	5.043.079	9.013.703	15.449.336	26.053.446
TOTAL ASSETS	2.527.178	5.043.079	9.013.703	15.449.336	26.053.446
Equity	1.181.079	3.466.458	7.127.158	12.970.555	22.455.651
Liabilities	1.346.099	1.576.621	1.886.545	2.478.781	3.597.795
TOTAL LIABILITIES + EQUITY	2.527.178	5.043.079	9.013.703	15.449.336	26.053.446

Investment Plan					*Un: Euros*
	Year 1	Year 2	Year 3	Year 4	Year 5
Tangible Fixed Assets	150.960	0	90.000	0	0
Intangible Assets	39.950	7.100	23.500	8.700	9.000
TOTAL INVESTMENT	190.910	7.100	113.500	8.700	9.000

Depreciation					*Un: Euros*
	Year 1	Year 2	Year 3	Year 4	Year 5
Tangible Fixed Assets	17.620	17.620	27.620	27.620	27.620
Intangible Assets	23.283	25.433	41.833	8.700	9.000
TOTAL DEPRECIATION	40.903	43.053	69.453	36.320	36.620

Financing Plan					*Un: Euros*
	Year 1	Year 2	Year 3	Year 4	Year 5
Own Capital	5.000	0	0	0	0
Medium/Long term Payables	900.000	0	0	0	0
Short term payables	0	0	0	0	0
TOTAL FINANCING	905.000	0	0	0	0

Treasury budget					*Un: Euros*
	Year 1	Year 2	Year 3	Year 4	Year 5
Total income	7.085.654	10.339.284	15.086.344	22.095.485	32.927.196
Total disboursements	4.553.967	7.580.644	10.858.040	15.190.323	21.636.921
Cashflow	2.531.688	2.758.640	4.228.305	6.905.162	11.290.274
Cash at beginning of period	0	2.531.688	5.290.327	9.518.632	16.423.794
CASH AT END OF PERIOD	2.531.688	5.290.327	9.518.632	16.423.794	27.714.069

Project Profitability Analysis				
Capital opportunity cost (rate)	11%			
Net present value	18.750.197			
Internal Profitability (Rate)	-------			
Payback Period	Nº Years:	Less than 1	Nº Months:	------

Ratios					
	Year 1	Year 2	Year 3	Year 4	Year 5
Return on sales	19,0%	22,1%	24,3%	26,4%	28,8%
Return on assets	46,5%	45,3%	40,6%	37,8%	36,4%
Financial autonomy	46,7%	68,7%	79,1%	84,0%	86,2%
Break even point (Euros)	695.749	782.180	747.444	551.385	488.628

Pessimistic Analisys

Income Statement					*Un: Euros*
Ir para Versão Web Original	Year 1	Year 2	Year 3	Year 4	Year 5
Costs	5.027.230	5.135.809	5.204.658	5.277.380	5.436.056
Cost of Goods Sold And Raw Materials	4.108.802	4.133.042	4.169.766	4.207.041	4.257.485
Outsourced Supplies and Services	88.188	89.121	90.074	121.045	158.336
Labour costs	110.912	112.575	114.827	117.123	136.650
Other Costs	719.329	801.070	829.991	832.171	883.585
Revenues	6.180.654	6.357.358	6.484.505	6.701.772	7.044.426
Sales of Products and Goods	6.180.654	6.357.358	6.484.505	6.581.772	6.779.226
Sales of Services	0	0	0	120.000	265.200
Other Sales	0	0	0	0	0
EBIT	1.644.885	1.787.255	1.844.229	2.017.515	2.242.240
NET PROFIT	1.153.424	1.221.549	1.279.847	1.424.393	1.608.369

Balance Sheet					*Un: Euros*
	Year 1	Year 2	Year 3	Year 4	Year 5
ASSETS	2.988.144	3.979.069	5.073.089	6.323.527	7.748.237
TOTAL ASSETS	2.988.144	3.979.069	5.073.089	6.323.527	7.748.237
Equity	1.158.424	2.379.973	3.659.820	5.084.213	6.692.582
Liabilities	1.829.720	1.599.096	1.413.269	1.239.314	1.055.655
TOTAL LIABILITIES + EQUITY	2.988.144	3.979.069	5.073.089	6.323.527	7.748.237

Investment Plan					*Un: Euros*
	Year 1	Year 2	Year 3	Year 4	Year 5
Tangible Fixed Assets	150.960	0	90.000	0	0
Intangible Assets	39.950	7.100	23.500	8.700	9.000
TOTAL INVESTMENT	190.910	7.100	113.500	8.700	9.000

Depreciation					*Un: Euros*
	Year 1	Year 2	Year 3	Year 4	Year 5
Tangible Fixed Assets	17.620	17.620	27.620	27.620	27.620
Intangible Assets	23.283	25.433	41.833	8.700	9.000
TOTAL DEPRECIATION	40.903	43.053	69.453	36.320	36.620

Financing Plan					*Un: Euros*
	Year 1	Year 2	Year 3	Year 4	Year 5
Own Capital	5.000	0	0	0	0
Medium/Long term Payables	900.000	0	0	0	0
Short term payables	0	0	0	0	0
TOTAL FINANCING	905.000	0	0	0	0

Treasury budget					*Un: Euros*
	Year 1	Year 2	Year 3	Year 4	Year 5
Total income	7.137.160	7.656.768	7.820.610	8.065.329	8.454.653
Total disboursements	5.358.489	6.473.215	6.600.121	6.628.359	6.858.331
Cashflow	1.778.671	1.183.553	1.220.489	1.436.970	1.596.323
Cash at beginning of period	0	1.778.671	2.962.223	4.182.712	5.619.682
CASH AT END OF PERIOD	1.778.671	2.962.223	4.182.712	5.619.682	7.216.005

Project Profitability Analysis				
Capital opportunity cost (rate)	11%			
Net present value	5.363.118			
Internal Profitability (Rate)	-------			
Payback Period	Nº Years:	Less than 1	Nº Months:	------

Ratios					
	Year 1	Year 2	Year 3	Year 4	Year 5
Return on sales	18,7%	19,2%	19,7%	21,3%	22,8%
Return on assets	38,6%	30,7%	25,2%	22,5%	20,8%
Financial autonomy	38,8%	59,8%	72,1%	80,4%	86,4%
Break even point (Euros)	707.849	844.170	841.374	636.784	574.721