BRIGHT NEW IDEAS ©

BUSINESS PLAN

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Young Americas Business Trust

Organización de los Estados Americanos
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TIC Americas
Young Entrepreneurs Talent and Innovation Competition of the Americas

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A. EXECUTIVE SUMMARY

"Bright New Ideas" (BNI) is a grassroots non-profit organization, founded to improve living conditions in the Jinotega region of Nicaragua where more than 80% of rural population do not have access to electricity. With the combination of solar-LED (Light Emitting Diode) solutions, we replace inefficient, dangerous and costly kerosene burning lamps with our proprietary solar lamp through sustainable subsidized commercial means (using a revolving fund which can ensure the future model replication in other communities). We promote LED lighting for education and health in developing and developed world. We began in 2006 at the University of Minnesota, who we continue to work with on a close basis, we have partnered with the National University of Engineering in Nicaragua and the Ministry of Energy and Mines in that country to improve and promote our lamps as a cost-effective alternative in the countryside.

In 2008 we have set-up a Nicaraguan small-scale assembly and workshop customer support system in the locality. We are well on our way of reaching our objective of producing and selling 100 solar powered lamps to be marketed to families without electricity in the surrounding countryside through December 31st, 2008. Using data obtained from this test we will expand to re-engineer lamps customized for northern Nicaragua for distribution in volumes of 1000-2000 in 2009. This alternative will create a new lighting system in the region in terms of environmental friendliness and economically solution. Our organization is committed to the delivery of goods through a positive impact in the environment. One LED lantern will give the opportunity to families to light and avoid kerosene (use and buying) which will make money saving per year of U$ 144.00 to improve living conditions. We are also pulling out dangerous fumes which clog the environment and causes different human diseases. This initiative will be a reality with the sponsorship and support from donors to help get materials and resources in our local market to start this year. The amount proposed to reach for this 2008 is U$ 5,000 American Dollars.

B. INNOVATION

Existing knowledge about solar systems and micro solar systems tells us that the market is filled with cheap low-quality goods with no support system. Thus, we will establish a long-term strategy which includes customer service, repair and warranty. These are principles that world-class businesses have been built upon, but are largely ignored in base of the pyramid businesses such as solar system sales.

Our Solar lantern is the result of the innovation and experience of the founders of BNI. It uses solar cells instead of a solar panel which reduces most of the costs in the system. The main source of lighting is a LED which can be easily found in signaling process or electronic equipment, one of their main features is the long lasting life (more than 15 years) and low energy consumption. Moreover, our product includes pulse-width modulation controlling electronics along with battery overcharge and undercharge protection, features ignored in other micro-solar products on the market today. This allows the user to easily select a bright mode that will be very bright for a couple of hours or a lower all-night mode. The product itself is robust, durable, eco-friendly, high luminous, low power consumption, low cost, and the most important it is under a demand to be used.

Our team includes Bright New Ideas certified technicians who have been taught in our solar educational training to bring future technical support and develop more lantern prototypes according the market size and demand.

C. MARKET FEASIBILITY

Market demand for our products has been so high that our pricing at $25 is realistically not high enough. Too many people wanted the lantern at this price during our first round of sales and we did not have enough inventories to cover everyone. We specifically selected people who were living in locations without electricity and with a promise that they would give us feedback on the lantern usage. The total size of the region un-electrified is about 222,975 [see chart 1] families who are well organized in 13 territories and divided in 150 communities. To give a clearer picture of where this demand comes from, we present the following market analysis.

According to the World Bank, 98.9% of all households in a Jinotega's "Open Area" use kerosene for lighting. Additionally 86.0% use dry cell batteries for lighting, radios and other uses. Other lighting systems are relatively minor in usage, and include candles (15.1%), car batteries (2.2%), and electric generators (1%).

The technology we are trying to introduce is not entirely foreign in the region. The people are already accustomed to using single use battery powered flashlights for an average of 1.24 hours a night. Our product is similar to a flashlight and the only learning that will need to take place is the way the battery is charged. Once a few people in a village have mastered the charging method, it will be a simple switch from their battery powered flashlights to our solar powered lantern. On a separate note, an average flashlight costs about $9 (with non-rechargeable batteries). Beside this type of product we have no competition with such innovate and useful product.

C.1 Our Target Client Segment – Noel. *Noel*'s family makes an average of $50 per month, and works in agriculture and livestock or the streets. He is most likely to be a man and will buy a lantern for personal use because it works better than a flashlight around the farm and his kids can use it for their education, or he can use it as a task light around the home. There is an 80% chance that this person has no access to electricity at all. Noel will be a hard sell because he doesn't see this type of technology-related stuff very often and doesn't make as much money. He uses flashlights and kerosene lanterns - so if he realizes that this can save him money, he will buy it. Noel may buy at least one (1) lantern to use it in his family house.

At 75% market penetration with price point of $25 this is total market size of 167,231 families or $4,180,781 revenue expected.

Un-electrified Households Per Departments Close to Jinotega in Northern Nicaragua, 2008		
Departament	**Households Without Electricity**	**Un-Electrified (%)**
Estelí	9,659	.26
Matagalpa	54,742	.66
Nueva Segovia	22,457	.61
Jinotega	**222,975**	**.75**
Total	**454,207**	**.32**

Chart. 1. - Un-electrified Household per Department

C.2 Sales-Promotion: At the storage and promotion facility, AVODEC, a local-based cooperative working with these communities and partner since 2006 will be playing an important role to disseminate and make promotion of the solar lanterns. They represent a good way to work closely with our customers through the benefits and different campaigns together BNI. AVODEC will also fill and process orders, take data and communicate with representatives according to an agreement we have made with them early in 2008 valid through 2009. They will also provide communication to our support staff for reverse logistics.

The lamps will be promoted not as a product but as a special educational program which allows people to get access to light for educational and living needs. This will not provide any push strategy other than to promote safety and health in case of burning or smoke exposure.

We will publicize our organization within the US and internationally for the purpose of fundraising to help subsidize our program and show the results of our performance in terms of helping provide access to people. We will show online reports on our website including pictures and videos on a regular basis.

C.3 Packaging: We have sourced our packaging in Nicaragua, in the local market of Managua. Packaging will be provided in Spanish instructions and made with ecological material with easy recycling. It will also contain warranty and support certificate with contact information for the Bright New Ideas support team. Our operations will be based in the city of Jinotega to make easy access to all the community leaders or villagers to come down.

C.4 Repairs and Support: Parts can be found in the local market of Jinotega to repair the lamp or in the worst case in the capital city Managua. We will train and provide a certified support team available in Jinotega City with knowledge in solar energy and solar lamp repair and maintenance. The first training was given in the early of 2008 and attended more than 25 participants among villagers and electrician students of the region.

C.5 Warranty: The warranty will cover technical problems on the entire unit including the solar cell, LED and the microchip, connecting pieces and body for one year. We will offer replacement of parts or the entire unit through our support team.

C.6 Accessories and Services: We will provide extra batteries at an affordable price to purchase as they have a lifetime of around two years. We will keep an inventory of extra parts available.

C.7 Pricing: The suggested retail price will be $25, volume discounts will be offered at quantities of 500 or more. We will provide 3-month financing at $30 and an early payment discount of $5 if payment is received before 3 months. There will be no seasonal pricing, bundling, price flexibility nor price discrimination within the country of Nicaragua.

C.8 Placement: We have an established partnership with AVODEC, which has a network of over 150 community leaders that can distribute the lanterns. In the future this scope will be widened to other organizations and small commercial stores after further market testing. With the price set at $25 we expect to hit 75% of the people without access to electricity as mentioned above in the market segmentation.

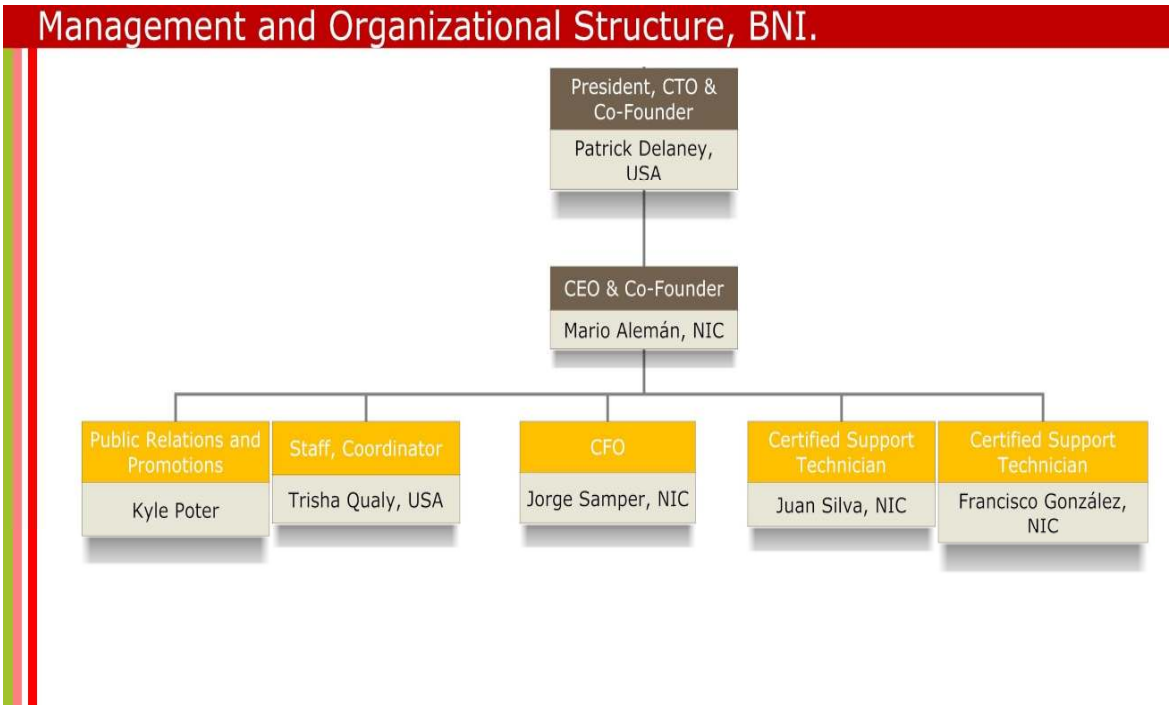
C.9 Inventory Management: Inventory is low; our plan for 2009 is 1000-2000 units which can be stored at our partner organization's office which is well-secured and centralized in the city of Jinotega. Counts will be made by AVODEC and our support team on a monthly basis and compared with order receipts.

C.10 Order Processing: AVODEC will fill out order receipts on carbon copy for each lantern sold, returned and each subassembly used for replacement. AVODEC will send a carbon copy of all receipts by mail monthly. Cash will be collected by hand and maintained in a Bright New Ideas account.

C.11 Transportation: Community leaders from around Jinotega already make monthly and/or weekly visits to the AVODEC office in Jinotega city. The lamps will be sold here and brought back to the communities to avoid transportation fee.

C.12 Reverse Logistics: The AVODEC community leaders have regular contact with AVODEC Support team most of the time and will give reports on the performance and needs of the solar lamp users. In the case of a broken lamp, the lamp will be brought back to Jinotega city by the community leaders.

D. MANAGEMENT AND ORGANIZATIONAL STRUCTURE



E. Vision

We recognize light as a critical enabler to education and envision worldwide access to micro solar lighting technology for the world´s deprived and underserved.

F. Mission

"We are dedicated to serving world´s deprived and unprivileged population by empowering them to improve their quality of life. We do this through the use, development and responsible commercialization of solar lighting technology".

G. Values

- Environmental Care: Using technologies that create minimal or no trash/waste in the beneficiaries' communities.
- Preventive Health: The technologies we use will create a net improvement in the overall health of the users through the non-toxicity / pollutant sources of the product.
- Commercial sustainability: We will make our technologies available at low prices that add value to users creating a net positive income, so that the products can be made available for more people and communities. A micro credit program will be developed with local cooperatives as an enabler tool.

H. FINANCIAL FEASIBILITY

Below is presented the Year 2008 Budget for Bright New Ideas. This budget has been balanced and checked for cash flow. Prices are American Dollars.

Fiscal Year 2008 Budget - Bright New Ideas

			Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	2008
	Results						
	Total Income		7814.5				
	Total Expenses		4823				
	Net Income		2991.5				
	Income						
1001	Donations Income	Donati	1000	1500	1150	2600	6250
1002	Investment Income		6.75	6.75	20	30	63.5
1003	Sales of Inventory		1	500	500	500	1501
1100	Total Income		1007.75	2006.75	1670	3130	7815
	Expenses						
2001	Finance, Bank Charges	Financ	1	20	20	20	61
2002	Fundraising	Fundra	1	1	1	1	4
2003	Inventory	Cost o	650	650	650	650	2600
2004	Postage & Shipping	Transp	320	320	320	320	1280
2005	Professional	Profes	50	50	50	50	200
2006	Research & Development	R&D	100	100	100	100	400
2007	Taxes	Payroll	1	1	1	1	4
2008	Telephone	Skype,	1	1	1	1	4
2009	Wages	Wages	50	50	70	100	270
2100	Total Expenses		1174	1193	1213	1243	4823
3100	Net Income		-166.25	813.75	457	1887	2992

H.1 Breakeven Analysis for 2008:

$$\frac{FIXEDCOSTS}{REVENUE\ /UNIT\ - V.COSTS}$$

Fixed Costs: Cost paid whether or not any units are produced. 100 units production range.

Variable Costs: Costs that vary directly with the number of product produced. (Material, labor used to produce units, percentage of overhead, etc.)

Revenue/unit: Selling price.

$$\frac{\$2{,}500.00/year}{\$30.00/unit - \$21.00/unit} = 62.3$$

62 of 100 Units must be sold at a price of U$30.00 before the organization begins to realize profit.