Business Plan

The name of the organization is Western Carolina Solar, LLC, incorporated in and by the State of North Carolina on October 16, 2015.

The purpose of the business is to develop and manufacture solar and other alternative energy products and systems using local labor and resources as is possible.

General Concept

Long term; to create a highly efficient solar cell to be used in utility, industrial, commercial and residential applications, worldwide.

Near term; in order to create cash flow, our objective is to use existing technology and create products that have an enhanced return on investment (better than the typical 8-15 years) to be used in municipal, commercial and civic applications.

Company Values

- 1. To use the resources local to Spruce Pine, both in personnel as well as natural resources to boost the local economy. This would include using the minerals that can be sourced locally to produce products that serve the solar & micro-processor industries as well as potentially creating hundreds of jobs for the region.
- 2. To attract supporting businesses to move within the area and put down roots here as well.

Business Plan by Stage

- 1. Acquire funding for the immediate lighting/surveillance/WiFi-connectivity needs in our public works here in Spruce Pine. We have submitted a tentative bid for this type of system for the Riverside Park walking trail. The result provides a project that would be mutually beneficial to both the community as well as Western Carolina Solar. Net Profits would then be re-invested into the production process to allow further development & enhancement of similar systems. The end result for WCS would be cash flow.
- 2. With a source of cash flow, we would then focus on the larger picture of turning raw materials into a usable medium in the electronics and communications world. The initial investment on this base of product would be in millions of dollars. We would invest our available funds along with applying for a grant to cover areas where our finances don't reach.

A Brief History

In the summer of 2014 five local businessmen gathered to consider forming a new local company whose purpose would be to explore the possibilities of using the mineral-rich resources found in our region and manufacture products that are currently produced by organizations who have their work shipped off-

shore, primarily to the Pacific Rim nations, in an effort to benefit from inexpensive labor, etc., but leaving many millions of their former American workers without employment.

Following years of extensive research and "brain-storming" and investing personal funds amounting to around \$1,000 per man, the five members decided that ours is a viable and beneficial venture and we prepared to move to the incorporation stage of organization.

The members have many years of involvement in the business world, scholastic field, as well as background in electronics and solar engineering. Through this range of experience we have applied these skills to stimulate and develop this business.

Using projects and concepts gained following attending seminars at the Florida Solar Energy Center in Cocoa, FL, and over 40 years of research and analysis, including 19 years at the NASA Kennedy Space Center, we launched Western Carolina Solar to begin the phase of manufacturing our first four line items.

We have virtually completed our testing and prototyping events, but we are safeguarding specific details of our intellectual properties for security and proprietary reasons, by copyrighting each design until said testing is complete and we submit our documentation and prototypes for patenting. We can state that our immediate intentions involve producing silicon-based solar CELLS and panels, using new theories to increase efficiency and productivity of these items, etc. Other alternative energy endeavors and devices are being researched and will follow.

Our Region

Spruce Pine (our proposed manufacturing facility location) in Mitchell County is in the heart of Western North Carolina and well set in the center of the economically-distressed Appalachian region. For a number of decades, this county was provided employment opportunities through a number of well-known furniture manufactures who had their facilities here. However, in recent years, all those plants have ceased operation, moving their processes out of the immediate area, primarily to China.

In a "domino" effect, ancillary businesses that provided for the food, clothing, automobiles, etc. for the many households have closed their doors due to the lack of customers.

These situations left hundreds of former employees without occupations while driving **retail** business to Asheville, Boone or Johnson City, TN.

Recently, due to the conversion of many power plants from coal to natural gas or other non-renewable fuels, many of the mines in the Eastern Kentucky, Southwest Virginia and Southern West Virginia areas have ceased operations or have drastically downsized their personnel headcount. Consequently, the railroads that have been hauling the coal, primarily CSX, have laid off many of their employees. In Erwin, TN, less than forty miles from Spruce Pine, that railroad dismissed 270 of their workers in their machine shop and switching yard, plus a dozen more employees in their Spruce Pine operation.

Ensconced in this area of Western North Carolina for many years, the members of this corporation have an ardent desire to re-train and employ as many of our local occupationally-distressed persons as possible.

Although relating to our immediate local tri-county concern this could include those from surrounding counties, as well as the border counties in East Tennessee who are within reasonable driving distance to our facility.

If given the opportunity to be re-trained in another field or type of work with good wages, many people would take advantage of the prospect.

The "high-tech" work in which we are involved will require our production employees to be trained or acquire skills that are needed in our industry. For that, we have consulted with Allen Cook, Director, Small Business Center and Ted Ollis, Coordinator, Industry Training & Career Development, both of Mayland Community College. Using funds available through the North Carolina Community Colleges Customized Training program our employees will be trained in these new skills that we require at no cost to students or Western Carolina Solar.

This educational program requires that the students have already been employed by us to be qualified for the customized training. For that, we need to source the necessary funds (start-up grant).

In conjunction with the hiring of employees, we will also need to purchase equipment (tools, etc.) and set up workstations for each.

Having a heart for the pristine natural beauty and tourist appeal of the area, our desire is to take advantage of existing structures that have been abandoned or are otherwise decaying from lack of maintenance and care, and refurbish and re-tool them for our use. That way no new "footprints" need be carved into our soil or cause further contamination of our streams and lakes.

Currently we would considering using the former Henredon facility for production. Although rather large it would be conducive to accommodate other *supportive operations*. It already has certain resources in place that further enhance its use for the new industry: natural gas line, 3-phase electricity, on-site water source and waste disposal.

Regarding "supportive operations" we are embarking on a plan to entice those who make the necessary electronic components we require that are NO LONGER manufactured in the USA (resistors, capacitors, coils, transistors, etc.) to either move their existing facilities and set up operation here OR to seek entrepreneurs who are willing to start brand new operations here. With the proposed and currently imposed tariffs on such foreign items it would be cost effective for these companies to make the parts here that could be sold tariff-free primarily in the United States.

We have also had "opened discussions" with a Chinese battery manufacturer to consider establishing a factory here, primarily for American sales. Because of the extreme weight and consequential shipping costs of sealed lead-based batteries plus the new tariffs they could still maintain a nice profit margin by manufacturing here and eliminate the extra expense. So far there has not been a "positive position" shown but as their profits continue to plunge because of the tariff they may eventually choose to do so.

If we are successful in luring support companies here to make the needed parts, the Henredon location would be an ideal place to have the new parts manufacturers sequestered there on the existing grounds, near to one another for logistical support yet not an environmental eyesore if diversified to different sites.

Five Year Plan

Our initial plan is to hire a dozen employees to be trained in our functional requirements and then assist us in setting up the operation of the full facility. More employees, tools, etc. would follow.

Our projections are that in a five-year time frame we anticipate employing at least 350 employees, "white & blue collar", and during the same five-year time frame annual sales revenue is expected to be in the one billion dollar range.

Even as our production of the "standard" solar-related items increases, our Research and Development section is preparing for the next phase in the five year plan; the evolution of four new and unique components and systems that moves the energy industry into the future. These (intellectual property protected) concepts are currently being finalized on the "drawing board" and will soon be placed into prototype construction and testing.

It is expected that, as we release these new, advanced devices, additional employees, facility space and corresponding training upgrades will be needed, further bringing this resources-rich area of Western North Carolina deeper into the technologically-expanding 21st Century. And, since our ownership and all personnel are local, income and wages, etc. remain here, not exported to another country or region!

After expending our out-of-pocket funds in research and development, and following the assessing of our immediate financial needs to move into the production stage, we necessitate the securing of a grant of \$3.225 million to further train certain employees in our unique, proprietary methods and devices, and equip them with the tools and raw materials necessary to begin and to make this operation successful. A detailed breakdown of essential funding can be made available, upon request.