



To the Shareholders of Magnolia Solar Corporation:

Dear Shareholder:

As President and Chief Executive Officer of Magnolia Solar Corporation, I would like to take this opportunity to share with you my excitement about our upcoming business opportunities, our vision for the future, past successes, and tell you about our motivation for starting Magnolia Solar (OTC: MGLT), a company that is developing the next generation of nanostructure based thin-film solar cells that convert light energy into electrical power.

Yash Puri, our Executive Vice-President and Chief Financial Officer and myself both grew up in India and were rather fortunate to have parents whose vision/hope was that we receive a good education, one that provided the springboard to higher education in the United States. Over the years, our experiences in India and the U.S. have shaped our thinking and our lives. In India we have seen hundreds of villages and millions of people who have no choice but to go without power, limiting their economic life to daylight hours due to the constraints of the power grid. In the U.S., we see an opportunity in both defense and commercial applications. Our soldiers risk their lives and go into harm's way, carrying a heavy load of batteries for communications and other equipment. We are developing flexible solar cell technology to provide low cost, flexible, and portable power solutions that will benefit both these populations.

Our work experiences have further shaped our thinking. I started my career as one of the early employees of a photovoltaic (PV) solar power joint venture between Mobil Oil and Tyco International (then known as Tyco Laboratories): Mobil-Tyco Solar Energy Corporation. From there, I went on to work with a variety of defense companies such as Honeywell, Loral, Lockheed-Sander, and BAE Systems. In a variety of senior technical and management positions in these companies, I worked on a wide range of technologies and products for defense and space applications; including developing high efficiency solar cells for space applications and to harvest the sun's energy and other sensors that detect in ultraviolet, visible and infrared spectral bands. This experience has helped shape the direction of Magnolia Solar to take advantage of the broad experience base.

Dr. Yash R. Puri, Executive Vice-President and CFO was the first Vice President of Finance for GT Equipment Technologies, Inc., now known as GT Solar (NASDAQ:SOLR). GT Solar manufactures and markets equipment to produce solar cells. He is also a Professor of Finance at the University of Massachusetts, Lowell and has worked on photovoltaic evaluation and applications.

Our vision is very simple: To lower the cost of solar power by improving its efficiency and therefore lowering its cost and increasing the ability to deploy solar into more places around the world. Energy is one of the key drivers of economic development. Developed countries consume a large portion of the world electric power generation. As India, Africa and other developing countries continue their economic development, their electricity needs will rise. The



U.S. Energy Information Administration (EIA) stated in their 2010 report, that net world electricity generation will increase from 18.8 trillion kilowatt hours (KWH) in 2007 to 25 trillion KWH in 2020 and 35.2 KWH in 2035. We believe that renewable energy will play a significant role in helping meet this demand. Wall Street Journal recently reported that China, which has had rapid economic growth over the past several years, recently surpassed the U.S. in total power consumption. Bloomberg reports that China has set a goal to generate 15 percent of its energy requirement from renewable energy sources by 2020, and 40 percent by 2050. Magnolia's future plans include manufacturing and distributing its solar panels in these markets as determined by market requirements and availability of capital to pursue these opportunities. There can be no assurance, however, that we will be able to obtain sufficient funds, on terms acceptable to us, to meet the capital requirements to pursue these opportunities.

While hydropower and wind power are two of the leading renewable electricity generation technologies, their use is location specific. A nation, for example, cannot simply build hydropower plants unless it has the necessary rivers and waterways. Many developing countries lack this natural resource. Similarly, wind is also not prevalent at all times and the ratio of actual electricity generation to installed capacity is typically very low. Therefore, we believe that low cost solar electric power generation will play a significant role in helping meet the increasing global demand for electricity.

This is the arena in which Magnolia Solar believes it will make its mark by being one of the lowest cost electricity producers in the world! We are very excited by the Solarbuzz June, 2010 forecast of global PV installations of 15.2GW (gigawatt) this year; a doubling of 7.5GW PV installations in 2009. This forecast comes on the heels of global PV market revenue of \$12B in 1Q10; nearly quadruple compared to the same quarter a year earlier.

Magnolia Solar believes that it can become the world's low cost thin-film solar power producer by reducing manufacturing costs to significantly less than \$1 per watt for a solar PV module. The final cost/watt that any company achieves is based on the power their modules generate, which in turn is based on the efficiency with which their technology converts sun light to electric power. Right now, silicon based manufacturers have the highest efficiency solar cells in the commercial market. However, silicon raw material costs have traditionally been high and unpredictable.

Silicon based solar panels require many steps to convert the raw materials into final panels, leading to higher manufacturing costs. Although companies using these technologies have made significant strides to reduce costs, they continue to be the highest cost manufacturers of solar PV in terms of cost/watt. Manufacturers using thin-film technology typically make solar cells on coated glass and even though their cell efficiencies are lower than silicon solar cells, they perform better on the cost/watt metric. In addition to developing solar cell technology that can be applied on glass and flexible materials, Magnolia Solar modules have the added benefit of minimizing the use of toxic materials.



Our strategy to reduce costs focuses on three variables. First, we are significantly reducing the capital cost requirement. We are developing our solar cell technology at the Albany Nanotech Center where all the equipment needed to develop our products is already available. By working at this Center of the College of Nanoscale Science and Engineering under a contract, we have achieved significant capital cost savings by not having to purchase equipment during the development stage, and can also save time since there are no procurement/installation delays. Here, we have made significant progress towards development of our technology.

Second, we are using government funds to meet most of the development costs. We have already received development contracts from the New York State Energy Research and Development Authority (NYSERDA) and the United States Air Force. We are using these funds to hire employees in the Albany region to develop our solar cell technology and to pay other development costs. We plan to continue using government programs for product development. We believe that this approach will allow us to conserve investor funds and to use them for other expenses such as the cost of building an intellectual property portfolio.

Third, our technology embodies unique features that we expect will allow us to achieve the efficiencies of conventional silicon-based solar cells at costs of a thin-film manufacturer. These technologies incorporate materials that capture a wider spectrum of the sun's energy so that we can produce electricity even when the sun is not shining directly on the panels. We use nanostructure based coatings that have been shown to minimize loss of energy due to reflection and employ proprietary techniques to trap the light in the solar cell so that all energy captured is converted into electricity. We have filed several patent applications to protect our intellectual property in these technologies.

Due to the reasons cited above, we are very excited about our future business prospects since we believe that we have the potential to achieve one of the lowest cost/watt profiles in the solar photovoltaic industry. As our technology progresses, we will seek to establish distribution channels to provide low cost, high efficiency solar power products to fulfill our vision and provide affordable electricity to millions of people in developing parts of the world. We believe that our cost-effective technology under development on flexible materials will be able to provide soldiers in harm's way the ability to reduce the battery load they have to carry and be able to charge their electronic gear.

We are grateful for the support we have received from our shareholders, and are thankful to many people and government agencies that believe in our vision and have supported us. We invite you to be part of this vision and join us in our journey to make inexpensive, renewable, and non-toxic solar power technology a reality.

Dr. Ashok K. Sood  
President and CEO