The Living Earth
FOUNDATION

"In order to change an existing paradigm, you do not struggle to try and change the problematic model. You create a new model and make the old one obsolete." –Buckminster Fuller

A New Beginning. The Living Earth Foundation is a nonprofit organization headquartered in Santa Fe that is dedicated to applying the principles of biomimicry, which is an approach to innovation that seeks regenerative solutions to human challenges by emulating, rather than altering, nature's time-tested patterns and strategies.

1.0 Executive Summary: Honoring Nature's Technology

The Challenge. Most would agree that the root-cause of our current planetary crisis is the widespread use of toxic, impactful systems to grow our foods, heal our bodies, and produce our energies – resulting in the steady deterioration of the natural ecosystems. How do we meet our growing need for clean air, water, soils, and energy in a manner that perpetually replenishes and improves the quality of these resources over the course of time? Simply put, by learning how to consistently apply nature's regenerative technologies.

The Objective. The Foundation asserts that the key component for environmental restoration is through the healthful application of beneficial microorganisms. These are the primordial life forms, dating back over four billion years, from which all higher life forms originated. Applying the principles of biomimicry require that this research be done in a manner that is fully respectful of the biological nexus that spans over the course of millennia, and creates viable solutions without the genetic disruption or alteration of these interconnecting linkages.

1.1 The New Organic Economy

Moving Forward. It is submitted that the next economic wave will be **"higher high-tech"**, which is the economic boon that will be derived from applying nature's technologies as a far more cost-effective and sustainable way of doing business. In an effort to support and strengthen these new organic sciences, the Foundation will be setting up a special green investment initiative, the Living Earth Fund, which will provide seed-funding capital for innovative ventures that are advancing the regenerative trades and services.

In particular, there are three major fields of biological regeneration that are ready to be fully realized, which are: *a) sustainable organic agriculture; b) comprehensive carbon resource recycling; and c) environmental cleanup and restoration.* In an effort to successfully move these restorative solutions forward in a coherent and effective manner, the Living Earth Fund will facilitate financial resources in the following fields of application:

Ecological Centers for the Organics Sciences (ECOS). The highly sophisticated nature of the microbiological sciences is in its earliest stages of research and development. We are just beginning to understand the fundamental interdependencies of these microscopic organic cultures. This regenerative approach to longterm health and sustainability will therefore

require thorough and comprehensive research and analysis. Priority is thus given to the establishment of well-funded research and development operations to design, develop, and patent the highest quality microbial formulations. It is submitted that these studies need to be done in a neutral and objective setting financed through nonprofit resources. The Living Earth Fund will therefore seek to establish nonprofit ***Ecological Centers for the Organic Sciences***, which will provide thoroughly reviewed and verified solutions to complex environmental and economic scenarios – with the longterm objective to build and strengthen green, sustainable, and community-based economies.

Regenerative Agriculture. Thorough research and field-study verifications have provided ample confirmation that highly-specialized microbial enhancement systems: *a) promote significant yield increases at substantial cost savings; b) raise the standards and affordability for organic food excellence; c) create self-regulating systems that are pesticide-free and herbicide-free; d) eliminate the need for tillage and crop rotation; e) strengthen the pollinators and beneficial insects; f) foster the recycling of green wastes for organic fertilization; g) generate substantial water reductions; and h) restore the carbon-consuming microbial cultures, which pull excessive volumes of CO_2 out of the atmosphere and sequester it back into the soil–and thereby offers the most effective means for reversing catastrophic climate change!*

Zero Waste BioParks. Once the regenerative agricultural systems are established, these biological cultures require a carbon-based food source. With the assistance of microbial enhancement systems, the Living Earth Fund will promote the creation of comprehensive carbon resource recovery centers to serve as *"Zero Waste BioParks"*, which will provide an important catalyst for the large-scale recycling of green wastes and turn them into valuable organic resources in a green business park setting. The pilot project of the Living Earth Fund will be launched in Santa Fe, NM, where recycling services are urgently needed and where the Foundation is headquartered.

Building Strong Localized Economies. In addition, the Living Earth Fund will provide special resource funding services for the financing of innovative green business ventures that are creatively applying the principles of biomimicry. Companies that have qualified to be "Certified B-Corps" (benefit corporations) would especially receive premium loan rates, as well as growers, manufacturers, and distributors that qualify to be in the organic certification program. Special attention will particularly be given to provide financing for the restoration of "family-owned farms".

Green Living Expo Centers. The Living Earth Fund will also provide stimulus funding for the creation of sustainably designed exposition centers demonstrating how biomimicry principles and practices work together in an integrated and cost-efficient manner. These green-living expos would also provide the research and development facilities for the Ecological Centers for the Organic Sciences (ECOS). The first center will be situated in Santa Fe demonstrating how to: *apply low-impact renewable energy systems; create rain fall harvesting systems with the recycling of black, gray, and potable water; allow for the ultra-pure effluent discharge waters to be used for recreational and landscaping purposes; utilize low-impact building materials that are natural and best suited for the climatic zone; and a broad variety of other sustainable applications as demonstrated in the illustration below designed for the climatic zone and cultural architecture of northern New Mexico.*



Celebrate the Earth Festivals. As a coherent and effective means for gaining public support and recognition, special festivals will be organized and promoted to bring attention to the regenerative solutions that are addressing the root-cause of our planetary crises – which is in actuality a crisis of consciousness. Rather than seeing nature as a foe that needs to be harnessed and subjugated, it is important to understand that the wisdoms of nature offer solutions that require our utmost respect and reverence. It is time to **"Celebrate the Earth"** as our friend and ally through festivals that bring together leading environmentalists, celebrities, and musical groups to raise awareness of the integral value of all life on the planet and to serve as a viable means for raising tax-deductible funds for advancing the nonprofit initiatives of *The Living Earth*.

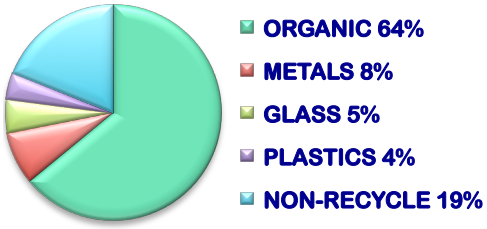
1.2 Launching the Zero Waste Pilot Project

The Objective. To design and develop a prototype model for a carbon resource recovery center as a collaborative partnership of public, private, and nonprofit organizations.

The Problem. The City of Santa Fe is currently recycling less than 10% of its solid wastes. The national average is over 35%. With the addition of a comprehensive resource recovery program, the objective is to raise the total volume of solid waste recycling services to over the 50% level.

The Solution. This pilot project, to be named the **"Santa Fe Zero Waste BioPark"**, will be launched and coordinated by a reputable nonprofit organization in cooperation with the City of Santa Fe. It is proposed that the biopark center be located at the Santa Fe Wastewater Treatment Plant at a designated "*enterprise zone"* specially set aside for comprehensive and diversified carbon resource recycling services. With the addition of special bioremediation systems that remove harmful noxious gasses and detoxify the biowastes, the site becomes a cost-effective and attractive location to create a prototype model for a comprehensive green business park to thrive and prosper.

The Challenge. The proposed recycling biopark operation will focus on the responsible recycling of carbon-based resources extracted from the municipal wastewater treatment plant (100%) and public landfill operation (64%) with the primary objective of producing quality-grade composts, humus, silage, bokashi, fertilizers, and other commercially viable byproducts.



Diversification Model. By setting up the prototype biopark operation at the wastewater treatment plant, this allows for additional opportunities to utilize the agricultural-grade effluent discharge waters to be used for adjoining community gardens, nurseries, green-houses, hydroponics, blue-green algae, biofuel, earthworm, bee, fishery, poultry, livestock, and other commercial operations. This diversification model creates a truly integrated business park operation, wherein the wastes of one operation become resources for other operations until a full-circle closed-loop **"zero waste biopark"** is created. This prototype model turns conventional biowastes into valuable resources, thus helping to build the local economy, create new sustainable jobs, and significantly reduce landfill disposal expenses.

Feasibility Study. The biopark project will seek to raise sufficient funds from nonprofit initiatives and public grants in order to provide a comprehensive feasibility study to begin the design and development of the Santa Fe Zero Waste BioPark. Once the comprehensive recycling and green business park is fully functional, this project will serve as an important prototype model – which can be duplicated virtually anywhere around the world.



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