

CO-CREATING BOSTON'S FUTURE-DECKER

Project Summary *'Global Green Link Energy- RASTRA*

Project Locations: Boston Massachusetts

Developer: Global Green Link Energy LLC

Project: Co-Creating Three-Decker

I. BUSINESS OVERVIEW

Founded in 2016, <u>Global Green Link Energy (GGLE</u>) is an independent power producer specializing in clean energy technology--biomass waste-to-energy, solar, ICT communication technology and housing infrastructure development in the United States, We are the manufacture and distributor of RASTA ICF building material used in the development of housing. We are proposing the use of RASTRA in the development of future homes in Boston, this includes three-deckers. We are interested in seeing how our RASTRA building system and construction technology for homes might respond to Boston's current and future housing needs. We are particularly interested in ideas that prioritize affordability, livability, and promote holistically healthy neighborhoods.

The beauty of our construction material and building methods is that it's cost of development is cheaper than conventional construction given the increasing cost of work and steel.

History & Background

Global Green Link Energy LLC is a limited liability company incorporated in the United States of America under Certificate of Incorporation Number.6570523 as a Delaware Corporation and in Massachusetts. GGLE is a licensed distributor of RASTRA in the United States and Africa. Under our business model, we build single and multifamily residential and commercial property using our proprietary RASTRA technology. In these projects we serve as project developers, buy land, finance real estate deals, build or have builders build projects. We contract and use a Project Management team to oversee each project and orchestrate the process of development from the beginning to end. We also purchase a property with the plans and permits in place so that they do not have the risk of failing to obtain planning approval and can start construction on the development immediately. As Developers, we work with many different counterparts along each step of this process, including architects, city planners, RASTRA engineers, surveyors, inspectors, contractors, lawyers, leasing agents, and investors.

Products & Services Offering

In nearly every city in the United States exists an urgent need for housing. The RASTRA system can be designed to match almost every style and type of building. The range reaches from low-cost housing to high-end applications. Building with Rastra is not only very swift, but also simple so there is no need for highly qualified labor. Rastra is made of materials readily available around the globe, mainly Portland

cement and expandable polystyrene (EPS). Once in place, our building materials provide all the necessary properties to guarantee insulation, protection against nature's assaults, like strong winds or fires. The ideal building product to meet the needs of the future population's living style, various architectural designs of habitats and environmental appeal!

RASTRA has been licensed in the Americas and Asia. RASTRA works through a holding company, RASTRA International. The product has gone through the approval processes for the RASTRA system in Europe, the USA and PRC China, spending in excess of US\$ 500,000 for an exhaustive test program. RASTRA obtained ICBO, SBCCI (now together ICC) and UL, EOPA and other approvals.

Since the early beginnings 40 years ago, over 9 million RASTRA structures have been placed in service. Today, RASTRA not only represents the original Compound ICF, but is recognized as the best product of any ICF category with installations throughout 5 continents, in all types of climates from the cold North, the Austrian Alps to the Saudi Arabian Desert, to the humid climate of Southeast Asia . Currently there is small manufacturing facility in the US that produces RASTRA elements/walls for our projects. We source product from this existing facility and intend to build (2) large manufacturing facilities in the US in 2021-2022. One in Boston and another in Tennessee. Total investment \$24 million, Creating thousands of jobs in each state.



These facilities will produce 300 elements pre-shift per-day tripling our capacity and increasing our ability to build thousands of homes: and too meet product demand. Plants will take 9 months to complete and will service the Northeast and Southeast region of the United States.

Assuming a 300 panels/shift plant at 320 days' operation per year in 2+ shifts such plant would produce \geq 192,000 panels or \geq 2,400,000 ft2 walls per year. The daily output of 600± panels can be installed on the building site by 2 to 3 installation crews of 4 men ea., or preassembled wall sections can be assembled in the plant and installed by 2 crews with the help of a light crane.

Value Proposition

Building with RASTRA offers homeowners several specific benefits not available in conventional wood construction.

- 1. Energy savings up to R-46,
- 2. Strength :700% stronger than wood frame walls,
- 3. **Safety**: highly fire resistant-4 hour rated@ 2000°F;
- 4. Interior Comfort: by restricting air leakage and improving the insulation properties.
- 5. **Quiet:** compared to a typical wood frame wall, 75% to 85% less sound passes through a RASTRA walls.
- 6. **Environmentally Friendly:** According to the National Association of Home Builders, a typical 2,000 square foot home uses 16,000 board feet of lumber plus 6,000 square feet of wood panels.

RASTRA greatly reduces consumption of our timber resources and reduces toxins caused by wood preservatives that circulate throughout the home.

- 7. **Indoor Air Quality:** RASTRA is inert and does not promote mold growth. RASTRA eliminates the interior cavity where moisture can hide and restricts moisture from entering the interior. It also holds conditioned air longer and allows the air conditioner to work more effectively to control moisture.
- Reduced Maintenance: RASTRA does not expand and contract like wood, so paint is less susceptible to cracking and the exterior requires repainting less often. Eliminating 2 x 4's and plywood eliminates the opportunity for wood rot.
- 9. Cost of Ownership: Determining the true cost of any building material goes beyond the product's initial cost. We admit that RASTRA may cost slightly more than wood *for now*. But as lumber prices continue to climb, this may not always be the case. Besides, RASTRA create savings in other areas such as downsizing the HVAC unit, tax credits, eliminating membrane and wire mesh on stucco installations and eliminating the need for vapor barriers.
- 10. **Increase Resale Value** As people become more familiar with RASTRA and its many benefits, it's logical to believe that RASTRA properties will command a premium of 10-15%. This ability to differentiate will translate into a favorable selling position. According to a 2007 survey by the National Association of Homebuilders, home buyers said they would spend an additional \$8,964 on a home if it would reduce their energy bill.

II. MARKET OVERVIEW

The demand for housing is increasing while the supply to build decreasing. Rising home prices in turn have priced some <u>homeowners out of the market</u>. COVID-19, recession, and trade restrictions have negatively impacted the economy and U.S .while millions of renters are struggling knowing any day now the COVID eviction moratorium is ending. Placing millions of renters on the streets of America in search of affordable housing. Today, we have the opportunity to change this scenario by using RASTRA to construct new design properties and modeling older designs currently in communities being considered as part of this initiative.

The projects that are being presented provide an outstanding opportunity to build affordable and market rate housing in Massachusetts and in the City of Boston. The projects are in diverse communities, both socioeconomically as well as culturally. This dynamic mix offers a good portfolio in which to connect downtown communities, inner city neighborhood and homeowners with stylish affordable housing, That can be adapted to any environment.

As we move forward on these projects, we believe, and soon you will, that RASTRA building technology is a product that adds true value to the home.

We all have heard the news, that the housing market is going gangbusters now that COVID restrictions have eased., and how total residential construction materials prices have increased by almost 8 percent in the last year alone: The increasing prices of these and other building materials is having a significant impact on the price of a new home. For example, the National Association of Home Builders estimates that record-breaking lumber prices alone have added \$36,000 to a home's price tag this year. To put that in perspective, the NAHB recently calculated that the total cost of framing a new home -most of which is lumber was only 51,589 in 2019 (17.4% of the home's final sales price). currently these products are subject to U.S. duties at rates ranging from 5 to 20 percent.

III SALES, MARKETING & DISTRIBUTION STRATEGY

Pricing Model

As a company we value people and understand the value of a home or shelter. When we priced units in these communities, we tried to provide housing for individuals at every rung of the economic latter! We are impact investors and developers and work hard to ensure that we look out for the least of these! The average home in Massachusetts is \$587,00 for 2 br, 2 baths unit. Projects we are targeting are priced within this price range and are expected to sell quickly, with and average unit price of \$590,000, roughly \$3,000 above market. The average time to sell in the northeast market is 55 days. Homes will be pre-sold!

Customers: The median age of a homeowner in the US is 47. Younger buyers are renting with and average rental unit in the Boston area priced at 1 br \$2,972 and 2br priced at \$3,363 and 3br at \$4,041. Our projects are located in a high demand markets and will be targeted to buyers and renters who cannot afford the higher markets in the city. Nearly 38% of apartments in Boston are 1 br. 29% 2 br, and 16% are 3 br. Unit sold under our proposal will be affordable to middle-and lower-income buyers.

IV. PROJECT OVERVIEW



Development Strategy

Our development strategy targets the Roxbury, Dorchester, Mattapan and Hyde Park Communities. The designs will be traditional and new edge energy efficient housing, three-decker and multifamily. Each lot will be designed to meet the current architecture and community neighbors, in order to maintain to values of the community.

IV.IMPACT

Our Development Review team is responsible for facilitating the evaluation of design, density, use, and physical and social impacts for all development projects, including proposals for residential, commercial office, hotel, retail, and research & development uses. The Project Managers assemble and work closely with Planners and Urban Design staff, relevant City Agencies and the community to ensure that the impacts of each project are identified and mitigated, and that the design of the project is one that relates to and enhances the surrounding area.

V. MANAGEMENT

Our management team brings the industry knowledge and experience to achieve the construction and building of the projects proposed in this document.

Curtis Jones Managing Director of GGLE has led the firm's engagement in the US and Africa since 2017 and has brought together a team of subject matter experts, engineers, quality surveyors, planners and technical advisors, builders, and suppliers as members of its team. Through his leadership and experience GGLE has established a strong relationship with leaders and governments throughout the US and Africa. Curtis has over 45 years of experience working in housing, as Assistant Administrator of the Boston Housing Authority. Chief of Housing Police, Director of the National Gang Network and President of Copley Global energy, health, technology; and business. Mr. Jones holds a BS in Criminal Justice and a Master's in Education. He is a WK Kellogg Fellow, a Salzburg Fellow, and expert in global diplomacy and international business development.

John Monteiro, VP of Engineering brings an outstanding list of project development experience. Owner of

GW2E John has provided engineering and land surveying services for over 30 years throughout the New England region of the US. His professional experience includes the planning, land surveying, design, and construction management of bridges, schools, highways, water treatment plants, and wastewater treatment plants. The firm has prepared thousands of estimates and proposals and has executed and managed over 3,000 contracts with values ranging in the millions. John is responsible of ensuring full compliance to all terms of the agreements. John will provide financial oversight supervising all aspects of finance, including prepared internal cash flow, balance sheet and monthly profit & loss statements "spread sheet program".

Karl Holik, the inventor of RASTRA is a partner in this effort and bring unparalleled skill and knowledge in the use of the RASTRA product and building expertise needed. He has over 40 years' experience using RASTRA in all type of environments with over 9 million properties constructed using the technology.

(currently over 60% of the European market - approximately 20% of the U.S. market is covered by Holik's machines) To this date these machines remain unchallenged. This know how including a large number of patents he has later licensed to another company in order for Holik to be able to concentrate on the Rastra building system.

Gregory D. Hayes, VP of Business Communication and Marketing has a vast experience in Business Management having worked with Stone & Webster Engineering, Ebasco Services, Celanese Fibers Marketing Company, Visual Impact, New Day Beverage, EDIT, Inc., Coordinated Systems International, Integrated Systems International, LLC, Nceptive, LLC, National Media Spots. Greg has held various positions with companies in a Human Resources capacity and as a President/Founder of several small businesses in the Systems Integration, Wireless Communications, Programmable Display Technologies.

Alessandro Ferreguetti Vicente is the owner and president of United Construction and one of Massachusetts' finest contractors. As owner, Alessandro and his team deliver a unique combination of value, supervision and expertise in all areas of the remodeling industry. Experienced Construction Project Manager managing & supervising construction projects from \$50k to \$4-20million cost range in the renovation and restoration to high end residential & commercial sectors. Proficient in executing each project phase including preconstruction, construction, closeout, and post-construction services. Very knowledgeable with budgeting, cost margins, planning, scheduling, permitting, scopes of work, schedules of value, change orders, labor/job costing, profit margins/cost analysis, contracts, procurement of materials, time management, business development, vendor relations, and architects and customer satisfaction.

Alessandro is a Licensed General Contractor, Home Improvement Contractor & De-lead Contractor by The

Commonwealth of Massachusetts. He is a certified Construction Management & Supervisor CS Unrestricted

(MA) (Residential/Commercial) Certified by OSHA, EPA, SSPC, HUD and NACE safety training courses. He will lead and manage various aspects of the housing construction and operations.

Mark Williams Andaz Real Estate Holdings LLC is a Massachusetts based company with over forty (40) years of construction experience. Our emphasis is in residential and light commercial construction projects, ranging from remodeling, full rehabilitation to complete build outs from start to finish, Wi-Lo Development LLC objective is to provide a comprehensive approach to quality and affordable construction services to the New England market. We deliver to our clients complete general contracting amenities by assisting them with project planning, construction management, financial options, zoning issues, Board of Appeals, BRA design review, permitting process, to an approved occupancy. Our goal for each project is to make the construction experience pleasurable and effortless as possible for the customer.

FINANCIAL OVERVIEW

Key Drivers & Assumptions

Key drivers of these projects are the projected performance revenues and margins resulting from these investments, as well as the impact that building in these communities will have on the affordable housing market in these neighborhoods. We plan to self-finance the projects and sell them to families living in the various neighborhoods. The only barrier to developing projects is land!

We look forward to working with you and are available to answer any questions. We are interested in working with architects interested in creating housing designs for the future. Site specific designs will be developed as the process moves forward.

Curtis Jones, Managing Director Global Green Link Energy L L.C www.globalgreenlinkenergy.com <u>Curtisj@ggleafrica.com</u> <u>www.RASTRA.COM</u> +1 617-970-9617 US