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Grand Vision:

Environmental Sustainability, Environmental and Economic life Cycle, mobilizing ESG Committed Funds

The grand vision is to create (1) an environmental life cycle, (2) a sustainable building material and net-zero building life cycle, and (3) an economic life cycle in building construction. (4) Attracting Off-takers / buyers based on Net-Zero

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White Paper

PRAKASH SUTHAR, Windsor Wood (India) Private Limited

SEEDING TO BUILDING LEADING TO NET-ZERO

Grand Vision and Action Plan for Net-Zero / Creating Circular Economy:

[1] FUNDING – ESG committed Funds Mobilization into ESG-compliant positive impact projects in our country.

[2] Regeneration of Forestry / Managing Forest Health, converting woodlands into sustainably managed forests, massive Agro-forestry for Re-generating **NATURE**;

[3] Sustainable Building Materials for NET-ZERO buildings utilizing only sustainable resources;

[4] Attracting Global and Local entities as Off-Takers / Buyers / Customers for the Net-Zero Buildings; and other ESG-compliant positive impact projects;

Grand Vision:

Preamble:

Let me share some reality on carbon emissions. The transportation sector generates 19% of carbon emissions, the industry sector generates 33%, and the building civil construction sector generates 40 to 47% of GHG. Now which one is important for us to address and resolve immediately (?) for

reducing the carbon from the atmosphere while we work to meet the challenges of climate change? I beg of you don't forget **nature** because today the destruction of **nature** accounts for more global emissions than all the cars the trucks and aviation fuel in the world. We can put solar panels in every room, we can turn every car into an electric vehicle but **as long as we do not care about the nature; (our targets below 1.5) we will fail as long** as we continue emitting 40 to 47% carbon in construction sector and other highly polluting sectors. We are consuming 12% direct energy in the production of iron and steel and cement and concrete generating mainly using fossil fuels. We are generating electricity using coal more than 64% and other fossil fuels that make highly embodied carbon material goes into the construction sector.

So, construction materials currently under use are highly embodied carbon materials.

The question is:

“What are we going to do with such a huge Development; that we are creating with the Greatest ever Climate Risk.” And, the “Climate Risk is the Investment Risk”

So long as we create “Climate Risk” using highly embodied carbon building construction materials, and the reserved forests; Amazon, Sumatra, and other great forests are slash and burn, so long as protected lands and tribal people indigenous people are allowed to be encroached upon; so long as wetlands and the bouquets are destroyed our climate goals will remain out of reach and we'll be run out of time if we **don't stop the destruction of our natural world**; if we do not regenerate the forest Woodlands, sustainable farm Agroforestry nothing else will matter; why? Because protecting and restoring the forests, mangroves, and wetlands, sustainably & professionally managed forest and agroforestry these huge dense carbon sinks represent at least 75 to 80 % and more of what needed to be done to avoid catastrophic warning. These are currently the only feasible solution for absorbing carbon on a global scale. Simply put if we don't protect nature, we can't protect ourselves then what is the use of GIFT cities and smart cities and the Urban Developments, big infrastructure we are developing when we create a huge climate risk. And, most importantly; we are creating huge risks to the INVESTMENTS that we are making for such developments. What is the use of the developments of farmlands when they're going to be scarce resources of **water?**

As a Nation, Ministry, professionals, scientists, foresters, and engineers this is what we need to do; we need to include NATURE in our endeavor while we serve our country.

Actions for transition to Net-Zero:

[1] US\$ 127 / 140 / 153 TRILLION / ESG COMMITTED FUNDS – Assets under Management held by the Institutional Investors Group on Climate Change. All Limited Partners, GP, & SOV. FUNDS – ATTRACTING; at least US\$ 1 to 2 Trillion; [Further, local ESG funds and seeking investments as

Timberland and Real estate REIT] must be mobilized annually as ESG Committed Funds for the following ESG Compliant positive Impact Projects:

ESG COMPLIANT POSITIVE IMPACT PROJECTS:

1. FORESTRY + FORESTRY REIT (Timberland Real Estate Investment Trust) for the regeneration of forests, managing optimal forest health, converting woodlands into sustainably managed forests, sustainable agroforestry for the production of Sustainable Building Materials for the Masstimmer Construction, Tall Wooden Buildings, and Affordable housing. Achieving this action through our methods of forestry., Following the Methods and Practices followed by the Largest Ever Timber Land Companies Globally for the professional management of the Reserved Forests and forest health, and Sustainably Managed Extended Forestry for sustainable resources for the production of Sustainable Building Material leading to Net-Zero Buildings;
[Further study of the Timber Innovation Act, 2016 (US Congress) for the actions for the research, development, and production of the Sustainable Building Material and recent Inflation Reduction Act,2021 -USA].

2. REAL ESTATES – Creating Life Cycles & Circular Economy leading to NET-ZERO GHG Impacts:

Sustainable Development of Real Estate by utilizing Sustainable Building Materials, for constructing a building of all sorts of commercial, educational & Institutional buildings, residential & affordable housing, and many more;

Creating a Framework for Transition to Net-Zero immediately: Through the Utilization of the Sustainable Building material resourced from sustainably managed forestry and agroforestry.

Initially, creating partnerships, alliances with sustainably managed resourced Sustainable Building Materials globally, plus a Make in India platform for the manufacturing of Sustainable Building Materials. And there are planned strategy in place for the transition to 100 percent Sustainable Building Material for Net-Zero with the goal of reducing at least 30 percent GHG through Carbon Sequestrations, reducing embodied carbon in the construction materials. And, constructing energy efficiently (with indoor air quality for the health) buildings and developing real estate sectors in the country.

WE HAVE TO CREATE A FRAMEWORK FOR MOBILISING ESG-COMMITTED FUNDS FOR THE ESG COMPLIANT POSITIVE IMPACT PROJECTS SUCH AS FORESTRY AND REAL ESTATE TO START WITH; MANY OTHER GOALS OF G-20 AND SUSTAINABLE DEVELOPMENTS GOALS WILL FOLLOW SIMULTANEOUSLY. [SUCH AS WHEN WE REGENERATE NATURE; WE GET THE FLOW OF WATER]

ONE ACTION IS ADDRESSING AND PROVIDING SOLUTIONS TO AT LEAST EIGHT GOALS OF THE G-20 AND SDGS;

3. DOES NOT REQUIRE SOLAR, MAY BE SOME WIND Energy:
When enough Carbon Sequestration is taking place by creating environmental life cycle; it may not require additional investments in just the solar sector. Every building constructed with net zero and generating energy for its utility management including water; serves the goals of net-zero. This is for the Double Investment Avoidance of the Funds. The investments taking place in solar; can be diverted for Net-Zero buildings; that serve the purpose of real estate and GHG reduction simultaneously.
4. STALLED PROJECTS / DELAYED PROJECTS ESG FUNDS + WITH GREEN-SUSTAINABLE BUILDING MATERIALS
Taking immediate action for the support to the projects through ESG-committed funds by converting these projects into ESG-compliant positive impact projects. Further, adopting the concept of “City above the City” for these projects and more sustainable Urban Developments. [there is a separate paper for this]
5. MOST RESILIENT WOODEN STRUCTURE BUILDINGS; SAVING 12 PERCENT ENERGY AND ELEMENATING EMBODIED CARBON FROM THE CONSTRUCTION MATERIALS + CREATING CIRCULAR ECONOMY + LIFE CYCLE LEADING TO NET-ZERO: The two main building materials; Iron and cement concrete are consuming 12 to 14 percent energy (electricity directly) that we are generating using manly COAL and other Fossils Fuels. This makes highly embodied carbon materials and the entire construction sector is the highest emitter of GHG. “ELECTRICITY SAVED IS ELECTRICITY GENERATED”.

CREATING ENVIRONMENTAL LIFE CYCLES AND CIRCULAR ECONOMY
FROM, “SEEDING TO BUILDING” IS THE LIFELINE ON THE PLANET.
[GRAPHS FOR REVIEW]

6. DIASTER MANAGEMENT – MOST RESILIENT BUILDINGS WITHSTAND EARTHQUACKS, SUPERSTORMS, TSUNAMIS, AND FLOODS FOR THE UPMOST SAFETY OF THE PEOPLE AND THE PROPERTIES AND ASSETS :

There are disruptive innovations for the most resilient sustainable building material for keeping the buildings most resilient during earthquakes, Tsunami situations.
[Separate paper for review]

7. BLAST PROOF’S STRUCTURE: SUPPORT TO DEFENCE SECTOR

The sustainable building materials are engineered materials too for constructing blast and weather proofs shelters/buildings in the border areas for the safety and security of the defense personnel. This will provide not only safety but, shelter from harsh weather.

8. SECRET AGENDA: ADDRESS AGENDA: ADDRESSING TWO NATIONAL SECURITY ISSUES. [Personal Discussions; one narrated below]

One agenda is:

The sea level rise will force the communities; and large population to rush to the ground / into the nearest safe villages, towns and cities that will create clashes between the populations as scarce resources/scarcity. This will create National Security Issues. The most important to address the issue and resolve/provide solutions now.

9. NEW EMPLOYMENT WITH RESOLUTION OF NATIONAL SECURITY

Sustainable Timberland Development will not only help and support the local communities, but, additionally generate Education & Employment simultaneously; manufacturing of sustainable building materials from harvesting to growing, logging & transportation, saw mills operations, will generate huge manufacturing operations of sustainable building material, designers & engineers for manufacturing, plant and machine operators; building design to structural engineers, setting up of manufacturing plants [will also solve many issues of training and operations of the machinery equipped with auto controls – such as one Masstimber Construction Plant

and Machinery can be operated by just 6 to 8 operators] And, Building construction personals and many other professional avenues will open up simultaneously. This will also increase the Wood Science Institutions' research and development, education, and training scope.

10. ENERGY SAVING 12 PERCENT & WATER CONSERVATION / GENERATION /

Resources from the sustainably managed timberland are the main source of raw material for Sustainable Building Materials replacing highly embodied (carbon) material for building construction leading to Net-Zero and creating a life cycle as well as circular economy. This cycle from, “Seeding to Building not only managing SDG Goals; but, simultaneously saving 12 percent of energy that we are generating using fossil fuels. “

ENERGY SAVED IS ENERGY GENERATED”

AND THE PROPOTIONATE SAVING IS OUT OF 12 PERCENT ENERGY GENERATED.

11. SUSTAINABLE BUILDING MATERIALS CREATES LIFE-CYCLES LEADING TO NET ZERO SIMULTINEOUSLY; CREATING A CIRCULAR ECONOMY AND PROVIDING SOLUTIONS TO THE CLIMATE CRISES AND ACTIONS TOWARDS ACHIEVING SDG GOALS.

12. STRAIGHT WAY REDUCING CARBON FROM 47 PERCENT AND 12 PERCENT ENERGY PRODUCED FROM FOSSIL FUELS:

The above actions not only attract ESG Committed Funds and generate circular economy; but, simultaneously reduce greenhouse gas and provide solutions to the climate crises; immediately. And, the BHARAT, ONLY **BHARAT** can do this and can lead from the front for the Global Communities.

13. HEALTH AND SAFETY OF PEOPLES: These actions bring wellness and manage health and safety issues from catastrophes such as Covid-19, earthquakes (as most

resilient wooden structures withstand all natural calamities) super storms, tsunamis, and, floods.

14. ECONOMY / REVENUE GROWTH / CREATING CIRCULAR ECONOMY :

These actions create a circular economy and the Industry and Market take the economy of the country to the height level;

REAL ESTATE THROUGH SUSTAINABLE BUILDING MATERIALS:

The IBIS Market and Industry reports say: The Sustainable Building Material Market and Industry in the USA is US\$269.4 Billion (More than the revenue/turnover of TATA, Birla, and Reliance Group) and the Turnover/revenue of the Key Buying Clients of Sustainable Building Material is more than US\$990 billion in the USA.

These climate actions will create a huge sustainable market and industry in the country in addition to regenerating NATURE / FLOW OF WATER FOR AGRI.

FORESTRY / AGRO-FORESTRY SECTOR

- TIMBER SECTOR
- SAWMILL SECTOR
- MASSTIMBER / SUSTAINABLE & RENEWABLE BUILDING MATERIALS
- TECHNOLOGY: DISRUPTIVE INNOVATION
- SUSTAINABLE CONSTRUCTION
- EDUCATION AND TRAINING

GREEN – BUILDING ATTRACTING BUSINESS SET-UP IN INDIA

While the country has progressed and reached the 5th largest economy. The Net-Zero building at the city developments such as GIFT City and 100 smart cities in the country; must attract the companies and the Global Financial sector occupying the premises in the cities. Rather they prefer premises in Net-Zero Buildings as they are taking Climate Actions and reporting to (Global Climate Action NAZCA) As their mandate is to take climate action.

OFFICE AND RENTAL BUSINESS AND 100 SMART CITY / GIFT CITY DEVELOPMENTS

These Climate Actions, “Seeding to Building” for Net-Zero most preferred by the entities taking climate actions as part of Environmental disclosures in their annual account that not on they are taking

climate actions; in addition to that they also taking steps/actions towards Net-Zero; greatly supporting/adopting climate action leading to net-zero.

The Most Important: Who is giving huge revenue?

WHO ARE THE IMMEDIATE OFF-TAKERS? [Customers/buyers giving valuable revenue immediately:

32,000 PLUS NON-STATE ACTORS REPORTING THEIR CLIMATE ACTIONS AS A PART OF THEIR COMMITMENTS TO THE UNITED NATIONS. AND, AS THEIR COMMITMENTS THROUGH THEIR ENVIRONMENTAL-RELATED MANDATORY REPORTING / DISCLOSURES IN THEIR ANNUAL ACCOUNTS. THEY BECOME THE TOPMOST BUYERS PROVIDING REVENUE. THESE ACTIONS GENERATE THE HUGE REVENUE.

17,000 PLUS COMPANY

1650 PLUS FINANCIAL INSTITUTION ATTRACTED TO GIFT + 100 SMART CITIES.

GENERATING SUSTAINABLE CYCLES: ENVIRONMENTAL LIFE CYCLES [SUCH AS LCA], ESG – SUSTAINABLE ESG AND SUSTAINABLE ECONOMIC LIFE CYCLE FOR BHARAT BECOMING SUPERPOWER – GLOBAL LEADER.

IMMEDIATE ACTIONS:

POLICY AND FRAMEWORK FOR THESE CLIMATE ACTIONS.