



\$500M HEMP-BASED BIOFUEL, POWER, AND PROCESSING INITIATIVE IN THE DOMINICAN REPUBLIC

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EXECUTIVE SUMMARY



Geodyn Solutions proposes a **\$500 million investment** to establish the Dominican Republic's first large-scale integrated **industrial hemp ecosystem**, focused on **biofuel production, renewable power generation, and diversified hemp processing**.

The project will:

- Cultivate **25,000 acres** of industrial hemp across strategic regions (San Juan, Monte Cristi, La Vega, and Barahona) with fertile soils and favorable climate.
- Build **two 25 MW biomass power plants** fueled by hemp residues and agricultural byproducts.
- Establish **one textile plant** and **one paper mill** to maximize value from hemp fibers and hurds.
- Process hemp seeds into **biodiesel, ethanol, and specialty oils** for the local and export market.
- Support a **zero-waste model**, turning every part of the hemp plant into a product: fibers → textiles, hurds → paper/hempcrete, seeds → biofuel & oils, residues → biomass energy.

This investment will create **2,500 direct jobs** and 4,000 indirect jobs, generate over **\$600M in annual revenues by year five**, and position the Dominican Republic as a **Caribbean hub for hemp-based renewable energy, sustainable materials, and green exports**.



STRATEGIC FIT FOR THE DOMINICAN REPUBLIC

The Dominican Republic faces high energy costs (\$0.20–0.28/kWh), heavy fossil fuel imports, waste management challenges, and strong demand for sustainable agriculture and exports. Hemp offers solutions:

- **Energy Security:** Locally sourced hemp biomass reduces dependency on imported fossil fuels.
- **Circular Bioeconomy:** Hemp waste and sargassum seaweed can be valorized into fertilizers, bioplastics, and construction materials.
- **Agro-Industrial Diversification:** Hemp textile and paper production strengthen Dominican exports beyond sugar, tobacco, and tourism.
- **Climate Commitments:** The DR's 2050 climate neutrality target aligns with hemp's ability to sequester 10–15 tons CO₂ per acre annually.

PROJECT COMPONENTS & BUDGET ALLOCATION

COMPONENT	BUDGET (USD)	KEY OUTPUTS
Hemp Cultivation (25,000 acres)	\$150M	300,000 tons biomass annually
Power Generation (2 × 25 MW plants)	\$120M	50 MW clean electricity (350 GWh/year)
Textile Plant (fibers → fabrics, rope, eco-textiles)	\$70M	20,000 tons fibers/year
Paper Mill (hurds → hemp paper & packaging)	\$70M	25,000 tons paper/year
Biofuel & Oil Processing Facility	\$50M	25M gallons hemp biofuel + oils/year
R&D, AI, Blockchain Carbon Credits	\$20M	AI crop optimization, GEO token for carbon credit exports
Training, Jobs & Community Development	\$20M	2,500 direct jobs, 4,000 indirect jobs
Total: \$500M		

FINANCIAL PROJECTIONS



REVENUES

(Year 5 steady state):

- Hemp Biofuel & Oils : \$150M
- Electricity Sales (PPA) : \$100M
- Hemp Textiles : \$200M
- Hemp Paper & Packaging : \$120M
- Carbon Credits & Byproducts : \$30M

Total Revenues: ~\$600M/year

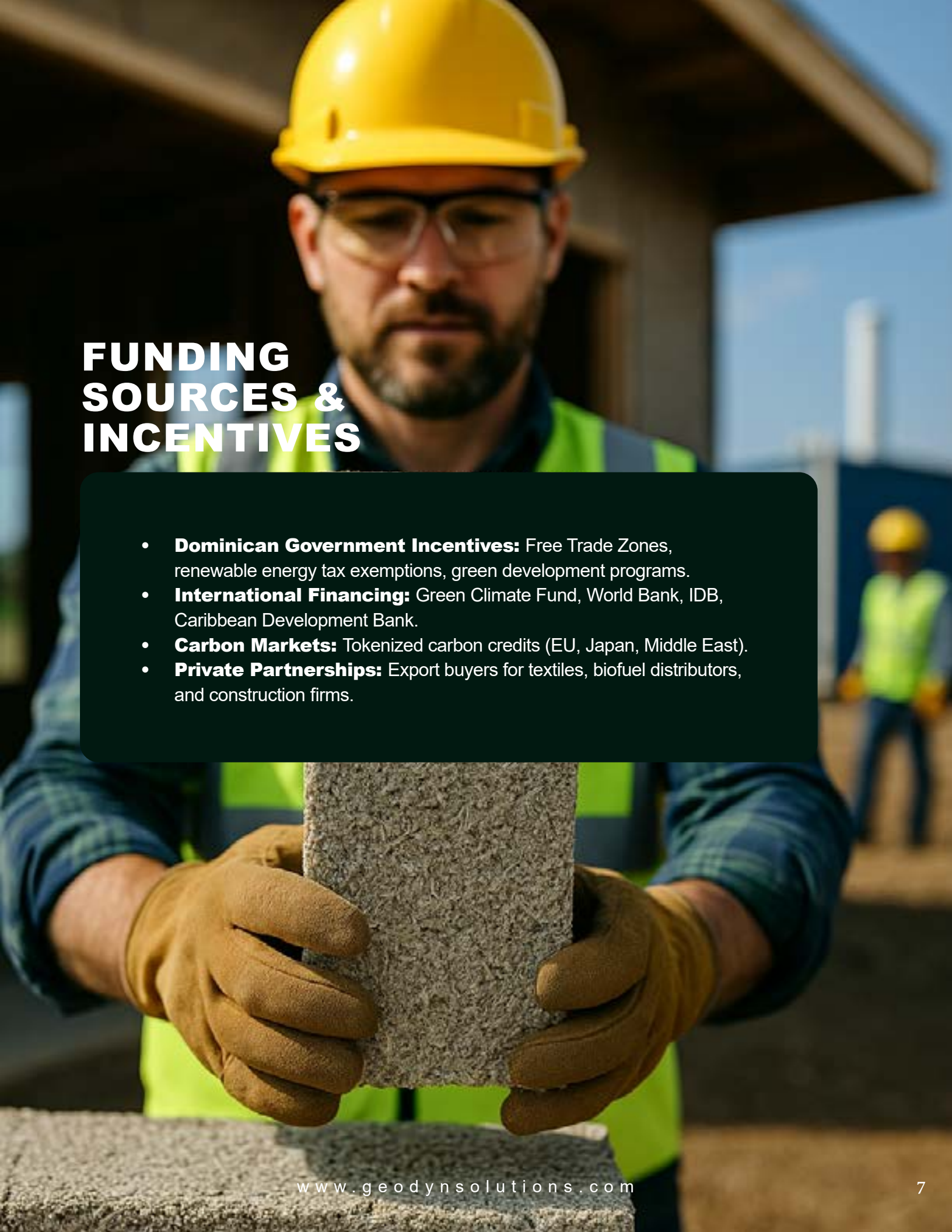
ROI & PAYBACK:

- ROI : 20–25% over 10 years
- Payback : 5 years
- Break-even : Year 3



ECONOMIC & SOCIAL IMPACT

- **CO₂ Reduction:** 300,000 tons CO₂ offset annually.
- **Soil Regeneration:** Hemp roots improve soil, prevent erosion, and increase fertility for rotation crops like rice and cacao.
- **Marine Protection:** Integration with sargassum harvesting reduces coastal damage.
- **Water Efficiency:** Hemp requires 50% less water than cotton.

A construction worker wearing a yellow hard hat, safety glasses, and a high-visibility vest is holding a large concrete block. The background shows a construction site with another worker in the distance.

FUNDING SOURCES & INCENTIVES

- **Dominican Government Incentives:** Free Trade Zones, renewable energy tax exemptions, green development programs.
- **International Financing:** Green Climate Fund, World Bank, IDB, Caribbean Development Bank.
- **Carbon Markets:** Tokenized carbon credits (EU, Japan, Middle East).
- **Private Partnerships:** Export buyers for textiles, biofuel distributors, and construction firms.

IMPLEMENTATION TIMELINE

PHASE	TIMELINE
MONTHS 0-6	• Feasibility, licensing, land acquisition, PPA negotiations.
MONTHS 6-18	• Cultivation rollout, textile & paper plant construction.
MONTHS 18-30	• Commission power plants and biofuel facility.
YEAR 3	• Commercial operations, first export shipments.
YEAR 5	• Full-scale operations, ROI achieved.



HEMP: NATURE'S TOUGHEST FIBER ON EARTH

It's said to have more than 50,000 unique uses.

TEXTILES

- Clothing
- Diapers
- Handbags
- Denim
- Shoes
- Fine Fabrics

INDUSTRIAL TEXTILES

- Rope
- Canvas
- Tarps
- Carpeting
- Netting
- Caulking
- Moulded Parts

PAPER

- Printing
- Newsprint
- Cardboard
- Packaging

FOODS

- Hemp Seed Hearts
- Hemp Seed Oil
- Hemp Protein Powder
- EFA Food Supplements

BUILDING MATERIALS

- Oil Paints
- Varnishes
- Printing Inks
- Fuel
- Solvents
- Coatings
- Fibreboard
- Insulation
- Acrylics
- Fiberglass Substitute

BODY CARE

- Soaps
- Shampoos
- Lotions
- Balms
- Cosmetics

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- Soaps
- Shampoos
- Lotions
- Balms
- Cosmetics



SEEDS

ROOTS

CONCLUSION

THIS \$500M HEMP-BASED BIOECONOMY PROJECT WILL TRANSFORM THE DOMINICAN REPUBLIC INTO A CARIBBEAN LEADER IN RENEWABLE ENERGY, SUSTAINABLE AGRICULTURE, AND ECO-FRIENDLY EXPORTS. BY LEVERAGING HEMP'S VERSATILITY, GEODYN SOLUTIONS ENSURES ENERGY SECURITY, CLIMATE RESILIENCE, ECONOMIC DIVERSIFICATION, AND GLOBAL COMPETITIVENESS FOR THE NATION.



HEMP PAPER



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