



EXECUTIVE SUMMARY

ENVIRODEV NATIONAL SUSTAINABILITY COOPERATIVE

Circular Sustainability. Cooperative Strength.

EnviroDev National Sustainability Cooperative constitutes a national cooperative platform that ties together regenerative agriculture, biochar-based carbon removal, circular manufacturing, mobility, gated estate food systems, and regenerative tourism under a single sustainability co-operative for South Africa, with a 10-year pathway to multiple flagship hubs, large-scale carbon assets, and export-oriented green industrialisation.

Vision and Purpose

EnviroDev's core purpose is to establish an integrated regenerative-economy platform that combines environmental restoration, agritech, circular manufacturing, tourism, and digital infrastructure in South Africa. The initiative is structured as a National Sustainability Co-operative with regional hubs, creating a shared architecture through which communities, landowners, municipalities, investors, and specialist technology partners participate in a coordinated green transition.

Over a 10-year horizon, the ambition is to deploy at least five flagship hubs, develop a national carbon aggregation capability, and leverage export-oriented green industrialisation to anchor long-term economic resilience. The brand proposition "Circular Sustainability. Cooperative Strength." captures the emphasis on circular value chains, carbon as a community asset, and co-operative finance and governance models.

Platform Architecture and Enabling Environment

At the heart of the initiative is an enabling environment built on portals, a comprehensive EnviroDev Enabling Environment TechStack, and interlocking sectoral programs spanning gated developments, retrofits, manufacturing, crops and food producing EcoPods, automotive AutoPods, tourism offerings, various EquipmentXChanges and marketplaces. Specialist suppliers contribute connectivity, software and apps, IPTV, fintech, tokenisation, DFI liaison, MobileHub Facilities

Management Platforms, and carbon monetisation capacity, creating a vertically integrated but modular ecosystem.

The cooperative structure is anchored by EnviroDev National Co-operative Limited as the apex, supported by regional primary co-operatives and a Sustainability & Environmental Fora Secretariat, with further commercial SPVs for green infrastructure, carbon exchange and services, education and human capital, and equipment exchanges. Governance emphasises independent boards, technical advisory councils, community representation, transparent reporting, and ESG dashboards to ensure credibility and investor confidence.

Cobus.Tech and its portfolio of domains and platforms (including MoPay, OmniMo, Smartfarms, CarbonTaxSA, Smarttechfunding, ICTCompliance, SmartBiometrics, Water360, MobileHub, EquipmentXChange, IOTServices, SmartRetro, IOTLogistics, Communitysustainability) provide the digital backbone for portals, MRV, compliance, and transactional flows. Internationally, the platform is positioned to interface with 11 professional associations, 8 industry apex bodies, 13 fora and regional associations, 26 channel thought leaders, and 17 technology collaborations, reinforcing global linkages and scalability.

Integrated Value Proposition and Stakeholder Benefits

EnviroDev's value proposition rests on integrated systems that connect agriculture, carbon, manufacturing, tourism, fintech, and MobileHub Facilities Management Platforms into a single coherent value chain. Feedstocks flow into biochar production and onward into soil enhancers, construction and road-building materials, and plant systems, establishing a circular economy from "seed to plant/equipment to plates.

Stakeholders benefit through restoration payments, land value uplift, jobs, food security, carbon revenue, diversified ESG returns, carbon asset creation, resilience, and local industrialisation. Communities, investors, municipalities, and landowners all have defined participation pathways as founding members, landowners, tribal authorities, municipalities, educational institutions, strategic partners, investors, and sustainability organisations.

Example stakeholder value

- Communities gain jobs, food security, skills, and shared carbon revenues through co-operative ownership of carbon assets.
- Municipalities gain restoration of degraded landscapes, localised industrialisation, and enhanced ESG profiles linked to verifiable carbon outcomes.

- Investors gain diversified revenue streams across agriculture, carbon, energy, construction materials, technology platforms, education, tourism, and waste recycling.

TechStack and Sector Programs

The platform's TechStack includes portals; Facilities Management Platforms; a connectivity layer; IPTV broadcasting; transactional and fintech portals; developer packs; retrofit kits; and 5IR design and fabrication capabilities. This stack underpins sector-specific programs for gated communities, modular production systems, carbon hubs, MVP projects, and funding instruments.

In gated communities, EnviroDev offers assessment bundles, HOA support platforms, EquipmentXChanges, circular EcoXChanges, reciprocities platforms for property, vehicles and skills, token/fintech exchanges, and a Water360 catalogue. Modular production covers food crops (Including moringa and hemp), biochar, fertilisers, health supplements, construction and road-building materials, and associated education venues and programmes, off-taker support, PPP facilitation, and carbon credit hubs and co-ops.

The sustainability funding architecture includes collateral instruments, project pipeline funding, MVP and twinning platforms, human capital development hubs, DFI collaborations, sustainability and green energy banks, asset tokenisation channels, and a Green Finance Hub. This is designed to handle capital intensity via blended finance, PPPs, and diversified revenue streams while accommodating regulatory and carbon-market risk.

Flagship Projects Overview

Four flagship concepts demonstrate the integrated model in practice and act as pilots and showcases.

BioChar2Thicket

BioChar2Thicket is a 1,000-hectare pilot integrating thicket restoration, carbon finance, manufacturing, and rural development. Its layered design spans restoration (Spekboom, moringa, hemp), carbon MRV and verification, manufacturing (biochar and soil enhancers), and rural economy development (jobs, SMEs, skills).

Indicative annual outputs per 1,000-hectare pilot include 3,000–6,000 tonnes of biochar and 25,000–60,000 tonnes of carbon sequestration (tCO₂e) from the biochar stream. Objectives are to restore degraded landscapes, produce biochar while reducing alien species, generate verified carbon credits, and manufacture carbon-negative products, with a scale pathway from 1,000 to 10,000–50,000 and eventually 100,000+ hectares.

Gouritz Bridge Development

The Gouritz Bridge Development envisions Africa's gateway to regenerative tourism through the adaptive reuse of heritage bridges into a sustainability precinct. Components include a 30-room boutique container hotel (15 rooms per side), public area modules, a 10-metre diameter pool, restaurant (80–100 seats), lounge capacity for 80, welcome centre, and biosphere exhibition, all powered by a renewable energy system combining 50 vertical-axis turbines, solar PV, battery storage, and rainwater harvesting.

Beyond the pilot, the concept extends to a Sustainability Route around South Africa, integration with all ports of entry, a dedicated IPTV sustainability channel, international route expansions, multiple PPPs, and a regional technology-driven support centre for local tourism offices and tour operators. It also serves as an incubator for human capital development in sustainability via e-learning/IPTV, linked to fly-in academic tourism.

EnviroDev EcoPod Food Systems

EnviroDev EcoPods are modular, water-efficient rotating hydroponic systems designed for gated estates, schools, hospitality and community projects. Features include 4–6 removable top crates, a central service core and return-flow reservoir to eliminate waste, a 360° rotating base for even exposure, and optional transparent or shade covers for modular expansion.

Performance metrics target up to 90% water-use reduction compared to open-field agriculture, with deployment models covering estate rollouts, schools and community hubs for nutrition and skills, and hospitality supply for hotel kitchens and restaurants. EcoPods connect into the broader circular system of crops, food security, carbon MRV, and EquipmentXChanges marketplaces.

AutoPods National Mobility Platform

The AutoPods National Mobility Platform will deploy a grid of AutoHubs and mobile AutoPods to deliver fleet optimisation, diagnostics, predictive maintenance and verified carbon accounting into the EnviroDev cooperative. The self-funding model targets approximately ZAR 1,000 per vehicle per month, using best-of-breed telematics and MRV to convert emissions reductions into cooperative carbon credits distributed via EnviroDev's Carbon Exchange.

Core offerings combine telematics and monitoring (OBD-II, SIM, satellite), predictive maintenance, carbon MRV and aggregation, a marketplace for parts logistics, auctions, valuations and financial products, and consumer integration via a carpool app and cooperative consumer fleet onboarding. The pilot in George envisages one AutoHub and three AutoPods integrated with the 1,000-hectare pilot MRV; Year 2 expands to 26

AutoHubs and 156 AutoPods managing about 117,000 vehicles, with Years 3–5 scaling to a national grid and broad consumer fleet integration.

Financials, Scale Targets and Roadmap

For a single integrated pilot hub, the indicative capital expenditure is approximately ZAR 1.4 billion across components such as land preparation, agrivoltaics, hydroponics and aquaponics, processing plants, biochar systems, renewable energy storage, smart infrastructure, digital platforms, education facilities, construction materials, working capital, professional services, and contingencies. Year-5 revenue projections for the pilot total around ZAR 665 million from agriculture, energy, carbon credits, construction materials, technology platforms, education and tourism, and waste recycling.

At national scale over 10 years, the platform targets annual turnover of ZAR 8–15 billion, carbon asset value exceeding ZAR 2 billion, export revenues above ZAR 3 billion per annum, direct employment of 15,000–35,000 people and indirect employment of 50,000–120,000 people, alongside annual carbon sequestration of 250,000–600,000 tCO₂e across a five-hub portfolio. The implementation roadmap is staged from foundation and governance formation (0–6 months), through pilot development (6–24 months), regional scaling (24–48 months) and national/international expansion (48–120 months), with key milestones including agrivoltaic installations, biochar pilot rollouts, EcoPod deployments, processing facilities, digital platform rollout, education launches, additional hubs, manufacturing scale-up, export programmes, expanded estate participation, five-hub deployment, continental replication, and IPO/listing preparation.

Risks, Mitigation and Next Steps

Key risks identified include capital intensity, regulatory delays, carbon-market volatility, technology integration challenges, and community governance complexity. Mitigation strategies focus on phased rollout and blended finance with PPPs, Strategic Integrated Project (SIP) positioning supported by specialist legal advisors, diversified revenue streams and long-term offtake agreements, modular pilots with strategic global partners, and clear governance charters with independent oversight.

Appendices include supporting documents such as EnviroDev brochures, pitch decks, financials, carbon MRV frameworks and investor memoranda, underpinning investment-readiness and technical robustness. A 90-day pref feasibility note, with an estimated cost range of ZAR 25–60 million, outlines immediate next steps: registering the steering committee, commissioning carbon baseline and agrivoltaic engineering studies, preparing the SIP submission, and building a detailed pilot financial model and investor memorandum.

Thank you for your attention.

