

## Sustainable Management of Construction and Demolition By-products – Pacific Region

Contact.	Subsector	Entidades Relacionadas.	ODS.
<b>Investment Single Window (VUI)</b> <b>Invest Pacific</b>  <a href="mailto:contactovui@mincit.gov.co">contactovui@mincit.gov.co</a>	Representante de ventas Utilization and Management of Construction and Demolition Waste (CDW)	Invest Pacific, Inter-American Development Bank (IDB), Santiago de Cali City Hall	  

National Development Plan (NDP) Alignment	
Productive Transformation, Internationalization, and Climate Action.	Transition toward a productive economy based on respect for nature.  Circular Economy

ESG Considerations	
<b>Environmental:</b>	Establish a legally compliant and efficient route for the final disposal and reuse of Construction and Demolition Waste (CDW), reducing the extraction of virgin raw materials and minimizing the carbon footprint of logistics operations.
<b>Social:</b>	Tangible improvement in urban sustainability and quality of life for Cali's citizens by addressing a critical public-health and waste-management problem.
<b>Governance:</b>	The PPP structure—supported by local government (Cali City Hall) and institutional partners (IDB Invest)—ensures transparency in the bidding process and a solid regulatory framework for long-term concession operation.

Business Overview	
<b>Objectives.</b>	To generate return on investment through the start-up and efficient operation of the first CDW recovery plant in Cali, ensuring a constant revenue flow through a Public-Private Partnership (PPP) agreement. <ul style="list-style-type: none"> <li>Secure the PPP contract through a transparent public bidding process within the established schedule.</li> <li>Build commercial alliances with key stakeholders in the construction sector to guarantee both the supply of CDW and the demand for the produced eco-materials.</li> <li>Reach operational break-even and maximum installed capacity as soon as possible to optimize cash flow.</li> </ul>
<b>Scopes.</b>	<p><b>The project includes:</b></p> <ul style="list-style-type: none"> <li>Total investment of <b>USD \$ 23,404,603.65 (2022)</b> for construction, technological equipment, and plant commissioning.</li> <li>Comprehensive structuring of the PPP with pre-approved technical, legal, and financial feasibility, and long-term concession operation.</li> </ul> <p><b>The project excludes:</b></p>

Business Overview	
	<ul style="list-style-type: none"> <li>Public capital financing from the City of Cali.</li> <li>The investment is <b>100% private</b> and contingent on successful contract award through the PPP bidding process.</li> </ul>
<b>Project Goals</b>	<ul style="list-style-type: none"> <li>Achieve PPP contract signing within <b>18 months</b> (completion of contractual phase).</li> <li>Reach <b>100 % operational capacity</b> by the <b>second year</b> of operation.</li> </ul>
<b>Market Opportunity.</b>	<p>Cali lacks a legally established and integrated system for CDW management, leading to high logistical costs and severe environmental impacts. The project already holds <b>zoning and environmental approval</b>, with validated <b>technical and financial prefeasibility studies</b>, thereby reducing formulation risk.</p> <p>There is a <b>captive demand</b> for CDW (waste) and a <b>guaranteed demand</b> for eco-materials (product), driven by regulation and strong engagement from construction industry associations. This is a business rooted in <b>urban necessity and regulatory clarity</b>, not just product supply.</p> <p><b>Exceptional Conditions:</b></p> <ul style="list-style-type: none"> <li><b>First-Mover Advantage:</b> The first CDW recycling plant in Cali, ensuring an initial monopoly position in a high-volume market.</li> <li><b>Stable Revenue Stream:</b> The PPP guarantees long-term financial stability, backed by the municipality, minimizing political and regulatory risk.</li> <li><b>Validated Circular Economy Model:</b> Supported by the commitment of major construction guilds (e.g., CAMACOL) for both raw material supply and product demand.</li> <li><b>Sustainable Investment Vehicle:</b> An infrastructure asset with direct and measurable environmental impact, aligned with sustainable-investment mandates.</li> </ul>

2



The project's value-added model for CDW recovery is based on the **Circular Economy** and the utilization of a **critical urban need in Cali**. I

n summary: **Transforming an environmental problem into a sustainable financial asset.**

The model operates under a **Public-Private Partnership (PPP)** agreement, ensuring a **dual and stable revenue stream**:

- Service Income:** Fee charged to construction companies for the reception and processing of their Construction and Demolition Waste (CDW).
- Product Income:** Sale of low-cost, high-ESG-value eco-materials (recycled aggregates) back to the construction industry

Business Model				
<b>Key Partners</b>  - Invest Pacific - IDB Invest - Santiago de Cali City Hall (U.A.E.S.P.)	<b>Key Activities</b> - Efficient, certified plant operation (crushing and sorting). - PPP contract management and service-level compliance. - B2B marketing of eco-aggregates.	<b>Value propositions</b>  - Only legal, integrated, government-backed solution for CDW management in Cali, turning waste into a sustainable and competitive construction input.	<b>Customer Relationships</b>  - Long-term contractual (B2B) relationships with construction companies and public entities, based on regulatory compliance and product quality.	<b>Customer Segments</b>  - Construction and real-estate developers (medium and large scale). - Local government agencies (infrastructure projects).
	<b>Key Resources</b> □ Industrial plant with specialized technology.  □ PPP contract granting operational rights.  □ Direct relationships with municipal and regional public entities.		<b>Channels</b>  -Direct relationship with companies and municipal and regional public administrations.	
<b>Cost Structure.</b>  Operating expenses (OPEX): energy, maintenance, personnel, logistics for CDW collection.			<b>Revenue Streams</b> -Sale of <b>eco-materials / recycled aggregates</b> (main source).  - <b>Processing / disposal fees</b> charged to CDW generators.	

3

Project Timeline				
Phase	Start	End	Predecessor	Milestone
Initial identification and structuring	Project launch	+ 9 months	N/A	Completion of Feasibility Studies (Technical, Legal, Financial, and Risk) for the PPP.
Approval and Evaluation	Feasibility closure	+ 6 months	Feasibility studies	Technical, Legal, and Financial Viability Report issued by the Public Entity.
Contracting process	Viability concept	+ 6 months	Approval	Launch, proposal evaluation, and PPP contract award.
Execution and construction	Contract awarded	+18 months	Contract closure	Start of the Plant's Commercial Operation (Guaranteed Income Flow).

Financial Parameters - Cash Flow	
Revenue Parameters	Expense Parameters
Parameter (Unit)	Parameter (Unit)
Payment for CDW collection and transport	Cost of CDW collection and transport
Sale of eco-sustainable aggregate products	Cost of CDW processing



Risk Management Plan					
Event	Probability	Impact	Rating	Mitigation	Contingency
Non-award of PPP contract	Medium	High	High	Solid technical and financial proposal, and investor experience in CDW management.	Diversification of project advantages.
Insufficient CDW volume (Demand Risk)	Low	Medium	Medium	Off-take agreements with key construction companies.	Regulatory pressure on City Hall to ensure compliance with the CDW management framework.
Cost increase (OPEX/CAPEX)	Medium	Medium	Medium	EPC (Construction) contracts under fixed-price schemes or economic rebalancing clauses in the PPP contract.	Use of contingency reserves and restructuring of the financial plan.
Regulatory / Political Risk (Changes in the legal framework)	Low	High	Medium	The PPP structure and support from BID Invest and City Hall mitigate the risk of regulatory change.	Execution of guarantees and compensation clauses within the concession contract.

End of the report.