Feedstock Supply & Logistics Overview

Purpose

This overview outlines how CarbonCore's feedstock supply chain is designed to ensure reliable, cost-effective delivery to the Catlettsburg SAF facility while minimizing local traffic impacts, infrastructure wear, and emissions.

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1. Multi-Source Supply Network

Our feedstock is secured from a network of vetted partners operating across forestry, agriculture, and land management sectors.

- **Primary Forestry Sources** – By-products from managed logging, sawmill operations, and long-term stewardship harvests.
- **Agricultural Residuals** – Residues from crop production, processing, and land clearing.
- **Opportunistic Inputs** – Short-rotation woody crops, energy grasses, or post-event biomass when available and suitable.

This diversified supply mix ensures resilience, protects against regional shortages, and allows for optimized cost per ton.

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2. Catchment Zones

The facility's sourcing plan uses a **concentric catchment zone model**:

- **Primary Zone (0–75 miles)** – Priority supply from local operations feeding into nearby railheads and barge terminals.
- **Secondary Zone (75–150 miles)** – Supplementary volumes routed primarily via rail or barge.
- **Extended Zone (150+ miles)** – Activated during peak demand periods or market shortages, almost exclusively via unit trains or bulk barge shipments.

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3. Primary Transport Modes

CarbonCore's inbound supply chain prioritizes high-capacity, low-impact modes:

- **Rail** – Unit trains provide predictable, bulk delivery from primary and secondary zones with minimal local congestion.
- **Barge** – Large-volume shipments via the Ohio River, especially from forestry hubs and agricultural riverports, offering both cost efficiency and carbon savings.

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4. Limited Truck Usage

Truck haulage is limited to **short feeder hauls** between regional staging points (railheads, barge docks) and the facility. This minimizes daily truck movements through Boyd County and avoids the community disruption that would come from high-volume road transport.

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5. Conveyor System Integration

Feedstock arriving by rail or barge will be transferred via a **dedicated conveyor link** directly from the terminal/dock to the processing facility.

- **Continuous Flow** – Ensures steady, controlled feed into operations without the stop/start delays of truck offloading.
- **Low Impact** – Eliminates the need for thousands of truck movements annually, reducing road wear, emissions, and local congestion.
- **Operational Efficiency** – Reduces handling costs and streamlines inbound logistics.

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6. Pre-Processing & Storage

Feedstock will undergo:

- **Pre-Processing** – Size reduction, drying, and quality inspection to ensure input specifications are met.
- **On-Site Storage** – Covered storage for a rolling 7–14 day buffer supply.
- **Strategic Off-Site Storage** – Staging reserves closer to source for rapid mobilization if needed.

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7. Risk Management in Logistics

Resilience measures include:

- Multiple contracted rail and barge partners for redundancy.
- Seasonal adjustments to optimize barge vs. rail usage.
- Optional third-party logistics coordination for extended zone supply during peak periods.

Investor-Confidential Note:

Exact terminal locations, conveyor specifications, and routing details are maintained in a restricted-access appendix to protect commercial sensitivity and supply chain security.