

Traceability & Chain of Custody for Woody Biomass

A practical guide for loggers, contractors, harvesters, suppliers, aggregators, and project developers



Why it matters: Buyers and fuel programs may require evidence of where woody biomass came from, what type of material it is, how it was generated, and how it moved through the supply chain.

1 What do these terms mean?



Traceability

The ability to connect a load of biomass back to its source and supporting records.



Chain of custody

The documented path the material follows from forest or mill to the receiving facility and final buyer.

2 The 5 core things to document



Source

Property, tract, stand, or mill of origin.



Material

Slash, thinnings, small-diameter wood, mill residues, storm debris, etc.



Activity

How the material was generated: thinning, harvest, salvage, or processing.



Quantity

Weight or volume, date, and units.



Movement

Truck/load ID, hauler, destination, and delivery record.

3 Who records what?



Landowner / Forester

- Tract ID and map
- Management or harvest plan
- Authorization / land info



Logger / Contractor

- Harvest activity
- Material category
- Load ticket or source reference



Hauler

- Pickup point
- Truck or load ID
- Delivery destination and date



Mill / Aggregator / Terminal

- Scale ticket
- Inventory or storage lot
- Mixing / segregation records



Fuel Producer / Buyer

- Supplier declarations
- Eligibility verification
- Audit-ready file



Important

The exact requirements vary by program and buyer. Good documentation links the source, the load, and the receiving record.

4 Key takeaway



Know the source. Describe the material. Document the load. Keep the records connected.

How to Verify Woody Biomass

Common records, chain-of-custody methods, and systems that support verification



Most programs accept a combination of records — not just one form — as long as the source, material, quantity, and movement can be connected and audited.

1 Common records that may support verification



Harvest activity

Harvest plan, silvicultural prescription, timber sale or harvest contract, forester report, permit or notification



Material category

Product code, supplier declaration, load ticket, residue report, or mill record



Source tract

Tract map, GIS boundary, stand or property ID, landowner authorization



Approximate quantities

Scale ticket, weighbridge receipt, tally sheet, inventory log, or documented conversion



Load identification

Truck ticket, bill of lading, trip or load ID, delivery receipt, receiving-facility ticket

i Different buyers and programs may ask for different combinations of records.

2 How the records stay connected



Tract ID MD-042

Map, source tract, management info



Load Ticket 2087

Material type, date, hauler, destination



Scale Ticket 9823

24.6 green tons received



Good practice

Use consistent tract and load identifiers so the buyer can connect the source record, the load, and the receiving record.

3 Chain-of-custody methods



Physical segregation

Eligible or certified material is kept separate from other material.



Mass balance

Material may be mixed, but quantities and claims are reconciled through defined accounting rules.



Identity preservation

A specific source or material identity is maintained through the supply chain.

i Not every program allows every method in the same way.

4 Systems that can support traceability



Basic

Paper records, signed load tickets, tract maps, spreadsheets



Intermediate

Digital ticketing, QR codes, GPS references, electronic scale tickets



Advanced

Integrated procurement, inventory, GIS, and chain-of-custody platforms

i The best system is the one your buyer accepts and your team can use consistently.

5 Program notes



EPA RFS

Focuses on pathway eligibility, qualifying feedstocks, and recordkeeping. Exact evidence depends on the approved pathway and verification approach.



EU RED

Adds biomass sustainability, and supply-chain requirements, often supported through recognized certification schemes.



CORSIA

For aviation fuel supply chains, sustainability and lifecycle requirements are typically demonstrated through approved certification approaches.



ISCC

Provides certification frameworks that often use chain-of-custody rules such as mass balance.

! Always confirm the buyer's requirements before harvest or delivery begins.



Before you supply biomass, ask:

- ☐ What material categories are accepted?
 ☐ What source records are required?
 ☐ How should loads be identified?
 ☐ What records must be retained, and for how long?
 ☐ Is third-party certification needed in this supply chain?