

TrustlessMark Proof Deployment Dossier

FCC Certification Framework v1

A transparent, cryptographically verifiable certification framework for specialty coffee ethics, sustainability, and provenance.

Verification Root: <https://verify.trustlessmark.org/fcc/>

Version: OCP-v1 | Date: October 24, 2025

Verified via TrustlessMark Foundation

Abstract

This dossier documents the foundational deployment of the TrustlessMark Open Coffee Proof (OCP) verification framework for Flying Circus Coffee (FCC). It establishes a cryptographically verifiable pathway from farm-level certifications to consumer-visible badges via Cloudflare, Shopify, and structured data integration.

I. Framework Overview

TrustlessMark establishes a verifiable data registry for ethical and sustainability certifications. Using JSON-LD manifests paired with cryptographic signature files (.sig), it enables third parties, search engines, and consumers to confirm authenticity and provenance directly from the source without intermediary validation.

II. Certification Scope

Category	Examples
Environmental	USDA Organic, Rainforest Alliance, Carbon Neutral, Compostable Packaging
Ethical	Fair Trade, Direct Trade, 1% for the Planet
Social / Ownership	Texas Veteran-Owned, WBENC / Women-Owned
Governance	B Corp, TrustlessMark Verified

III. Example Proof Object

Each certification is represented by a pair of files: a JSON manifest and a corresponding signature. For example, the “USDA Organic” proof appears as:

<https://verify.trustlessmark.org/fcc/certifications/usda-organic.json>
<https://verify.trustlessmark.org/fcc/certifications/usda-organic.sig>

IV. Verification Flow

1. Laboratory or certification body issues a verified claim.
2. Flying Circus Coffee converts it into an OCP JSON-LD proof.
3. Cloudflare Pages hosts the proofs under `/verify/fcc/certifications/`.
4. Shopify product templates load proofs dynamically via metafields.
5. Search engines detect verified claims through structured data markup.

V. Governance & Renewal

All proofs in this deployment conform to TrustlessMark OCP-v1 standards and are valid through October 2026. Signatures are simulated pending key management activation. Renewal requires re-signing of all active .json manifests and updated publication in the `/verify` registry.

Verified via TrustlessMark Foundation – October 2025