

Executive Sustainability & Resource Audit Report

Multi-Vector Environmental Audit & Carbon Performance Baseline • Facility: Ekoten • Period: 2025-12

FACILITY
Ekoten

REPORTING PERIOD
2025-12

PRODUCTION OUTPUT
608,946 kg

DATA STATUS
✓ 100% Ingested

ANNUAL GHG
7,307
ton CO₂e / year

CARBON INTENSITY
1.496
kg CO₂e / kg fabric

WATER FOOTPRINT
72.6
L / kg product

CARBON LIABILITY
€70,678
@ €80.0 / ton ETS

VERIFIED SCOPE 1 & SCOPE 2 ENERGY BREAKDOWN

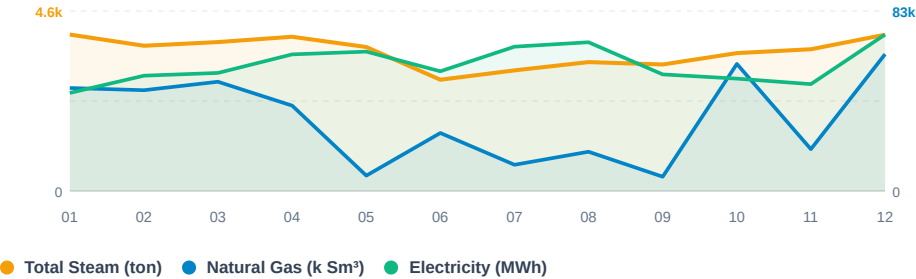
Scope 1 Direct Emissions
1,348.8 tCO₂e
Natural gas & fluid bed boilers

Scope 2 Grid Electricity
5,958.2 tCO₂e
Grid power allocation

Specific Process Intensity
4.82 kWh/kg
Total energy per kg fabric

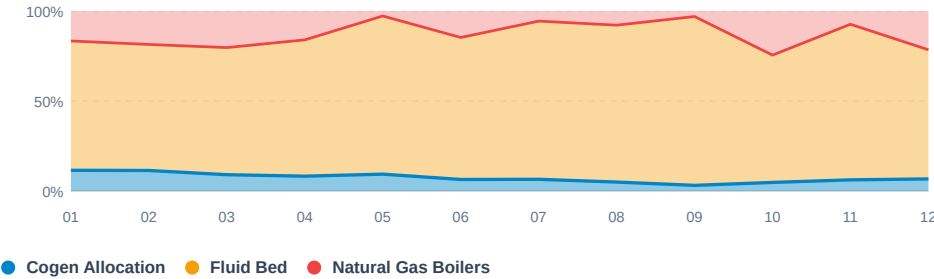
12-Month Multi-Vector Energy Consumption Trend

Area Trend



Fuel Source Distribution & Fuel Bed Utilization (%)

Area Mix

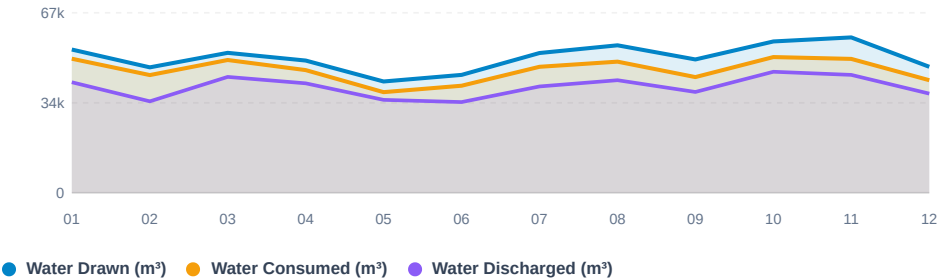


Water Footprint, Strategic Interventions & Audit Lineage

Deterministic Observations & Immutable Cryptographic Lineage • Facility: Ekoten • Period: 2025-12

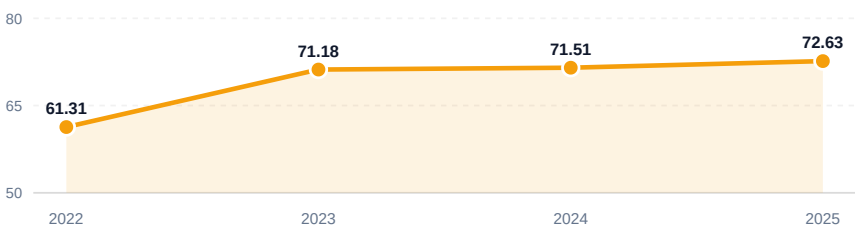
12-Month Water Balance Dynamic (m³ / month)

Area Flow



ISO 14046 Historical Water Intensity Trend (2022–2025) · L / kg

Line Intensity



01. Seasonal Gas Variance & Thermal Optimization

Winter natural gas consumption shows a 28% peak increase over baseline summer operations. Transitioning pre-heating stages to recovered waste-heat loops will reduce seasonal heating spikes and curtail ~380 tCO₂e Scope 1 emissions annually.

02. Water Recycling Capacity Expansion

Process water recovery currently stands at 44,989 m³/year (7.4% of total withdrawal). Upgrading membrane filtration capacity to reach 15% closed-loop recycling will yield ~50,000 m³ in annual municipal savings and ensure full CSRD compliance.

03. Scope 2 Grid Decarbonization via PPA / On-site PV

Scope 2 represents 81.5% of total carbon liabilities (€476k/year ETS risk). Accelerating corporate Power Purchase Agreements (PPA) or direct on-site solar deployment directly hedges against rising EU carbon border tax tariffs.

VERIFIED INGESTED SOURCE RECORDS

SOURCE FILE NAME	SHA-256 CHECKSUM HASH	YEAR	STATUS
Atık Hiyerarşisi 2025.xlsx	000b4242dd3d2203e9c48fc140dd172c10374ba5f4f92856094cac2888cd0506	2025	✓ Ingested
Enerji Tüketimleri 2025.xlsx	9e2b818a740942c2659bda1cfa36c4605be3f65e07663641dcaa9faf55cdefb0	2025	✓ Ingested
Su Ayak İzi Hesaplama Tablosu_2025.xlsx	132c1fe25ec623b6806dc2f985b4e677b7b10565f25eef395e8dd00abfd9b89e	2025	✓ Ingested
mb_kompozisyon_sutunlara_ayrilmis.xlsx	85f727b3fa7e8f6c1009c7a85d13b6b386e70c1e91193d35c16b81a8de89e253	2025	✓ Ingested

OFFICIAL EVIDENCE STATEMENT

Certified that all KPIs, energy balances, water intensities, and GHG emission calculations presented in this 2-page report originate exclusively from authenticated operational records and immutable fact tables without synthetic estimation.