ROASTED ON ELECTRIC POWER IN YORK

Scope 3 and your coffee.

How the coffee your business buys shows up in your carbon footprint, and how to shrink it **without changing anything about your morning**.

KWHCOFFEE.COM · HELLO@KWHCOFFEE.COM

~90%

cut in roasting emissions vs gas, per Bellwether's published data for our all-electric roaster

20–47×

more CO_2e from air freight than sea, per tonne-km. We never fly coffee

0 g/km

tailpipe CO_2 on our EV deliveries across York & Yorkshire

The short version

01

If your business reports its carbon footprint, or expects to soon, the coffee in your kitchen, lobby or hospitality offer sits inside **Scope 3, Category 1: Purchased Goods and Services**. For most companies, Scope 3 is by far the largest slice of their footprint, and Category 1 is typically its biggest single category.[1]

Coffee carries a heavier footprint than most office purchases. That range is the point: the same coffee, sourced and processed differently, can carry **less than a quarter of the emissions**.

kWh Coffee is built to sit at the bottom of that range. We roast on an all-electric Bellwether, never air-freight our beans, deliver on EVs, and source through direct, traceable, ESG-led relationships. Then we hand you the data so your sustainability team can use it in your own reporting.

11 kg

of CO_2e per kg of green coffee on ICO estimates. Published life-cycle studies range from 3.5 to 15.3 kg depending on how it is grown, shipped and roasted.[2]

Scope 3, in two minutes

SCOPE 1	SCOPE 2	SCOPE 3
What you burn directly	The electricity you buy	Everything else in your value chain, including every product you purchase

Scope 3 commonly accounts for the large majority of a company's total footprint, which is why regulators and large customers increasingly ask about it. The pressure to report it is rising in the UK:

UK SRS

The UK Sustainability Reporting Standards (S1 and S2), finalised in February 2026, bring Scope 3 disclosure into the mainstream: mandatory for listed companies is proposed from January 2027, with Scope 3 on a comply-or-explain transition.[3]

SECR

Large UK companies (250+ employees, £36m turnover or £18m balance sheet, any two) already report energy and carbon annually. Scope 3 is voluntary but encouraged, and increasingly expected.[3]

CSRD

UK businesses selling into or owned by EU groups inherit mandatory Scope 3 reporting where value-chain emissions are material.[4]

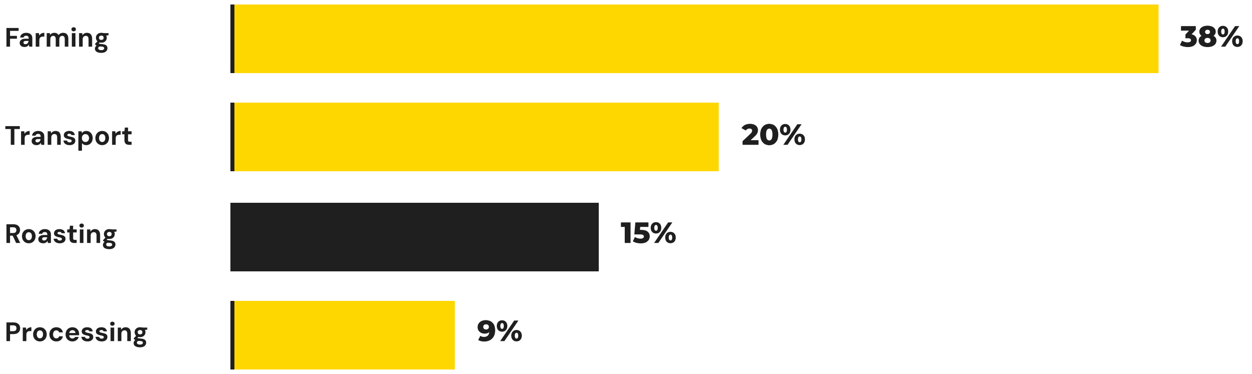
Customer pressure

Companies with science-based targets must engage their suppliers. If your customers have net-zero commitments, your footprint is their Scope 3, and tenders increasingly ask for it.

You cannot cut Scope 3 by changing your own operations. You cut it by **choosing better suppliers**. That is the entire mechanism, and it is why the GHG Protocol's own guidance on Category 1 centres on supplier engagement and supplier-specific data.[5]

Why coffee is worth fixing

Life-cycle studies span **~3.5 kg CO_2e per kg** for sustainably produced, sea-freighted coffee to **~15.3 kg** for conventional production: a 77% difference driven largely by farming inputs and by whether beans travel by ship or by plane.[2] Every stage below is a supplier decision. Which means every one of them is a decision we can make well on your behalf.



Share of the coffee industry's emissions by supply-chain stage.[6] Roasting (black bar) is usually gas-fired. It doesn't have to be.

What kWh does differently

STAGE	CONVENTIONAL SUPPLIER	⚡ KWH COFFEE
Roasting	Gas roaster with afterburner; roasting is ~15% of the industry's footprint	All-electric, ventless Bellwether: ~90% lower roasting emissions; under 0.1 kg CO_2 per roast cycle (Bellwether's published data)
When we roast	Whenever production demands	Batches timed to the greenest windows on the National Grid (our public Grid Watch feed launches winter 2026/27)
Int'l freight	Mixed; air freight used for speed (500–1,000 g CO_2e per tonne-km)	Sea freight only (10–40 g CO_2e per tonne-km). A policy, not an accident
Local delivery	Diesel van, ~250 g CO_2/km	Electric vehicle, zero tailpipe emissions
Sourcing	Often opaque; blended lots	Direct-trade relationships, fully traceable. Lot-level records shared on request; our public Supply Chain Visualiser launches winter 2026/27
Your reporting	Industry-average estimates only	Supplier-specific data for your Scope 3 Category 1 disclosure, prepared for you on request

1

All-electric roasting, timed to the grid

Every batch is roasted at our York roastery on a Bellwether, the world's first commercially ventless, all-electric roaster. No gas line, no chimney, no afterburner. Bellwether roasting cuts roasting emissions by around 87–90% versus gas, and reduces VOCs and particulates by 80% and 43% respectively, per Bellwether's published data.[7] Our roast cycles come in under 0.1 kg CO_2 each, and we schedule them for the windows when Britain's grid is running greenest on wind, solar and nuclear. Our public Grid Watch feed launches winter 2026/27.

2

No air freight. Ever.

Air freight emits 500–1,000 g CO_2e per tonne-km; sea freight emits 10–40 g. Moving a tonne of coffee by ship instead of plane cuts its transport emissions by a factor of roughly 20 to 47.[8] All kWh green coffee travels by sea. It costs us patience, not quality: green coffee is stable in transit; freshness comes from the roast date, which is ours and recent.

3

Zero-tailpipe delivery

A diesel delivery van emits around 250 g CO_2 per km. Ours emit none at the tailpipe: kWh deliveries across York and Yorkshire run on electric vehicles, and our mobile espresso bars run entirely off vehicle batteries via V2L: no generators, no grid hookup.[9]

4

ESG-led, traceable sourcing

We buy through direct-trade relationships with full traceability, and we share it: lot-level traceability and per-kg carbon figures on request today, with our public Supply Chain Visualiser and Carbon Calculator launching from late 2026. ESG is a sourcing criterion for us, not a label, which matters when your auditors, customers or tender panels ask you to evidence yours.

What your sustainability team gets

✓ Supplier-specific data, not industry averages

GHG Protocol guidance ranks supplier-specific data as the gold standard for Category 1. We provide per-kg emissions figures for your coffee purchases, ready to drop into your inventory.

✓ A reportable reduction

Switching to a lower-carbon coffee supplier is a genuine, defensible Scope 3 intervention: the kind supplier-engagement programmes exist to find.

✓ Evidence for tenders and customers

Traceability, LCA-backed figures and a named UK supplier with a documented data trail: material you can cite in CDP responses, tender submissions and ESG reports.

✓ A story people actually enjoy

Most Scope 3 work is invisible. This one is in the kitchen every morning, tastes better than what it replaced, and comes with a yellow EV.

DROP-IN DISCLOSURE · COPY, ADAPT, PASTE

"Coffee purchases (Scope 3, Category 1) are supplied by kWh Coffee Roasters, York, using supplier-specific emissions data: all-electric roasting (<0.1 kg CO_2e per roast cycle, per Bellwether's published data), sea freight only, and zero-tailpipe-emission local delivery. Per-kg figures were provided by the supplier and cross-checked against supplier-provided records."

Next steps

We supply wholesale roasted coffee, fully managed office and lobby espresso bars, mobile bars for events, and custom roasting with your branding, all from York, all on electric power.

Get a quote

at kwhcoffee.com. Our instant Wholesale Profiler launches late 2026

See your coffee's numbers

Per-kg figures on request now; self-serve Carbon Calculator from late 2026

Or just email

hello@kwhcoffee.com and we'll bring samples in the EV.

SOURCES 1. Carbon Direct / GHG Protocol: Scope 3 Category 1 typically the largest category for most sectors. 2. International Coffee Organization estimate; LCA synthesis of Arabica coffee (Brazil/Vietnam to UK), *Geo: Geography & Environment*. 3. UK Dept for Business & Trade, UK SRS S1/S2 (Feb 2026); SECR guidance. 4. EU Corporate Sustainability Reporting Directive. 5. GHG Protocol, Technical Guidance for Calculating Scope 3 Emissions, Category 1. 6. Kaffeemacher / Bellwether Coffee industry analyses. 7. Bellwether Coffee sustainability reporting and independent coverage (Canary Media). 8. Freightos / Climate Action Accelerator freight emissions data. 9. ICCT, European delivery vehicle emissions. Figures are drawn from published third-party sources current as of July 2026 and are provided in good faith to support, not replace, your own reporting. Full citations available on request.