

QSTIMATING CASE STUDY

Waste Classification to a Rate Build-Up

Turning three documents that don't reference each other; a levy regulation, a by-product regime, and a ground investigation report; into a single decision flow a QS can price against.

3

DECISION GATES
DERIVED

6

GI SAMPLES
CROSS-CHECKED

€10/t

RECOVERY LEVY
RATE IN PLAY

3

PRICING STREAMS,
NOT ONE

PREPARED FOR THE QSTIMATING.IE WORKFLOW LIBRARY

THE STARTING POINT

A brownfield site is being cleared for a retail tender in the Mid-West. Three documents land on the desk, and none of them were written to speak to each other: a waste recovery levy regulation, an EU by-product regime, and a ground investigation report full of TOC percentages and leachate comparisons written for geotechnical purposes, not for pricing.

None of that is a price. A regulation tells you what's exempt in principle; a GI report tells you what's in the ground; neither tells you, sample by sample, what a haulier is going to be charged at the weighbridge. Turning three static documents into one live decision a QS can defend at tender return is the job.

1

Is it even “soil and stone” in law?

The regulation's own definition has two limbs, and organics fail it in a way that isn't obvious from a visual borehole log. Get this gate wrong and the whole waste code, and levy rate, follows it.

2

Does the site's own history change the rate?

Two loads can look identical in a trailer and carry a €10-a-tonne difference, because the exemption turns on where the land has been, not what the lab says is in it.

THE APPROACH - THREE GATES OVER THE SAME LOAD

The same structure that works for a rotary core log works here: don't average the site into one number, run every sample through the same sequence of tests and let the sequence do the classifying. Three gates, applied in order, decide the rate before a single trailer leaves site.

GATE 1

Definition

Does the material meet both limbs of the legal definition, natural excavation spoil, and inert? Peat, timber and plastic fail this gate outright. Brick, concrete and metal don't, they're inert in themselves.

GATE 2

Origin

Greenfield or non-greenfield, tested against site history and anthropogenic content rather than the lab sheet. This is the gate that actually carries the money.

GATE 3

Documentation

At the weighbridge, a mixed and undocumented load is charged in full, the exemption only survives if the exempt tonnage is identified in a site investigation or resource plan.

APPLYING THE GATES

Gate	What decides it	Outcome if failed
1: Definition	Full WAC suite (solid & leachate) plus TOC, not the visual log description	Falls outside soil and stone entirely; waste code can shift to a materially higher levy band.
2: Origin	Site history, aerial imagery, previous-use description, sampling location plan	Greenfield material carries the full levy, even where a by-product route exists as an alternative.
3: Documentation	Site investigation or resource management plan identifying the exempt tonnage, load by load	Whole load charged at the leviable rate, including any fraction that would otherwise be exempt.

THE OUTPUT - A WORKING DECISION REGISTER

Run against the site's own GI data, the three gates stop being abstract and become a row-by-row table: sample, depth, what it failed or passed, and the rate that follows. This is the format that actually sits behind a tender line, based on a designated brownfield site.

Sample	TOC	Result	Rate
TP01, 0.30–0.50m	0.54%	Passes both gates: brick and concrete inclusions make it non-greenfield	EXEMPT
TP01, 0.90m	15.27%	Fails Gate 1: exceeds even the hazardous ceiling on organic content	€10/t
TP02, 0.30–0.50m	6.62%	Fails Gate 1: plastic, timber and peat present	€10/t
TP03, 0.40–0.60m	0.76%	Gate 1 contestable: logged as peat but the TOC result contradicts that description	CHECK
TP03, 1.20m	0.02%	Passes both gates: natural silt, previously developed land	EXEMPT

“Half the tested material fails Gate 1. Don't price a single blended disposal rate, the register only earns its keep if the exempt mineral fraction stays visibly separate from the fraction that needs a specialist outlet.”

WHY THIS APPROACH, NOT A SINGLE RATE

- Every outcome traces back to a specific test result, not a visual description on a borehole log.
- Failures are typed; a definition failure and an origin failure need different fixes, not the same qualification.
- The register flags open items (unresolved logging anomalies, untested parameters) instead of quietly absorbing them into a rate.
- Segregation on site becomes a commercial lever, not just good practice, once the exempt tonnage is visible.

WHAT THIS MEANS FOR A TENDER

Structured this way, the levy regulation and the by-product regime stop being two Acts an estimator has to hold in their head, and become a live filter that sits underneath the price: which horizons clear the exemption, which need a specialist outlet, and where a qualification belongs in the tender return rather than a risk absorbed silently into a blended rate.

THE PARADOX WORTH FLAGGING TO THE CLIENT

The same brick and concrete fragments that make a horizon non-greenfield, and win the levy exemption, are also what disqualifies it from the cheapest disposal category, which requires freedom from physical contaminants. One inclusion moves the price in two directions at once, exactly the kind of interaction a QS catches and a spreadsheet doesn't.

Where this is heading

The same three-gate structure; definition, origin, documentation; is repeatable across any brownfield site with a GI report and a levy question attached to it. The next step is templating the gate thresholds so a new GI report produces this register automatically.

The commercial takeaway

At the cheapest category, the levy avoided on a non-greenfield tonne can exceed the gate fee itself. Getting Gate 2 right, on paper, before material leaves site, is worth more than any amount of negotiating at the weighbridge afterwards.

Full Output in Excel - Decision Register & Rate Schedule

Gate-by-gate classification, sample-level outcomes and a three-stream pricing structure for the full site; the working file behind this case study.