

Environmental Policy

Karnot's environmental commitments — covering refrigerant choice, lifecycle carbon, energy efficiency, waste, supplier engagement and disclosure.

Document ID	KES-POL-005
Version	1.0
Effective from	11 May 2026
Next review	11 May 2027 (Annual)
Approved by	Stuart Edmund Cox, Managing Director
Applies to	All Karnot directors, officers, employees, consultants, contractors, sub-contractors and suppliers, in respect of every Karnot activity, product, service and supply-chain interaction.

1. Environmental commitment

Karnot Energy Solutions Inc. ("Karnot") exists to decarbonise industrial process heating. The Company's product strategy — natural-refrigerant heat pumps in place of fossil-fuel combustion — is itself an environmental statement. This Policy describes the standards by which Karnot intends to be judged across every aspect of its own operations and supply chain.

Karnot commits to: (a) compliance with all applicable environmental laws as a floor, not a ceiling; (b) prevention of pollution at source; (c) continual improvement in environmental performance, measured against publicly-stated objectives; and (d) transparent disclosure to customers, investors, regulators and the public.

2. Legal and standards framework

This Policy is designed to comply with, at minimum:

- Republic Act No. 8749 — Philippine Clean Air Act of 1999, and DENR-EMB implementing regulations.
- Republic Act No. 9275 — Philippine Clean Water Act of 2004.
- Republic Act No. 9003 — Ecological Solid Waste Management Act of 2000.
- Republic Act No. 6969 — Toxic Substances, and Hazardous and Nuclear Wastes Control Act of 1990.
- Republic Act No. 11285 — Energy Efficiency and Conservation Act of 2019, and designated establishment reporting where applicable.
- Presidential Decree No. 1586 — Environmental Impact Statement System.
- DENR Administrative Order 2013-22 (Hazardous Waste Management) and DENR Memorandum Circular 2008-04 (CFC Phase-out).
- Montreal Protocol on Substances that Deplete the Ozone Layer, and the 2016 Kigali Amendment phasing down HFC refrigerants — to which the Philippines has acceded.
- ISO 14001:2015 — Environmental Management Systems (the framework Karnot operates to).
- ISO 14064 — Greenhouse gas accounting (used for Karnot's carbon disclosure).
- EU Regulation 517/2014 (the EU F-Gas Regulation), referenced for technical alignment where Karnot products are exported.

3. Refrigerant policy — natural first

Refrigerant choice is the largest single environmental decision a heat-pump company makes. Karnot designs and supplies products that use exclusively natural refrigerants:

- **R290 (propane)** — GWP 3, ODP 0. Karnot's principal refrigerant for water-heating heat pumps.
- **R744 (CO₂, transcritical)** — GWP 1, ODP 0. Karnot's principal refrigerant for refrigeration and the iCOOL product line.

- **R32 (difluoromethane)** — GWP 675, ODP 0. Used selectively for pool heat-pump applications (iSPA) where R290 charge limits are impractical. Karnot's roadmap transitions iSPA to R290 once IEC 60335-2-40 charge-limit amendments permit.

Karnot does not supply or service equipment that uses ozone-depleting refrigerants (CFC, HCFC) or high-GWP HFCs (R404A, R134a, R410A, R407C). The Company refuses commercial opportunities that would require it to do so, even where the regulatory phase-out date has not yet passed.

4. Lifecycle carbon and product disclosure

Karnot calculates and publishes the lifecycle climate impact of its products on a Total Equivalent Warming Impact (TEWI) basis, capturing both direct (refrigerant leakage and end-of-life) and indirect (electricity consumed over lifetime) emissions. The Company commits to:

- Publish per-model TEWI figures with the published datasheet, refreshed when grid carbon intensities are updated.
- Compute customer-project CO₂ savings using transparent methodology and current Philippine grid emission factors (DOE official figures), with explicit disclosure of assumptions in every quotation and engineering report.
- Cooperate with customers' Scope 3 carbon accounting by providing audited product-level emissions data on request.

5. Own-operations environmental management

In its own offices, workshops and field operations Karnot will:

- Measure and report annual Scope 1 and Scope 2 greenhouse-gas emissions using ISO 14064-1.
- Source renewable electricity for the Karnot Low Carbon Innovation Centre where and as it becomes commercially available from the local distribution utility.
- Segregate waste at source under RA 9003 and dispose of hazardous waste (used oil, filters, refrigerant) only through DENR-EMB-accredited TSD facilities.
- Recover and reclaim refrigerant from any system being decommissioned or serviced; no venting to atmosphere is permitted under any circumstance.
- Maintain a Refrigerant Register tracking all charges, top-ups, recoveries and destructions, in accordance with the Montreal Protocol implementation rules of the Philippines.
- Minimise paper, business travel, single-use plastic and other office-level impacts through documented procedures.

6. Energy efficiency in design and operation

Karnot products are sized, specified and commissioned to deliver the COP and efficiency claimed in the published datasheet under the published conditions. Field-measured COP is a deliverable on every commissioning. Where field COP deviates from design by more than 10%, Karnot will at its own cost investigate, remediate and re-test, before final acceptance.

7. Supply chain environmental requirements

Every supplier of a Karnot bill-of-materials component must, as a minimum:

- Comply with all applicable environmental laws of the jurisdiction(s) in which it operates.
- Avoid restricted substances under EU RoHS 2 (Directive 2011/65/EU) and REACH (Regulation 1907/2006) for any component supplied to a Karnot product intended for export.
- Confirm that no component contains intentionally-added asbestos, mercury, lead above PEC thresholds, or PFAS substances on the EU Candidate List, and that wood products are sourced from controlled-legal-origin or FSC-certified sources.

- Cooperate with Karnot's reasonable requests for environmental data and audit, including site visit where the contract value warrants it.

8. Customer and community engagement

Karnot actively engages with customers on environmental matters: every customer engagement begins with an emissions baseline (existing fuel-based system) and ends with a documented emissions outcome (heat-pump operating data). The Company encourages customers to make those outcomes public, and contributes to their sustainability reports under standard NDAs.

Where Karnot installations are in or adjacent to communities, the Company designs to minimise noise, visual impact and refrigerant-risk to bystanders, in line with Section 4 of this Policy.

9. Reporting concerns

Any actual or suspected breach of this Policy — including refrigerant venting, improper waste disposal, or non-compliance with environmental permits — must be reported to info@karnot.com without delay. Reports may be made anonymously under the Whistleblower and Speak-Up Policy (KES-POL-007).

10. Review and disclosure

This Policy is reviewed annually. Karnot publishes an annual environmental performance summary covering Scope 1 and Scope 2 emissions, refrigerant register movements, waste streams and significant environmental incidents, on its website alongside this Policy.

APPROVAL

This policy is approved by the undersigned for and on behalf of Karnot Energy Solutions Inc., with effect from 11 May 2026, and will be reviewed not later than 11 May 2027.

Stuart Edmund Cox
Managing Director
Karnot Energy Solutions Inc.
Date: 11 May 2026