

1. Executive snapshot

Item	Ethiopia assessment
Ease of importing from Europe	Imports require a licensed Ethiopian importer, import licence/registration, bank/foreign exchange processes, customs documentation and product conformity checks.
Best-fit EPIC sectors	Type I: hospitals, schools, public facilities and health facilities. Type II: horticulture, flower exports, dairy/meat/fish, agro-industrial parks, pharmaceuticals and vaccine cold chain.
Regulatory clarity	Ethiopia has PVoC/CoC conformity controls for regulated imports, but cooling-specific MEPS/labels are not as mature as Kenya/Brazil/Tunisia. Confirm product scope before shipment.
Best-fit technologies	Cold rooms, pre-cooling, efficient industrial refrigeration, vaccine/health refrigeration, PV-hybrid cooling, robust air-cooled HVAC, monitoring, smart controls, and passive cooling/retrofit packages.
Primary opportunity	Large unmet cooling access, strong horticulture and flower-export cold-chain needs, vaccine/health cold-chain gaps, and potential for resilient, off-grid or PV-hybrid systems.
Primary barrier	Foreign exchange/import-permit delays, PVoC/CoC requirements, high landed costs, limited local low-GWP refrigerant skills, and sparse O&M capacity outside Addis Ababa and industrial/export clusters.
Recommended EPIC approach	Prioritise robust, maintainable systems; require importer-of-record, PVoC/CoC plan, customs/tax estimate, local O&M partner, spare-parts stock and training before award.

2. Market demand and commercial opportunity

Ethiopia is planning to develop its National Cooling Action Plan (NCAP) in 2026, with the objective of securing access to sustainable cooling to its population, with the country being among the most underserved countries globally. Market demand is driven less by mature mass-market air-conditioning and more by unmet needs in health, food systems, horticulture exports, pharmaceuticals, agro-industrial parks and urban public/commercial buildings.

Ethiopia can be considered to have a nascent or under-developed cooling market – there is extremely low cooling technology penetration and little domestic experience with sustainable cooling. Refrigerator ownership is low and air conditioning penetration is negligible and largely confined to high-end commercial buildings and urban elites, reflecting both low incomes and limited reliable electricity access. Around 45% of the population

still lack access to electricity, while a fair share of those connected face reliability issues. At the same time, 29% of the total population in Ethiopia is at high risk due to a lack of access to cooling, according to SEforAll's Chilling Prospects analysis.

For Type I - tertiary sector, the strongest opportunities are hospitals, schools, public facilities and health centres, where reliable cooling supports public health, medicine/vaccine storage, indoor thermal comfort and resilience. These facilities require reliable comfort cooling, medical-grade refrigeration, resilient power systems, and high-efficiency solutions. Particular attention can be given to urban hubs in Addis Ababa and secondary cities. Healthcare is the most critical anchor demand segment, yet cooling access is often constrained by unreliable electricity and weak maintenance systems. And without improvements in electricity security of supply and

in energy efficiency, the deployment of cooling appliances will remain low.

For Type II - industrial and cold chain, the strongest opportunities are horticulture, flower exports, dairy/meat/fish value chains, agro-processing and pharmaceutical cold chain. Ethiopia's cold-chain infrastructure is still relatively underdeveloped and concentrated around export-oriented sectors, especially flowers, with significant gaps at first-mile and domestic food-system levels. As much as 40% of perishable losses stem from logistics gaps on agricultural outputs, mainly weak transport infrastructure and inadequate cold storage. The government is already seeking to establish the viability of cooling technologies and to enable access to sustainable cold chain coverage to improve food security and economic development.

Priority segment	Opportunity
Healthcare and vaccines	Vaccine and pharmaceutical refrigeration; solar/PV-enabled or resilient cold rooms for public health facilities; high impact but demanding O&M requirements.
Horticulture and flowers	Pre-cooling, cold storage, pack-house refrigeration and temperature monitoring linked to export quality and air-cargo logistics.
Agro-processing / food value chains	Dairy, meat, fish, fruit and vegetables; cold rooms and middle-mile cold storage to reduce post-harvest losses.
Public buildings / universities	Passive cooling, efficient HVAC, controls and resilience in Addis Ababa and secondary cities; opportunity for demonstration projects.

Priority segment	Opportunity
Agro-industrial parks / logistics hubs	Industrial refrigeration, storage and energy management where anchor loads and operators exist.

3. . Import and regulatory matrix by EPIC application

EPIC track	Application / equipment package	Import duty	Certification / standards issue
Type I - Tertiary	Passive cooling / retrofit: insulation, shading, reflective materials, ventilation	0-35% depending on HS code; check tariff	Product conformity if covered by compulsory standards; building/electrical standards to confirm
Type I - Tertiary	Room AC / packaged AC / small HVAC	Likely 10-35%, confirm by HS code	PVoC/CoC if regulated; no clear mature AC MEPS/label identified, but roadmap recommends MEPS
Type I - Tertiary	Central HVAC / chillers / heat pumps	Likely 0-35%, confirm; possible capital-goods incentives if eligible investment	PVoC/CoC; pressure/electrical/refrigerant documentation; professional installation
Type I / II	Smart controls, BMS, sensors, monitoring	Product-specific	Electrical/telecom conformity; ECAE/standards route to confirm
Type I / II	PV-hybrid cooling / resilience	Solar products may have preferential treatment; integrated systems vary	Electrical/grid and battery safety; import incentives depend on product configuration
Type II - Cold chain	Pre-cooling: forced-air, hydro-cooling, ice machines, heat exchangers	Product-specific; possible capital-goods incentives	PVoC/CoC; water/food-contact and electrical checks where relevant
Type II - Cold chain	Cold storage: cold rooms, evaporators, condensers, commercial freezers	Product-specific; confirm tariff and possible investment incentives	PVoC/CoC; refrigerant safety; no clear mandatory commercial refrigeration label identified

Type II - Industrial	Industrial refrigeration upgrade	Product-specific; possible capital-goods incentives	PVoC/CoC; pressure equipment, electrical and refrigerant safety
Type II – Transport / logistics	Refrigerated transport / reefer systems / loggers	Highly product-specific	Vehicle rules if complete vehicle; cold-chain and electrical conformity

4. Duties, levies and exemptions

Ethiopia does not offer an EU-style preferential tariff route for European industrial goods. Tariff treatment is based on the Ethiopian customs tariff and exact HS classification. Duty rates can range from 0% to 35%, with additional import taxes and charges.

Charge	Working assumption
Customs duty	0-35% depending on product classification; exact rate must be checked by HS code.
VAT	15% on imports, with exemptions for selected goods.
Surtax	Generally 10% on imports, with some exceptions.
Withholding tax	Generally 3% on commercial imports, creditable against income tax for registered taxpayers.
Excise tax	Product-specific; unlikely for most HVAC&R capital equipment but confirm by HS code.
Other costs	Bank/FX approval, customs broker, Djibouti port and inland transport, storage/demurrage, conformity assessment, testing, insurance and local handling.

Exemptions are possible but are not automatic. Investment projects may access customs-duty exemptions for eligible capital goods, construction materials and spare parts if they meet investment-incentive rules. Solar products may receive preferential treatment, but assembled PV systems with batteries/inverters/controllers may be treated differently.

Exemption mechanism	Relevance to EPIC
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Exemption mechanism	Relevance to EPIC
Investment incentives	Potential customs-duty relief for eligible capital goods/spares in approved investment projects; confirm with Ethiopian Investment Commission and Customs.
Solar/PV equipment	Some solar products may be exempt from duty/surtax/excise; integrated systems with batteries/inverters/controllers may be treated differently.
Donor-funded projects	Possible case-by-case exemptions through government/project agreements; not automatic.
Health/agriculture/cold chain	No blanket cooling-specific exemption identified; may qualify if embedded in approved investment or donor agreement.
Energy efficiency	No mature cooling-specific fiscal incentive identified; future policy may evolve through energy-efficiency and NDC work.

5. Key authorities

CE/EN/ISO documentation can support technical evidence, but CE marking should not be treated as automatic market access. Ethiopia operates a Pre-Export Verification of Conformity / Product Conformity Assessment system for regulated imports. Goods subject to compulsory Ethiopian standards may need a Certificate of Conformity before shipment, issued through ECAE-authorized inspection bodies.

Authority / body	Role for EPIC cooling pilots
Ministry of Trade and Regional Integration	Import licensing, trade regulation and oversight of conformity-related import requirements.
Ethiopian Conformity Assessment Enterprise (ECAE)	PVoC / product conformity assessment and Certificate of Conformity for regulated imports.
Ethiopian Standards Institute	Development and publication of Ethiopian standards.
Ethiopian Customs Commission	Tariff classification, customs valuation, clearance and duty/tax collection.
Ethiopian Energy Authority / energy ministry institutions	Energy efficiency, electrical energy regulation and possible future MEPS/labelling.
Environmental Protection / National Ozone Unit	ODS/HFC licensing, Montreal Protocol and Kigali Amendment implementation.
Ethiopian Electric Utility / Ethiopian	Distribution/transmission connections and electrical supply arrangements.

Authority / body	Role for EPIC cooling pilots
Electric Power	
Local engineering/licensing bodies	Professional responsibility for installation and engineering works; confirm case-by-case.

6. MEPS, energy labels and product registration

Ethiopia does not currently have mandatory MEPS and an energy-labelling system for air conditioners and refrigerators. The country has energy efficiency policy work and draft/roadmap references, and recent cooling roadmap work recommends MEPS for air conditioners and refrigerators as a priority measure.

Product category	Ethiopia status / action needed
Room ACs / small ACs	No clear mandatory national label confirmed; confirm whether any Ethiopian standard or PVoC product scope applies.
Refrigerators/freezers	Energy-efficiency work exists, but mandatory cooling product registration is unclear; confirm with energy authority/ECAE.
Commercial cold rooms / industrial refrigeration	Likely general conformity and safety requirements rather than a specific energy label; confirm by product.
PV/inverters/batteries	Product-specific electrical and quality requirements; solar incentives depend on configuration.
Monitoring / wireless equipment	Check telecom/radio and electrical conformity if wireless devices are included.

7. Import documents and timelines

A licensed Ethiopian importer is required in practice. Importers need an import business licence, import registration number, TIN/VAT registration and foreign-exchange/bank approval. Trade.gov notes that import permits are not always granted quickly and that foreign-exchange allocation can cause delays of

several months or longer. EPIC applicants should therefore treat importer selection and FX planning as critical-path items.

- import licence / import registration number and TIN/VAT registration;
- bank permit / foreign-exchange authorisation and letter of credit or approved payment route;
- commercial invoice, pro forma invoice, packing list and bill of lading/airway bill;
- certificate of origin and insurance certificate;
- customs import declaration and transit/inland transport documents;
- PVoC Certificate of Conformity where product is regulated;
- technical datasheets, CE/EN/ISO test reports and quality certificates;
- refrigerant import permit/notification where controlled substances are involved;
- duty-free/incentive approval where relying on investment or donor exemptions.

Indicative timing: PVoC/CoC can be completed before shipment if technical documents are in order, but allow at least 2-4 weeks for first-time products. Sea freight from Europe via Djibouti plus inland movement to Addis Ababa or project sites can take several weeks. Customs clearance may be relatively short if documents are complete, but FX allocation, bank permits, missing CoC, HS disputes or physical inspection can cause major delays. For first-time EPIC imports, plan a conservative 2-4 month import window unless the importer has proven experience with the same product category.

8. Local content, partnerships and O&M

No strict local-content percentage was identified for private HVAC&R imports, but a local partner is essential in practice. Public procurement may apply preference margins for local goods and suppliers, and Ethiopian labour/service providers will normally be required for installation, maintenance and after-sales. Local HVAC&R capacity exists mainly in Addis Ababa and export/industrial clusters, but is weaker in rural areas. Cold-chain expertise is stronger in flower/horticulture export channels and weaker in first-mile domestic food chains and remote health facilities. Ethiopia's ODS regulations establish licensing and quota controls for ozone-depleting substances, and recent UNIDO/Kigali implementation material states that the system has been extended to HFCs since 2024. Draft regulatory revisions are expected

to include HFC phase-down provisions, a ban on new and used HCFC-based equipment by January 2026, and a ban on virgin HCFC refrigerants by 2030.

Selected sources consulted

Section 2 - Market demand and commercial opportunity

Ethiopia Roadmap for Integrating the Cooling Sector in Ethiopia's NDC

https://perspectives.cc/wp-content/uploads/2025/03/KCEP_Ethiopia_O7_Roadmap-for-Cooling-in-NDC_final-1.pdf

SouthSouthNorth — Establishing Sustainable Cold Chains in Ethiopia

https://southsouthnorth.org/portfolio_page/clean-cooling-collaborative-establishing-sustainable-cold-chains-in-ethiopia/

EAP Africa — Cold Chain Storage Market Assessment

<https://eapfrica.org/documents/Sector-Briefs/cold-chain-storage-market-assessment-2023.pdf>

SEforAll 2023 – Access to Cooling Gaps, Risk Profiles

<https://www.seforall.org/chilling-prospects-access-to-cooling-gaps-2023/risk-profiles>

World Bank Access to electricity data

<https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=ET>

SouthSouthNorth - Establishing Sustainable Cold Chains in Ethiopia

<https://southsouthnorth.org/portfolio/clean-cooling-collaborative-establishing-sustainable-cold-chains-in-ethiopia/>

Shega 2026 – 40% of Perishable Losses in Ethiopia stem from Logistics Gaps

<https://shega.co/news/nearly-40-of-perishable-losses-in-ethiopia-stem-from-logistics-gaps-study-finds-1>

Section 3 - Import and regulatory matrix by epic application

Ethiopia Customs Trade Portal — Tariff

<https://customs.erca.gov.et/trade/customs-division/tariff?lang=en>

U.S. Commercial Service — Ethiopia Import Requirements and Documentation

<https://www.trade.gov/country-commercial-guides/ethiopia-import-requirements-and-documentation>

U.S. Commercial Service — Ethiopia Import Tariffs

<https://www.trade.gov/country-commercial-guides/ethiopia-import-tariffs>

TÜV Rheinland — Ethiopia PVoC Program Guide

<https://www.tuv.com/content-media-files/master-content/government-inspections-international-trade/ethiopia/tuev-rheinland-ethiopia-pvoc-program-guide.pdf>

Intertek — Certificate of Conformity for Exports to Ethiopia

<https://www.intertek.com/government/product-conformity/ethiopia/>

PwC Ethiopia — Corporate Other Taxes

<https://taxsummaries.pwc.com/ethiopia/corporate/other-taxes>

U.S. Commercial Service — Ethiopia Trade Standards

<https://www.trade.gov/country-commercial-guides/ethiopia-trade-standards>

Section 4 - Duties, levies and exemptions

Ethiopia Customs Trade Portal — Tariff

<https://customs.erca.gov.et/trade/customs-division/tariff?lang=en>

U.S. Commercial Service — Ethiopia Import Tariffs

<https://www.trade.gov/country-commercial-guides/ethiopia-import-tariffs>

PwC Ethiopia — Corporate Other Taxes <https://taxsummaries.pwc.com/ethiopia/corporate/other-taxes>

Ethiopian Investment Commission — Publications / Investment Incentives

<https://investethiopia.gov.et/resources/publications/>

Ethiopia Investment Incentive Regulation No. 517/2022

https://ethiodata.et/wp-content/uploads/2023/02/Ethiopia-Investment-Incentive-Regulation-No.-517_2022.pdf

Section 5 - Key authorities

U.S. Commercial Service — Ethiopia Trade Standards

<https://www.trade.gov/country-commercial-guides/ethiopia-trade-standards>

TÜV Rheinland — Ethiopia PVoC Program Guide

<https://www.tuv.com/content-media-files/master-content/government-inspections-international-trade/ethiopia/tuev-rheinland-ethiopia-pvoc-program-guide.pdf>

Intertek — Certificate of Conformity for Exports to Ethiopia

<https://www.intertek.com/government/product-conformity/ethiopia/>

Ethiopia Roadmap for Integrating the Cooling Sector in Ethiopia's NDC

https://perspectives.cc/wp-content/uploads/2025/03/KCEP_Ethiopia_O7_Roadmap-for-Cooling-in-NDC_final-1.pdf

UNIDO — Ethiopia Kigali Implementation Plan Stage I Project Document

<https://downloads.unido.org/ot/40/10/40104968/1.%20Ethiopia%20-%20KIP%20Stage%20I%20C%20first%20tranche%20-%20project%20document.pdf>

Section 6 - MEPS, energy labels and product registration

Ethiopia Roadmap for Integrating the Cooling Sector in Ethiopia's NDC

https://perspectives.cc/wp-content/uploads/2025/03/KCEP_Ethiopia_O7_Roadmap-for-Cooling-in-NDC_final-1.pdf

U.S. Commercial Service — Ethiopia Trade Standards

<https://www.trade.gov/country-commercial-guides/ethiopia-trade-standard>

TÜV Rheinland — Ethiopia PVoC Program Guide

<https://www.tuv.com/content-media-files/master-content/government-inspections-international-trade/ethiopia/tuev-rheinland-ethiopia-pvoc-program-guide.pdf>

Section 7 - Import documents and timelines

U.S. Commercial Service — Ethiopia Import Requirements and Documentation

<https://www.trade.gov/country-commercial-guides/ethiopia-import-requirements-and-documentation>

Ethiopia Customs Trade Portal — Tariff

<https://customs.erca.gov.et/trade/customs-division/tariff?lang=en>

TÜV Rheinland — Ethiopia PVoC Program Guide

<https://www.tuv.com/content-media-files/master-content/government-inspections-international-trade/ethiopia/tuev-rheinland-ethiopia-pvoc-program-guide.pdf>



Intertek — Certificate of Conformity for Exports to Ethiopia

<https://www.intertek.com/government/product-conformity/ethiopia/>

PwC Ethiopia — Corporate Other Taxes

<https://taxsummaries.pwc.com/ethiopia/corporate/other-taxes>

UNIDO — Ethiopia Kigali Implementation Plan Stage I Project Document

<https://downloads.unido.org/ot/40/10/40104968/1.%20Ethiopia%20-%20KIP%20Stage%20I%2C%20first%20tranche%20-%20project%20document.pdf>

Section 8 – Local content, partnerships, O&M

Ethiopian Investment Commission — Publications / Investment Incentives

<https://investethiopia.gov.et/resources/publications/>

Ethiopia Investment Incentive Regulation No. 517/2022

https://ethiodata.et/wp-content/uploads/2023/02/Ethiopia-Investment-Incentive-Regulation-No.-517_2022.pdf

U.S. Commercial Service — Ethiopia Import Tariffs

<https://www.trade.gov/country-commercial-guides/ethiopia-import-tariffs>

PwC Ethiopia — Corporate Other Taxes

<https://taxsummaries.pwc.com/ethiopia/corporate/other-taxes>

EEP Africa — Cold Chain Storage Market Assessment

<https://eepafrica.org/documents/Sector-Briefs/cold-chain-storage-market-assessment-2023.pdf>

SouthSouthNorth — Establishing Sustainable Cold Chains in Ethiopia

https://southsouthnorth.org/portfolio_page/clean-cooling-collaborative-establishing-sustainable-cold-chains-in-ethiopia/

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U.S. Commercial Service — Ethiopia Import Requirements and Documentation

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