

1. Executive snapshot

Item	Brazil assessment
Ease of importing from Europe	Brazil is commercially attractive but can be administratively complex, with high landed costs, INMETRO certification, Siscomex/RADAR requirements, state ICMS and product-specific controls.
Best-fit EPIC sectors	Type I: hospitals, schools, public facilities, public buildings. Type II: food cold chain, ports, logistics, agro-processing, refrigerated storage and pharmaceutical/healthcare cold chain.
Regulatory clarity	Brazil has established systems, but compliance is product-specific and requires local handling through Brazilian entities.
Best-fit technologies	High-efficiency chillers, central HVAC, heat pumps, cold rooms, industrial refrigeration upgrades, pre-cooling, temperature monitoring, BMS, PV-hybrid/resilience systems.
Primary opportunity	Large and growing HVAC and cold-chain markets where efficiency, reliability, resilience and service quality can justify higher-value European solutions.
Primary barrier	INMETRO certification, high cumulative import taxes, need for a Brazilian importer/representative, and local certification/testing requirements.
Recommended EPIC approach	Prioritise high-value applications where lifecycle cost and reliability matter; require Brazilian partners, INMETRO/IBAMA/ANATEL compliance planning, O&M contracts, spare-parts strategy and local technician training.

2. Market demand and commercial opportunity

Brazil has officially launched the development of its National Cooling Action Plan (NCAP) in 2026, positioning cooling as a key pillar of both climate action and socio-economic development. Particular attention is being given to sustainable solutions, including natural ventilation, shading and

bioclimatic building design for public infrastructure such as schools and hospitals. Market demand is driven by heat exposure, urbanisation, healthcare and education infrastructure, energy-efficiency requirements, industrial growth, food exports, pharmaceutical logistics and technology upgrades.

Brazil has a large and mature cooling market – around 98% of households have a refrigerator and the penetration of air conditioning is growing as it currently is low in comparison to other countries with around 20% of households owning an AC . At the same time, 16% of the total population in Brazil is at high risk due to a lack of access to cooling, according to SEforAll's Chilling Prospects analysis, especially in hotter northern and eastern regions as heatwaves intensify.

For Type I - tertiary sector, the strongest opportunities are hospitals, schools, public facilities and public buildings, where pilots can combine passive cooling, retrofits, efficient chillers or HVAC, heat pumps, controls, monitoring and resilience measures. These facilities require reliable comfort cooling, medical-grade refrigeration, resilient power systems, and high-efficiency solutions. With the increased installation and use of air conditioners in residential and commercial facilities, their energy consumption has been increasing, furthering the stress on the electricity grid and creating the need for energy efficiency measures. And the expansion of national immunization programs continues to drive demand for monitored, temperature-controlled medical cold chains, especially in underserved areas where logistics and grid reliability are weaker.

For Type II - industrial and cold chain, the strongest opportunities are in cold rooms, pre-cooling, refrigerated logistics, ports, agro-processing, meat and poultry, fruit and vegetable chains, and pharmaceutical cold chain. Brazil is considered to be an agricultural powerhouse, with agriculture representing a quarter of the country's GDP. Brazil's agricultural exports hit a record 166 billion USD in 2023, 49% of the country's total exports – with the country being the world's largest exporter of beef, poultry, coffee, sugar and soybean products among other products, according to Food and Agriculture Organization. This export orientation creates a direct commercial imperative for robust temperature-controlled infrastructure, where supply chain failures translate into immediate financial losses and reputational risk in international markets. This justifies the need for modernized, energy-efficient cold chains to improve food security, reduce waste, and maintain export competitiveness.

Priority segment	Commercial opportunity
Type I - Hospitals and public facilities	Reliable HVAC, efficient chillers/heat pumps, resilience packages, controls, monitoring, maintenance contracts and indoor comfort/health protection.
Type I - Universities and public buildings	Integrated retrofits, passive cooling, efficient central systems, BMS, PV-hybrid solutions and demand management.
Type II - Food cold chain	Pre-cooling, cold rooms, refrigerated storage, industrial refrigeration upgrades and temperature monitoring for exporters and processors.
Type II - Ports and logistics	Port/logistics cold-chain infrastructure, reefer interfaces, monitoring, backup power and serviceable refrigeration systems.
Type II - Pharma/health cold chain	High-reliability storage, alarms, data logging, validation, redundancy and rapid service response.

3. Import and regulatory matrix by EPIC application

Brazil uses NCM tariff classification under Mercosur, based on the HS system. The indicative headings below must be converted into the correct Brazilian NCM code before costing, certification and import planning.

EPIC track	Application / equipment package	Import duty	Certification / regulatory issue
Type I - Tertiary	Passive cooling / retrofit: insulation, cool roofs, shading, glazing, ventilation components	Product-specific	ABNT building/electrical standards; product-specific INMETRO if regulated
Type I - Tertiary	Room ACs / split ACs / packaged ACs up to 60,000 BTU/h	Often 10-20%, confirm by NCM	INMETRO/PBE mandatory; MEPS and energy label apply

EPIC track	Application / equipment package	Import duty	Certification / regulatory issue
Type I - Tertiary	Commercial AC / VRF / central systems above 60,000 BTU/h	Often 10-20%, confirm by NCM	Regulation for commercial AC above 60,000 BTU/h is pending; product-specific INMETRO/ABNT checks still needed
Type I - Tertiary	Chillers / heat pumps / chilled-water systems	Often 10-20%; possible Ex-Tarifario if eligible	INMETRO if regulated; NR-13 if pressure equipment; ABNT electrical/safety standards
Type I / II	Smart controls, BMS, IoT monitoring, sensors	Product-specific	ANATEL approval if wireless/radio-frequency; INMETRO/EMC if applicable
Type I / II	PV-hybrid cooling / resilience package	Product-specific; possible incentives for some energy equipment	INMETRO for PV/inverters where applicable; grid/electrical rules
Type II - Cold chain	Pre-cooling equipment	Often 10-20%; possible Ex-Tarifario	INMETRO if regulated; food-contact/site rules may apply
Type II - Cold chain	Cold storage equipment: cold rooms, freezers, commercial refrigerators	Often 10-20%; possible Ex-Tarifario for capital equipment	Refrigerators/freezers may be subject to PBE/INMETRO; confirm commercial vs household scope
Type II - Industrial	Industrial refrigeration: compressors, condensers, evaporators, pressure vessels, valves, controls	Often 10-20%; possible Ex-Tarifario	NR-13 for pressure systems; IBAMA for refrigerants; INMETRO if regulated
Type II - Transport/logistics	Refrigerated transport: transport refrigeration units, reefer bodies, reefer containers, data loggers	Highly product-specific	Vehicle/homologation rules may apply if importing complete vehicle

4. Duties, levies and exemptions

Brazil's main taxes are Import Duty (II), IPI, PIS/COFINS-Import and ICMS, a state-level VAT-type tax. These taxes are often calculated cumulatively and can materially increase landed cost.

Charge	Working assumption
Import Duty - II	Often 10-20% for relevant equipment, but must be checked by NCM.
IPI	Often 0-15%, product-specific.
PIS/COFINS-Import	General goods rate commonly 11.75%: 2.1% PIS and 9.65% COFINS.
ICMS	State VAT-type tax, often 17-25%, applied on an inflated base and varying by state.
Other costs	Siscomex fees, customs broker, port/storage, testing, certification, translations, warehousing and demurrage.

Ex-Tarifario is the main route to reduce import duty for eligible capital goods or ICT goods where there is no equivalent domestic production. It is relevant for specialized chillers, industrial refrigeration, energy equipment or controls, but should not be assumed: applications can take months and must be handled by a Brazilian legal person or representative. Exemptions or waivers may be possible in specific bilateral or project-specific cases.

Exemption mechanism	Relevance
Ex-Tarifario	Strongest mechanism for imported chillers, industrial refrigeration, specialized cold-chain equipment, energy systems or ICT equipment with no Brazilian equivalent.
BNDES Climate Fund / Fundo Clima	Potential financing route for machinery, equipment and technologies linked to GHG reduction and climate adaptation.
Energy-efficiency programmes	May support efficient public buildings, industrial efficiency or utility-backed efficiency projects, depending on host and state.
Subnational ICMS incentives	Possible in some states or sectors, but state-specific and must be checked.

Exemption mechanism	Relevance
PV / renewable integration	Incentives may be available for distributed generation or energy systems, but they are not automatic for cooling equipment.

5. Key authorities

Brazil does not generally accept CE marking as a substitute for local certification where Brazilian regulation applies. International and European standards can support the technical file, but regulated products must follow Brazilian conformity-assessment requirements, usually through INMETRO and accredited certification bodies/laboratories.

Authority / body	Role for EPIC cooling pilots
INMETRO	Product certification and PBE energy-efficiency labelling for regulated products, including air conditioners and several appliances.
CGIEE	Federal policy body for energy-efficiency indicators and minimum energy-performance levels.
Eletrobras / PROCEL	Energy-efficiency recognition and labelling ecosystem linked to efficient products.
ABNT	Brazilian technical standards, including electrical and engineering standards.
IBAMA	Controls import of HCFCs, HFCs and other Montreal Protocol substances; import authorization and quota/registration processes.
ANATEL	Approval/homologation of wireless, radio-frequency and telecom equipment, relevant for IoT sensors, BMS gateways and smart controls.
MTE / Ministry of Labor	NR-13 compliance for boilers, pressure vessels, piping and pressure systems.
CREA	Professional engineering registration and responsibility for engineering work.

Authority / body	Role for EPIC cooling pilots
Receita Federal / SECEX / Siscomex	Customs, importer registration, import declaration and import licensing.

6. MEPS, energy labels and product registration

Product category	Brazil requirement
Air conditioners up to 60,000 BTU/h	Mandatory INMETRO/PBE label and MEPS.
Commercial ACs above 60,000 BTU/h	Regulation pending; confirm before procurement.
Refrigerators and freezers	PBE/INMETRO labelling applies for regulated categories; confirm scope for commercial equipment.
Electric motors, pumps, fans, PV modules	Some categories covered by PBE/INMETRO programmes.
Smart controls / wireless devices	ANATEL approval if radio-frequency communication is included.

Any proposal including regulated equipment should include the INMETRO certificate number or a plan, timeline and budget for certification before import.

7. Import documents and timelines

A Brazilian importer normally needs a CNPJ, access to Siscomex/RADAR, and the ability to file the relevant import declaration. Foreign suppliers will generally need a Brazilian importer, distributor, EPC contractor or importer of record.

Core documents likely required:

- Commercial invoice; packing list; bill of lading or air waybill; certificate of origin, if relevant;
- DI or DUIMP import declaration; import licence if required by the NCM/product;
- INMETRO certificate for regulated products; ANATEL homologation for wireless devices;
- IBAMA permit/authorization for refrigerants; NR-13 dossier for pressure equipment;
- Portuguese manuals, labels and safety documentation where required.

Process	Planning assumption
INMETRO certification	Often 3-6 months, depending on product, lab testing and documentation.
Product certification testing	Often 8-12 weeks for simpler regulated products; costs may be several thousand USD.
Customs clearance	Can range from a few days to several weeks; complex or non-compliant shipments can take much longer.
Ex-Tarifario application	Often 4-6 months, so it must be planned well before shipment.

8. Local content, partnerships and O&M

There are no general mandatory local-content rules for imported HVAC&R equipment, but a Brazilian partner is effectively necessary for CNPJ/RADAR/Siscomex access, INMETRO certification, ANATEL certification where wireless equipment is included, IBAMA refrigerant processes, customs clearance, Portuguese documentation, installation, commissioning, after-sales service, CREA engineering responsibility and NR-13 pressure-system compliance.

Local capacity is good in major urban and industrial centres, especially Sao Paulo, Rio de Janeiro, Minas Gerais, Parana, Santa Catarina and major port/logistics corridors. Capacity is weaker in rural or remote

areas. ABRAVA should be treated as a priority counterpart for identifying local partners and service capacity. Brazil's refrigerant controls are managed by IBAMA and refrigerant importers must follow IBAMA procedures.

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