



White Paper

Manufacturing in Brazil Instead of Just Selling

Why European Hardware Developers Should Rely on Local Manufacturing When Entering the Brazilian Market

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1. Introduction

European hardware developers seeking to build a stable and growth-oriented sales market outside of Europe almost inevitably turn their attention to Brazil. With a population of approximately 214.2 million people as of July 1, 2026—based on the official projections of the Brazilian Institute of Geography and Statistics (IBGE)—the country is the seventh most populous in the world and represents by far the largest national consumer market in South America.

However, those who plan to enter this market purely by exporting finished products from Europe regularly underestimate an import system that ranks among the most complex, expensive, and bureaucratically demanding in the world. Depending on the product class, customs classification, and state, the cumulative tax and duty burden for pure product imports can reach levels of 50 to over 100 percent of the CIF (Cost, Insurance, Freight) value. An extensive tax reform, which has been underway since 2023, makes the legal landscape additionally confusing until at least 2033.

The strategic way out lies in local manufacturing—whether through a qualified Brazilian EMS partner or at its own local production facility. This avoids a significant portion of the import tax burden on the finished end product. At the same time, extensive tax and industrial policy incentives become available, which are tied to local manufacturing requirements.

This white paper analyzes the administrative and strategic hurdles of pure product imports to Brazil, presents the pathways to local manufacturing, and explains why the Greater São Paulo area has for decades hosted the densest concentration of German industrial enterprises outside of Germany.

2. Brazil as a Sales Market – The Scale of the Opportunity

According to the official projections of the Brazilian Institute of Geography and Statistics (IBGE), approximately 214.2 million people lived in Brazil as of the reference date July 1, 2026 (an increase of 0.37 percent compared to the previous year). Despite slowing population growth, the country remains by far the largest national market in Latin America.

Within Brazil, the state of São Paulo stands out in particular: with around 46 million inhabitants, it generates over 30 percent of Brazil's economic output. São Paulo boasts highly developed and powerful sectors in automotive manufacturing, aerospace, renewable energies, and industrial manufacturing technology.

For European hardware developers, this market offers a dimension that exceeds the domestic market in many product categories. Furthermore, the industrial demand for automation, digitalization, and sustainable production solutions is growing continuously. The critical question for market success, however, is not the market potential itself, but the choice of the right supply model.

3. The Hurdles of Pure Product Import: A Qualitative Analysis

The first impulse of many European hardware developers is obvious: manufacture products in their home country, ship them to Brazil, and distribute them there. However, this exact approach regularly leads into a logistical and financial cost trap based on several interlocking factors.

The Import-Side Tax Cascade

Brazil levies several independent taxes and duties on imported goods at the federal and state levels, as well as other import-related charges. These primarily include:

- **Import Duty** (*Imposto de Importação – II*)
- **Industrialized Products Tax** (*Imposto sobre Produtos Industrializados – IPI*)
- **State Value Added Tax** (*Imposto sobre Circulação de Mercadorias e Serviços – ICMS*)
- **Federal Social Contributions** (*PIS-Importação* and *COFINS-Importação*)
- **Merchant Marine Fund Surcharge** (*Adicional ao Frete para Renovação da Marinha Mercante – AFRMM*) for maritime transport

These taxes and duties are calculated on different tax bases, partially cascade on top of each other, and reinforce one another. In practice, this cascading effect means that, depending on the product class, customs classification, and state, the cumulative tax and duty burden for pure product imports can reach levels of 50 to over 100 percent of the goods' CIF (Cost, Insurance, Freight) value. For electronic assemblies with tight margins, this can often mean that any price advantage over local competitors is entirely consumed.

Note: Since the specific tax burden depends heavily on the product's precise customs classification (NCM number) and the chosen state, and because the EMS Strategy Group does not provide tax advisory services, detailed mathematical sample calculations are deliberately omitted from this document. For a binding calculation of the so-called "landed cost," a qualified local tax expert should always be consulted.

Customs Registration and Bureaucratic Hurdles

A foreign company without its own Brazilian subsidiary cannot import independently without further action. Accreditation for foreign trade via Siscomex is carried out under the *Expressa*, *Limitada*, and *Ilimitada* modalities. The permissible operational limits are determined by the Receita Federal based on the assessed financial capacity of the importer. Without a corresponding accreditation or an appropriately accredited importer, the import cannot be properly processed through Siscomex.

Furthermore, ongoing administrative practice requires deep market knowledge. All customs declarations, tax returns, and the mandatory electronic invoicing (*Nota Fiscal Eletrônica*) must be processed strictly in the national language (Portuguese). Without qualified local customs and tax advisors, the administrative management of this system can hardly be achieved without errors.

4. The Tax Reform in the Transition Phase (2026–2033)

Brazil is currently undergoing its most extensive tax reform since the 1960s, initiated by Constitutional Amendment No. 132/23 in December 2023. The goal of the reform is the gradual introduction of a dual VAT system, consisting of the federal levy **CBS** (*Contribuição sobre Bens e Serviços*) and the state/municipal levy **IBS** (*Imposto sobre Bens e Serviços*). This new system is designed to completely replace the previous taxes PIS, COFINS, ICMS, and ISS by the year 2033.

For businesses entering the market now, however, this translates into a phase of significant administrative uncertainty:

- **The year 2026** functions as a test and transition year, during which the new CBS and IBS levies are already shown on invoices but, under the statutory conditions, do not yet trigger any regular financial additional burden.
- **Starting in 2027**, the gradual, actual replacement of PIS and COFINS by the CBS will begin.

Since the old cumulative tax system and the new regulations coexist during this long transition period, and detailed rules continue to evolve, forward-looking contract design is mandatory. In practice, many companies find it beneficial to incorporate flexible adjustment clauses into contracts with customers and suppliers to address potential changes in the tax burden.

As is the case elsewhere: The EMS Strategy Group does not provide tax or legal advice. A detailed assessment of the reform's impact on your business model must be accompanied by qualified tax advisors or auditors.

5. The Way Out: Local Manufacturing

The significant hurdles of pure product import can be bypassed by shifting value creation, in whole or in part, to Brazil. For market entry, European hardware developers have two established paths available:

A. Cooperation with a Local EMS Partner

Manufacturing through a Brazilian Electronic Manufacturing Services (EMS) provider is the fastest and most capital-efficient path for market entry. It eliminates the need for high initial investments in own factory buildings and machinery.

- **The Challenge:** Process maturity, quality assurance, and component sourcing competence vary significantly among Brazilian EMS providers. Since these quality differences can hardly be reliably assessed from afar, a meticulous and expert partner audit on-site is indispensable.

B. Establishing an Own Manufacturing Facility

This path offers maximum control over production processes, quality standards, and the protection of intellectual property. However, it requires the incorporation of a Brazilian legal entity, the establishment of personnel structures, and significant capital expenditure (Capex) on machinery and equipment.

- **Strategic Lever – The Ex-Tarifário Regime:** Those who opt to establish their own manufacturing can achieve substantial cost savings when importing the required production equipment. Under the government *Ex-Tarifário* regime, the import duty on certain capital goods as well as information and telecommunications technology can be temporarily and drastically reduced (in many cases to zero percent), provided there is no equivalent domestic production for these machines in Brazil. Without this instrument, the regular tariff rates for such capital goods typically range between 14 and 16 percent. The import of corresponding production and testing technology can thus be financially facilitated to a substantial degree.

6. Industrial Policy Incentives for Local Value Creation

Brazilian industrial policy rewards companies that bring jobs and technology into the country through various incentive programs:

The Basic Productive Process (PPB)

The cornerstone of local industrial promotion in the electronics sector is the so-called Processo Produtivo Básico (PPB), legally anchored, among others, in Law No. 8.387 of 1991. The PPB defines for each product category the minimum number of manufacturing and assembly steps that must be performed within the country so that the finished product is officially recognized as "made in Brazil."

Companies that demonstrably fulfill these PPB requirements for their product gain access to extensive industrial policy advantages and tax reliefs. The exact design of these benefits varies depending on the product class and the applicable incentive regime.

Research and Development Commitments (R&D)

For certain product categories—particularly in the field of information and communications technology—the incentive rules require investments in research, development, and innovation (PD&I) in return for tax reliefs. These may, for instance, mandate an annual investment of at least 5 percent of the respective tax base in local research activities or collaborations. These R&D obligations must be considered an independent regulatory requirement and should not be swept into a general assumption of being fulfilled merely by meeting the PPB criteria.

Special Zone: Free Economic Zone of Manaus (Zona Franca de Manaus – ZFM)

Particularly comprehensive concessions are offered by the Free Economic Zone in Manaus. Products manufactured in compliance with the PPB in the local industrial cluster benefit from a reduction of the import duty on imported raw materials and components (such as semiconductors, passive components, or connectors) by up to 88 percent, as well as a full exemption from the federal Industrialized Products Tax (IPI). For hardware developers whose designs rely on global electronic components, this can be a decisive factor for competitiveness.

7. Market Advantages in the Public Sector

An often underestimated lever for companies manufacturing in Brazil is preferential access to public tenders. The Brazilian Procurement Law No. 14.133/21 provides for a so-called *Margem de Preferência* (preference margin) for locally manufactured products.

- **How It Works:** Within the framework of appropriately regulated public tenders, locally manufactured products can receive a preference margin over imported competitor products. The statutory framework allows for a preference of up to 10 percent.
- **Innovation Bonus:** Under certain conditions, this preference for nationally manufactured products and services involving technological development and innovation in Brazil can reach up to 20 percent.

For hardware developers whose target customers lie in public administration, energy supply, or the infrastructure sector, this preferred market access represents a strong strategic argument.

8. São Paulo: The Established German-Brazilian Industrial Ecosystem

The fact that the state of São Paulo is the premier address for foreign industrial investment has deep historical roots. Over more than a century, one of the world's largest concentrations of German industrial companies outside of Germany has developed in the Greater São Paulo area.

According to the AHK São Paulo, approximately 1,000 German companies are active in the state, forming a cornerstone of the local industrial ecosystem. A significant portion of these is concentrated directly in the metropolitan area of São Paulo. In total, these companies secure more than 250,000 direct jobs in the state. Nationwide, around 1,600 companies with German capital are active in Brazil, with the traditional focus areas being automotive manufacturing, mechanical engineering, and the electrical industry.

Naturally, this industrial ecosystem is not limited to German companies. Numerous other European and internationally active enterprises are also represented in Brazil, and particularly in the Greater São Paulo area, with production sites, branches, and local partner structures. This provides the region with an exceptionally broad international industrial and technological environment for establishing their own activities.

For European hardware developers entering the market, this dense network offers invaluable advantages:

- They do not have to laboriously rebuild logistical structures, supply chains, and quality standards from scratch.
- A highly specialized pool of skilled labor, established suppliers, as well as German-Brazilian chamber and consulting structures (such as the AHK São Paulo) exists to secure the market entry both administratively and operationally.
- In practice, this proven framework often decides whether a production project in Brazil successfully launches within a few months or remains bogged down in years of costly, high-effort learning curves.

9. Strategic Comparison: Import vs. Local Manufacturing

Criterion	Pure Product Import	Local Manufacturing (EMS or Own Facility)
Tariff & Tax Burden	Cascading import duties and taxes (often 50% to > 100% of the CIF value).	Significant reduction of duties and taxes on the finished end product.
Investment Risk (Capex)	Minimal (no local production facilities required).	Low when utilizing an EMS; high when establishing an own factory.
Market Access & Tenders	Disadvantaged in the public sector; no preference margins.	Statutory preference of up to 10% (or up to 20% in case of local innovation).
Import of Machinery (Capex)	Not applicable.	Cost reduction on machinery imports possible via <i>Ex-Tarifário</i> .
Lead Times & Flexibility	Long sea routes, unpredictable customs clearance times (<i>Custo Brasil</i>).	Fast response times and flexible delivery directly from a local warehouse.
Local Tax Incentives (PPB)	Excluded.	Access to the respectively applicable PPB and ZFM incentive regimes.
Administrative Complexity	High (requires accreditation via Siscomex).	High (requires close guidance from local partners and subject matter experts).

10. Conclusion and the Structured Path to Success

As South America's most populous nation, Brazil offers immense market potential for cutting-edge European technology. However, the seemingly simple path of pure product import often turns out to be uneconomical due to complex administrative hurdles, customs barriers, and cascading duty structures.

The strategically and economically more successful path leads through local value creation. By combining local EMS partnerships, fulfilling applicable PPB criteria, utilizing the *Ex-Tarifário* regime, and selectively positioning in the public sector, substantial competitive advantages can emerge.

However, this demanding market imperatively requires local guidance, deep operational process understanding, and access to a reliable network. This is precisely where the circle closes back to the established industrial ecosystem in the São Paulo region.

European hardware developers do not have to walk this path alone. The EMS Strategy Group combines established roots in Europe with its own network and long-standing presence in Brazil, particularly in the São Paulo area. A step-by-step entry via an experienced, locally audited EMS partner minimizes risk and significantly accelerates market entry.

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About the Author

Dirk Kaussen is Founder and Managing Director of EMS Strategy Group. With around 40 years of experience in the electronics industry — including founding and managing his own electronics manufacturing company in Germany — he brings deep expertise in manufacturing processes, EMS partner selection, supply chain stability, relocation projects, and risk management. His approach combines practical solutions with a direct connection to industrial reality.

About the EMS Strategy Group

EMS Strategy Group supports industrial enterprises in the strategic and operational advancement of their electronics manufacturing. Our core expertise lies in the strategic relocation of manufacturing volumes, the selection of qualified EMS partners, the establishment of new production capacities, and the expansion of existing manufacturing structures.

Furthermore, we design resilient supply chain frameworks, conduct comprehensive risk assessments, and guide dual-sourcing strategies, with operational support through to a successful series production ramp-up.

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