

Total Landed Cost (TLC): Making all procurement costs transparent

Total Landed Cost (TLC) refers to the total cost of a product or service from the supplier's plant to the point of use within one's own company. The term combines purchase price, transport, customs, packaging, handling and all downstream costs into a single key figure. Only those who consider the TLC compare suppliers and procurement variants in a truly fair manner. For buyers in the DACH region, TLC analysis is therefore a central instrument of supplier selection and price negotiation.

Key facts

- In addition to the product price, Total Landed Cost typically covers transport, packaging, insurance, customs and processing costs up to goods receipt.
- A pure price comparison can be misleading, as logistical and administrative costs frequently account for 5 to 20 per cent of the purchase price.
- TLC analysis is the foundation for well-founded procurement decisions such as supplier selection, site comparisons or onshoring assessments.
- Costs for quality, inventory holding and recalls are also often included in extended TLC models.
- Without a sound data basis from freight settlement, customs tariffs and internal cost rates, the TLC calculation remains an estimate.

Definition: Total Landed Cost

Total Landed Cost (TLC) is the sum of all costs incurred until a procured product is ready for operation at the point of use. It extends the purchase price by all logistical, fiscal and administrative incidental costs. This makes the TLC clearly distinct from the pure net price, which often takes centre stage in classic price comparisons.

Distinction from the purchase price

The purchase price typically contains only the negotiated product price based on the agreed delivery term, such as Incoterms like FCA or DDP. The Total Landed Cost goes beyond this: it adds freight, insurance, packaging, customs and import duties as well as handling and booking costs. Two offers with an identical product price can therefore show very different TLC values, for example if one supplier offers DDP and the other only delivers ex works.

- Product price net
- Transport and insurance
- Packaging and handling
- Customs, import VAT financing, freight surcharges
- Procurement process costs up to goods receipt

Extended perspective: Total Cost of Ownership

In practice, TLC is often understood as a subset of the Total Cost of Ownership (TCO). While TLC ends at goods receipt, TCO also includes usage, maintenance, quality and disposal costs over the life cycle. For wear parts or capital goods, a cost-benefit analysis over the entire life cycle is therefore recommended, whereas TLC is primarily suitable for material direct procurement.

Methods and approach for TLC calculation

A reliable TLC calculation requires a structured approach: identify cost drivers, define data sources, standardise the calculation logic. The effort pays off particularly for award-relevant volumes, international procurement or site decisions.

Systematically capture cost drivers

At the outset, buyers should list all relevant cost drivers along the procurement chain. These include transport costs including fluctuations caused by a freight surcharge, the customer's packaging requirements, customs rates per commodity code as well as the processing time in goods receipt. For cross-border procurement, checks on dual-use goods and documentation of conflict minerals proof of origin are added, which can generate additional effort.

Incoterms as the basis of calculation

The chosen delivery term determines which party bears which cost component. With FCA, the buyer arranges the main carriage itself; with DDP, everything is included. For a fair comparison, buyers must normalise the offers to a uniform reference basis, for example converting all options to TLC ex own plant. Only then are supplier benchmarks and offer comparisons reliable.

Build a standardised calculation model

An Excel- or ERP-based model calculation scheme with category-specific parameters has proven its worth: weight, volume, country of origin, customs rate, mode of transport and internal cost rate per goods receipt item. The model data should be updated regularly, as freight rates and customs rates are subject to volatility. An outsourcing analysis for contract manufacturing uses the same logic, supplemented by logistics costs for outward and return transport of the parts.

Important KPIs around the Total Landed Cost

The TLC itself is the central key figure, but it only unfolds its effect in interplay with supplementary indicators. These key figures make drivers visible and show whether cost reduction measures are actually taking effect.

TLC share and TLC variance

Two key figures have proven themselves in practice: the TLC share of production costs per material group and the variance between planned and actual TLC. The latter shows whether freight surcharges, customs changes or fluctuations in transport times are shifting the calculation. Typically, the non-price TLC share for international procurement lies in the range of around 5 to 20 per cent of the product price, depending on distance and type of goods.

Supplementary key figures from logistics and quality

The supplier's fill rate influences inventory costs and thus indirectly the TLC. The scrap and rework rate is also factored into extended models, as poor quality generates replacement transports and

administrative effort. Those who think in terms of TCO additionally add key figures for inventory coverage and capital binding.

Key figures in the supplier benchmark

In the supplier benchmark, the TLC serves as a common comparison basis. This makes it possible to objectively compare locations in different countries – for example when deciding between onshoring and low-wage procurement. It is important that all parties use the same assumptions on exchange rates, freight rates and customs rates, otherwise an apparent advantage arises.

Risks and controls in TLC analysis

The greatest danger of TLC analysis is an overly optimistic data basis. Those who use only average values overlook volatility, regulatory changes and hidden process costs. Controls and scenario calculations are therefore indispensable.

Volatility of freight and customs

Freight rates, fuel surcharges and customs rates can change significantly within a short time, for example due to geopolitical risk, trade conflicts or route disruptions. Proven in practice are scenario calculations with upper and lower limits as well as a freight audit to reconcile freight-invoiced items with the contractually agreed tariffs. Deviations should be systematically recorded and taken into account in price updates.

Hidden internal costs

Internal efforts are often underestimated: deadline monitoring, customs declarations, supplier qualification, handling of complaints and GR/IR clearing in accounting. Hedging of currency risks via forwards & swaps or alternative financing instruments such as forfaiting for long supply chains also generate costs that belong in a realistic TLC calculation.

Supplier failure and supply risks

A low TLC value is worthless if supply security is at risk. A high supplier failure risk should therefore be included as a risk premium or as a separate evaluation block alongside the TLC. In addition, qualification processes such as APQP for series parts, an FMEA to safeguard critical manufacturing steps and contractual safeguards via a warranty agreement are recommended. In the event of acute failures, a prepared crisis team with clearly defined escalation paths helps.

TLC in procurement strategy and supplier selection

TLC analysis is not an isolated calculation tool but a strategic steering instrument. It feeds into tenders, site decisions and long-term supplier development.

Tendering and price negotiation

In the tender process, buyers should specify in the specification of requirements which cost components bidders must disclose – for example packaging type, delivery term and Incoterms. This makes offers comparable and keeps negotiation levers open. Questions of the future warranty agreement can also be assessed early using the TLC logic, as complaint costs increase the landed costs.

Make-or-buy and site decisions

In make-or-buy decisions or when assessing onshoring, the TLC often paints a more differentiated picture than the pure unit price. Higher labour costs domestically can be offset by shorter transport routes, lower inventories and lower quality risks. A sound outsourcing analysis combines TLC with capacity and risk considerations.

Cost management in the development phase

Ideally, TLC analysis begins before the design freeze, i.e. before engineering decisions fix the material and country of manufacture. Methods such as design-to-cost start here and optimise the product so that total procurement costs fall. The involvement of new suppliers via the innovation funnel also benefits from evaluating TLC criteria early rather than only unit prices.

Current developments and digital support

Data quality and automation increasingly determine the practical usability of TLC analysis. At the same time, regulatory requirements and geopolitical conditions are changing the cost structure.

Automated freight and customs data

Digital freight settlement and freight audit tools make it possible to continuously reconcile actual costs with calculated values. ERP integrations ensure that goods receipt costs and incidental costs are automatically assigned to the material master records. In practice, the coordination between procurement, logistics and finance – for example via GR/IR clearing – is often the critical point for a reliable data basis.

Regulation and sustainability

Documentation and reporting obligations relating to conflict minerals proof of origin, CO2 accounting for transport and customs changes, for example through carbon border adjustment mechanisms, extend the TLC catalogue. Indirect procurement, for example for packaging and operating materials, is also gaining in importance, as it bears part of the logistics costs. Internal transfer prices between sites also influence which costs are attributed to which unit.

Risk management and resilience

Companies are increasingly linking TLC analysis with ongoing risk monitoring of geopolitical risk and supply chain disruptions. In crisis situations, a crisis team coordinates short-term alternative procurement, whose additional costs are set against the TLC baseline planning. Dual or multi-sourcing strategy thus becomes part of the cost logic, not merely of risk mitigation.

Typical metrics

TLC share of product costs: typically 5–20 % in addition to the product price

heavily dependent on transport route, type of goods and customs rate

TLC variance planned/actual: < 5 %

larger variances indicate an incomplete calculation or volatility

Supplier TLC difference: individual per comparison

normalise to a uniform reference basis in the benchmark

Inventory cost share: commonly 15–25 % p. a. of inventory value

use internal capital cost rates

Practical example

A medium-sized mechanical engineering company procures a cast part both from a European supplier and from Asia. The pure unit price from Asia was around 18 per cent lower. However, the TLC analysis showed: sea freight with long lead times, higher safety stocks, packaging effort and the return rate for rework almost completely offset the advantage. After a scenario calculation with increased freight rates, the Europe TLC option came out cheaper, and the company shifted part of the volume with dual sourcing.

- Uniform TLC comparison calculation based on the delivery term FCA ex supplier plant
- Consideration of capital binding costs for safety stocks per transport variant
- Scenario calculation with three freight rate and customs scenarios, including possible freight surcharge
- Decision for a hybrid sourcing model with an ongoing supplier benchmark on a TLC basis

Conclusion

The Total Landed Cost shifts the focus from the unit price to the actual procurement costs up to goods receipt. In doing so, it creates the conditions for fair supplier comparisons, reliable site decisions and realistic negotiation targets. Prerequisites are a sound data basis, clear Incoterms and a standardised calculation model that also includes internal process costs. Those who combine TLC with quality and risk key figures steer their procurement along the actual value creation. Ultimately, the TLC is the connecting element between operational price negotiation and strategic cost management.

Frequently asked questions

What does Total Landed Cost mean?

Total Landed Cost is the sum of all costs incurred up to the provision of a product at one's own site: product price, transport, packaging, insurance, customs, handling and related process costs. It enables a fair comparison of suppliers and procurement routes beyond the pure purchase price.

Which costs are included in the Landed Cost calculation?

Typically this includes the net price, freight and insurance costs, packaging, customs and import duties, goods receipt and quality inspection costs as well as a share of the procurement process costs. In extended models, inventory carrying costs, currency hedging and complaint costs are added. What matters is a uniform reference basis, such as a standardised delivery term.

What is the difference between Landed Cost and Total Cost of Ownership?

The Landed Cost ends with the availability of the product at goods receipt, whereas the Total Cost of Ownership additionally covers usage, maintenance, quality and disposal costs over the entire life cycle. The TLC is therefore usually a subset of the TCO. For consumables and series parts, the TLC is often sufficient; for capital goods, a TCO analysis makes more sense.

Why is Landed Cost important for supplier selection?

Without a TLC analysis, distant or customs-liable suppliers often appear cheaper than they really are

because transport, customs and inventory costs are not taken into account. The TLC makes these differences visible and enables an objective supplier benchmark. It therefore provides a sound basis for decisions in tenders and site comparisons.

How is the Total Landed Cost calculated in practice?

To the product price, one adds the documented costs for transport, insurance, packaging, customs and handling, supplemented by estimated internal process cost rates per purchase order and goods receipt. A standardised calculation scheme with category-typical parameters such as weight, country of origin and mode of transport is advisable. Scenario calculations for freight and customs fluctuations increase the validity of the analysis.

What role do Incoterms play in Landed Cost?

Incoterms such as FCA, EXW or DDP determine which party bears transport, insurance and customs, and thus which costs are already included in the product price. For a TLC comparison, all offers must be converted to the same reference basis. Otherwise one is comparing apples with oranges, and the cheaper option may be merely an illusion.