

Glossary & Abbreviations

This document covers the most usual terms and abbreviations from the commodity market and that may help in a better understanding of Intratec's products.

Administrations costs. Costs associated with the executive and administrative activities, including salaries and wages for administrators, accountants, secretaries, legal costs, communications, office maintenance and other costs associated with the company's head office.

Assessments. Each assessment refers to the price series of a commodity that is provided at a particular location and based on a clearly defined price basis.

Assessments basis. It represents the set of definitions related to the assessment and may comprise the price category, Incoterm, sublocation, and commodity specifications.

Biofuels. Renewable fuels derived from organic materials (biomass), such as plants, agricultural residues, animal fats, and waste. They serve as alternatives to fossil fuels in transportation, heating, and electricity generation, including liquid, gaseous, and solid biofuels.

Biomass and Waste. This category refers to organic materials from plants, animals, or waste that can be converted into biofuels (e.g., ethanol, biodiesel), biogas, or burned for energy. Key sources include agricultural residues, forestry waste, municipal solid waste, animal manure, and dedicated energy crops.

CAPEX. See "Capital expenditures."

Capital expenditures. Also referred to as fixed capital, constitutes the depreciable fraction of the capital investment, which is spent to construct an industrial plant.

Capital investment. All capital costs invested to construct an industrial plant and make it operational, from design and construction to startup.

Cash cost. A commodity production cost that represents the out-of-pocket expenses manufacturers pay to produce a commodity, including raw materials, utilities, labor, maintenance, taxes, and fees. It varies based on production practices, input quantities, and prices, influenced by diverse production routes, yields, raw material costs, and utility expenses across countries. Cash cost excludes depreciation and profit and should not be confused with the product price, which is the market value.

cfr. See “Cost and Freight.”

cif. See “Cost, Insurance & Freight.”

Coal Products. Processed coal used in power generation (thermal coal) and steel production (metallurgical coal). These bulk commodities are typically transported by rail, barge, or ship, requiring specialized handling.

Commercialization costs. Costs associated with marketing the product, which include developing a market plan, establishing a distribution network, and devising a customer support strategy.

Compiled Prices. Costs that are modeled using price data from public sources, and their raw data consist of some price series (value per quantity) over a month.

Consumption. Direct use of energy by individuals, businesses, and industries for heating, cooling, lighting, transportation, and manufacturing. It also includes non-energy uses (e.g., fossil fuels in chemical production). Energy losses occur during conversion, making final consumption different from total demand.

Contract. A binding agreement between a buyer and a seller in a transaction.

Corporate overhead costs. Costs incurred by a company’s head office, which are not directly related to the process operation, such as general administrative costs, information technology, marketing and advertising, and research and development activities.

Cost and freight. The seller covers delivery costs to the destination port and origin costs, including export clearance and freight charges. The buyer assumes risk and origin costs once the goods are unloaded at the destination port. After delivery, the buyer handles insurance, transportation from the destination port, unloading, and associated costs.

Cost, insurance & freight. The seller covers delivery costs and insurance during the journey to the designated port.. The selling price includes the cost of goods, freight or transport, and insurance. After delivery and unloading, the buyer assumes the remaining operations and associated costs.

Crude Oil. Liquid fossil fuel extracted from underground reservoirs and refined into essential products such as gasoline, diesel, and jet fuel.

Diesel. Middle distillate fuel primarily used in diesel engines.

ddp. See “Delivery Duty Paid.”

Delivery duty paid. The seller delivers goods to the named destination, unloads at own cost, handles import clearance, and covers import duties, taxes, and charges.

Demand. Total energy required in a country, calculated as domestic production plus imports, minus exports. It reflects the energy needed to meet industrial, commercial, and residential consumption, including both primary energy sources and those converted into fuels or electricity.

Depreciation. Decrease in value of industrial assets with passage of time. While not a true operating cost, it is considered an operating expense for accounting purposes.

Direct costs. Costs of all material and labor associated with the process equipment. It is the total installed equipment cost from purchase to installation, including the installation bulks – piping, civil, steel, instrumentation and control, electrical, insulation, and painting.

Domestic Supply of Oil Products. Total availability of refined petroleum products within a country. It indicates how much oil products are available for domestic consumption.

Electricity. Energy carrier generated from fossil fuels, renewables, or nuclear power. It is essential for residential, industrial, and infrastructure applications.

Electricity Generation. Production of electricity from various sources, including fossil fuels (coal, natural gas, oil), renewables (hydro, wind, solar, geothermal, biomass), and nuclear power.

Energy Self-Sufficiency. Measure of the extent to which a country can meet its energy needs with domestic production, reducing reliance on imports.

Energy Balance. Comprehensive accounting framework that tracks energy flows within a country, from production and imports to transformation, consumption, and exports.

Ex-works. The seller's minimum obligation, that is, making goods available to the buyer, which assumes responsibility for all required aspects of export/import clearance, carriage, and insurance.

Imports, Exports, and Net Trade. Balances that track energy flows across borders. Imports bring energy in, exports send energy out, and net trade shows whether a country is a net importer or exporter.

exw. See “Ex-works.”

Fixed capital. See “Capital expenditures”.

fob. See “Free on Board.”

Formula. See “Formula-based price.”

Formula-based price. It is a pricing method where a pre-established mathematical formula is used to define a commodity price based on different criteria, such as feedstocks, indexes, and others. The formula pricing approach can be useful in markets with insufficient activity to enable a direct price assessment extraction or in markets where prices are consistently determined based on a predetermined formula.

Free on board. The seller is responsible for delivering and loading goods onto the buyer's designated ship and handling the export documentation and clearance. Following this delivery, the remainder of the transaction (transportation, unloading, insurance, and associated costs) is the buyer's responsibility.

Freight-Based Prices. These are prices which adjust product values to include maritime freight costs, resulting in **Netback** and **Netforward** prices. Netback deducts freight costs to reflect the product value at the loading terminal, while Netforward adds freight costs to estimate the product value at the destination terminal.

Fuel Oil. Heavy petroleum product used in power generation, marine engines, and industrial heating. It has high energy content and is a by-product of refining.

Functional unit. Intratec defines “functional unit” as a group of equipment and ancillaries required to perform a particular operation, i.e., a significant step in the process in which a particular physico-chemical operation occurs.

Futures contracts prices. A contractual arrangement to either deliver or receive a commodity at a specific date or range or dates in the future, at a pre-agreed price established during the transaction.

Gaseous Biofuels. Category of biofuels that includes biogas, generated via anaerobic digestion of organic waste.

Gasoline. Refined petroleum product used in internal combustion engines, valued for its high energy content and efficiency.

Geothermal Energy. Form of energy that harnesses heat from beneath the Earth's surface for electricity generation and direct heating.

Heat. Produced directly (e.g., geothermal) or as a by-product of fuel combustion. It is crucial for heating, industrial processes, and energy systems

Heavy Oils. High-density petroleum products such as fuel oil that require specialized handling. In freight, they are transported under “dirty freight” conditions, referring to tankers carrying unrefined or residual oil products.

Henry Hub. It serves as a pivotal point near Erath, Louisiana, where multiple interstate and intrastate pipelines converge through a header system managed by Sabine Pipeline. It is the designated delivery location for the NYMEX natural gas futures contract in the United States.

Hub. A specific geographic area where numerous individuals engage in the trading of services.

Hydro Energy. Energy source that converts the kinetic energy of flowing water into electricity using turbines, making it one of the most reliable renewable sources.

IC index. Stands for Intratec plant construction index, which is an indicator published monthly by Intratec to scale capital costs from one time period to another.

Incoterms. A set of globally acknowledged regulations that outline the obligations to sellers and buyers in an export transaction. Incoterms establish guidelines regarding the party responsible for handling and covering costs related to shipment, insurance, documentation, customs clearance, and other logistical tasks.

Indirect costs. Defined by the AACE as costs which do not become a final part of the installation, but which are required for the orderly completion of the installation. It accounts for engineering and procurement costs, construction materials and indirects, general and administrative overheads, and contract fees.

Industrial site. All installations (facilities and buildings) required in the production of a commodity, including the process unit and infrastructure.

Information technology expenses. Total cost related to information processing, such as computer software, hardware, personnel, data communications and miscellaneous.

Inside battery limits. Also known as inside battery units or process units, it is the core of an industrial site. These are installations that comprise all main units of the site required to modify the input stream and obtain the target output.

ISBL. See "Inside battery limits."

IT. See "Information technology expenses."

Kerosenes. Refined petroleum products used in aviation (jet fuel), heating, and lighting. They are middle distillates valued for stability and clean combustion.

Key process input and output figures. Also referred as key process indicators (KPIs), indicate the amount of each raw material and utility consumed, as well as the amount of co-products generated per amount of the main product manufactured.

Labor requirements. The number of operators per shift required to run the equipment of a given process, as well as the personnel per shift required to directly supervise the operating labor.

Labor training costs. Costs of plant crew training for plant start-up.

Lag. Lag refers to a time delay that indicates the number of months during which the preliminary price of a commodity is provided, rather than its ultimate or final price.

Land & site development costs. Costs for site preparation, including roads and walkways, parking, railroad sidings, lighting, fencing, sanitary and storm sewers, and communications.

Light Oils. Low-density refined petroleum products, such as gasoline, naphtha, and kerosene, that are easier to handle and transport. In freight, they fall under “clean freight” conditions, requiring tanks free from heavy oil residues.

Liquefied Petroleum Gas (LPG). Flammable hydrocarbon gases such as propane and butane, used in heating, cooking, transport, and industry.

Liquid Biofuels. Category of biofuels that includes ethanol, produced from crops like corn, and biodiesel, derived from vegetable oils or animal fats. Renewable diesel, another liquid biofuel, is a sustainable alternative that closely resembles petroleum diesel in its chemical composition.

LME. The London Metal Exchange is a global exchange for futures and forwards, offering a large market for standardized forwards contracts, future contracts, and options on base metals.

Location. It refers to a specific or set of countries or regions as specified by an assessment.

Long-term contract price. Commodity price set through an agreement over several years, providing stability and predictability for buyers and sellers. Prices can be fixed or variable, adjusting based on formulas, raw material costs, or benchmark prices. Long-term contracts include terms for delivery schedules, quality standards, and price adjustments to reflect market changes. They are common in energy, manufacturing, and agriculture to manage risk and ensure supply chain stability.

Maintenance cost. Costs related to the replacement and repair of equipment as well as the costs necessary to carry out this maintenance work.

Manufacturing Cost-Based Prices. Prices based on operating costs, including raw materials and utilities. One example is the **cash cost**, that represents the out-of-pocket expenses manufacturers pay to produce a commodity, including raw materials, utilities, labor, maintenance, taxes, and fees.

Marketing & advertising costs. Costs associated with the sales (sales personnel, advertising, technical sales service) of the products manufactured in the plant.

Mont Belvieu. A city in Chambers and Liberty counties in the US state of Texas.

Naphtha. Flammable liquid hydrocarbon used primarily as a petrochemical feedstock and industrial solvent. Intratec considers it a key oil product.

Natural Gas. Methane-rich fossil fuel used in heating, electricity generation, and petrochemicals manufacturing. It is processed to remove impurities and can be liquefied (LNG) for transport.

Natural Gas Liquids (NGL). Mixture of hydrocarbons such as ethane, propane, butane, and pentanes recovered during crude oil or natural gas production.

Netback price. Price calculated from other assessment prices by subtracting maritime freight costs. Therefore, netback price represents the value of the products returned to the loading terminal.

Netforward price. Price calculated from other assessment prices by adding maritime freight rates. So, netforward price represents the value of the products arriving at the destination terminal.

Nuclear. Energy source generated through nuclear fission, where uranium atoms split to release heat, producing steam to drive electricity-generating turbines. Nuclear fuels include uranium, thorium, and plutonium.

Oil. Petroleum and all derivatives, such as refined fuels obtained through the processing of crude oil in refineries. Intratec considers crude oil and all oil products as oil.

Oil Products. Refined fuels and derivatives from crude oil, primarily used for energy, transportation, and industry. Intratec categorizes diesel, gasoline, fuel oil, naphtha, and kerosenes as oil products.

Operating cash cost. The sum of the operating fixed costs and the operating variable costs.

Operating costs. Also referred to as operational expenditures (OPEX). These are ongoing costs associated with the plant operation based on the process studied, including operating fixed costs, operating variable costs and depreciation.

Operating fixed costs. Also referred to as fixed costs. It is directly tied to the plant capacity of an industrial site, which does not change with operating rate. It includes all costs associated with the construction of the functional units, such as operating labor, supervision labor, maintenance costs,

operating charges, plant overhead, property taxes and insurance.

Operating labor costs. Costs associated with plant operators actually required to run the equipment. This cost includes pay for time worked and other directly paid benefits (e.g., vacations, holidays, seasonal or irregular bonuses) given to the operators.

Operating supplies. Costs including consumable items not considered as raw materials nor part of regular maintenance, such as instrument charts, lubricants, test chemicals, wiping clothes.

Operating variable costs. Costs directly proportional to the actual operating rate of the industrial site. Such costs include raw materials and utilities, i.e., steam, electricity, fuel, and refrigeration.

OSBL. See "Outside battery limits."

Other Oil Products. Products that include lubricants, bitumen (asphalt), paraffin waxes, petroleum coke, and petrochemical feedstocks.

Other Feedstocks. Refinery feedstocks (unfinished oils), synthetic crude oils (e.g., from tar sands or coal liquefaction), and blending components for fuel enhancement.

Outside battery limits. Also known as outside battery units, offsite facilities, or site infrastructure. These are installations that are required but do not directly enter into the manufacture of a product. They are support buildings and auxiliary units used for providing and distributing utilities and storage facilities.

Owner's costs. Costs required to make the plant operational despite not being associated with the construction of the plant itself. It may include initial catalyst load in reactors, purchase of technology through paid-up royalties or licenses and miscellaneous costs.

Payroll charges. Expenditures incurred by the employer to employ a worker, that were not taken into account in operating and supervision labor costs. More specifically, it includes indirect expenditures such as legally required insurance programs and other contractual benefit plans for each worker, e.g., retirement and disability pensions, health insurance, life and accident insurance, unemployment insurance, taxes on payroll.

Plant cost. Costs directly, or indirectly, associated with the construction of the industrial plant itself (i.e., ISBL, OSBL and contingencies).

Plant nominal capacity. Maximum throughput per unit of the industrial plant at full operation throughout the year under specific conditions, based on the plant operating rate assumed.

Plant operating rate. A fraction of the production capacity of the industrial plant per hour in relation to the plant nominal capacity per year.

Plant overhead. Costs of non-maintenance and non-operating site labor for services associated with the manufacture of the product, including outsourced labor, technical assistance to operation, plant engineers, restaurant, recreation, purchasing, employee relations department, and janitorial.

Preliminary Prices. Best-estimate price values for the current period when official trade data are unavailable or delayed, typically by 1 to 3 months. They are derived using mathematical models that adjust related, timely price assessments to provide a reliable estimate until official figures are released.

Prepaid royalties. Royalty charges on portions of the plant are usually levied for proprietary processes.

Primary Energy Sources. Raw energy materials extracted from nature, such as crude oil, coal, and natural gas, or harnessed from renewable flows like solar and wind.

Process contingency. A factor included in the estimation of the total process capital as an effort to lessen the impact of the cost of absent technical information, uncertainty of the information obtained, or technical uncertainties associated with limited design data.

Process unit. See “Inside battery limits”.

Product price. Actual value practiced in market transactions for the product.

Product value. A value that provides an idea of the minimum price at which the product could be sold, and how competitive it is. It is based on all the costs associated with the manufacture of the product combined, including the operating cost, corporate overhead and an expected return on capital employed (ROCE).

Production. Generation of energy from various sources, including fossil fuels extracted through drilling or mining, nuclear power, and renewable sources such as hydropower, wind, and solar energy. Bioenergy, derived from waste materials and biomass, also plays a significant role in domestic energy production across many countries.

Project contingency. A factor included in the estimation of the plant cost to cover the costs which may arise as the project evolves, related to project errors or incomplete specifications, labor costs changes, strikes, problems caused by weather, inflation, etc.

Property taxes and insurance costs. Costs associated with the local property taxes charged by governments on commercial land or buildings, as well as the cost of insurance to cover third party liabilities and potential plant damage.

Raw materials costs. Costs related to the raw material directly consumed by a plant to make the final product.

R&D. See "Research & development costs."

Renewables. Energy sources that naturally replenish, including solar, wind, hydro, geothermal, and biomass. They generate electricity with lower environmental impact than fossil fuels and contribute to sustainability.

Research & development costs. Costs associated with the research activities related to the process and products. It includes salaries and wages for personnel and funds for machinery, equipment, materials, and supplies related to research and development activities.

Return on capital employed. Reflects the capital costs of a given process into its product value. It provides an idea of the minimum price at which the product may be sold. It is a measure of the efficiency and profitability of the use of capital.

ROCE. See "Return on capital employed."

Secondary Energy Sources. Result from processing primary energy sources into more usable forms, such as refined fuels and electricity.

Settlement price. The settlement price is the closing price of an asset or the reference price for a derivatives contract at the conclusion of each trading day or upon its expiration. This price will be determined on the specified settlement date for a given contract.

Site infrastructure. See "Outside battery limits".

Solar. Sun's radiant energy, harnessed through photovoltaic (PV) cells to generate electricity or solar thermal systems for heating and industrial applications.

Solid Biofuels. Category of biofuels that includes wood pellets and briquettes used as substitutes for coal in heating and power generation.

Spot price. Spot price reflects the price at which the commodity can be purchased for immediate delivery. Unlike contract prices, spot prices are ruled by the current availability of the commodity in the marketplace.

Spot market. Also known as "physical market" or "cash market," it is a market where goods are traded for immediate delivery.

Spread. The distinction between two prices, which can be observed either over time or between different commodities or instruments.

Start-up costs. Costs incurred during commissioning and start-up of an industrial site including operator training, commercialization costs, start-up inefficiencies and unscheduled plant modifications.

Start-up inefficiencies costs. Costs of inefficient process incurred during the start-up of an industrial site, such as operating runs in which operation cannot be maintained or false starts. It may vary according to the process maturity.

Stock Change. Variations in energy inventories over a specific period, reflecting increases (stock builds) or decreases (stock draws), which impact supply stability and pricing.

Sublocation. It refers to a specific set of ports, districts, or countries that represent a location specification for each assessment.

Supervision labor costs. Costs associated with field supervision labor required to directly supervise the operating labor. This cost includes pay for time worked and other directly paid benefits (e.g., vacations, holidays, seasonal or irregular bonuses) given to the supervisors.

Technology maturity. Measure of performance, reliability, durability, and operating experience associated with process technology. The technological maturity of a given process is defined by Intratec team through a method adapted from the so-called Technology Readiness Level (TRL) method, developed by NASA.

Technology readiness level. The measurement system developed by NASA used in a broad range of sectors/industries to estimate the maturity level of technologies. Each technology can be rated in nine TRLs, in which a technology at TRL 1 its scientific research is beginning and at TRL 9 it is successfully implemented.

Total operating cost. The sum of the operating cash cost with depreciation.

Total process capital. The investment required for the construction of process areas (ISBL investment), a process contingency, and the site infrastructure (OSBL Investment).

TPC. See “Total process capital.”

TRL. See “Technology readiness level.”

Trade Partners. Countries involved in energy imports and exports, shaping market dependencies and geopolitical considerations.

Transaction price. Transaction price represents monthly and statistically treated average prices from closed international trade transactions. This price does not necessarily indicate specific long-term contract or spot prices but rather it is a combination of all concluded negotiations.

Unit value. It signifies the total amount of money divided by the total quantity of a given commodity exchanged between countries as reported by countries custom authorities. These prices refer to commodities grouped by the data sources and can represent trades involving a single or combined commercial specifications.

Unscheduled plant modifications. Equipment modifications or additions which may be required if the product(s) do not meet market specifications, which is a key fault that can occur during the start-up of the plant.

USGC. Abbreviation for United States Gulf Coast, also known as the Gulf of Mexico. The coast is bordered by the states of Florida, Alabama, Mississippi, Louisiana, and Texas.

Utilities costs. Costs related to a plant's consumption of utilities, i.e., steam, electricity, fuel, and refrigeration.

Value-added tax. Type of tax on goods and services consumed, which is imposed at every step of the supply chain where value is added, starting from the initial production phase to the final point of sale. The VAT amount paid by the consumer is calculated by subtracting the overall cost of the product from any previously taxed material costs at earlier stages. Unless otherwise noted, internal taxes, such as Value Added Tax (VAT), are not included in the pricing information found in the Intratec Primary Commodity Prices.

vat. See "Value-added tax."

Wind. Energy source that converts wind's kinetic energy into electricity using turbines, with blades capturing wind currents to drive generators.

Working capital. Defined as the funds, in addition to the fixed capital, that a company must contribute to a project, for getting the plant into operation, and meeting subsequent obligations. It includes raw materials inventory, products inventory, in-process inventory, supplies and stores, accounts receivable and accounts payable.