

Producing organisation: INSEE

- [Read the “Informations Rapides” related to this indicator.](#)

## Warning

Past indices have been stopped, but, as for any rebasing, INSEE systematically proposes a “corresponding series” in front of each “stopped series”, with following rules:

- Before rebasing, i.e. until September 2014 included, the “stopped series” is directly accessible and is authoritative;
- After rebasing, i.e. since October 2014 included, stopped series can be extended this way: the “corresponding series” has to be multiplied by the connecting coefficient, then the obtained product rounded with one decimal.

## Introduction

The indices relating to landscaping, engineering and horizontal road marking are cost indices for various activities related to the construction sector, used mainly for the purpose of index-linking of contracts. We added thereto sub-indices used for calculating the Building (BT) and Civil Engineering (TP) indices, but which can be used independently: miscellaneous costs, road transport related to construction, equipment items of the BT and TP indices.

Since the creation of the Engineering Index in 1973 and up to the values of November 2013, these indices were published and calculated by the [Ministry of Ecology, Sustainable Development and Energy](#).

## Goals

**These indices allow businesses, local authorities and public organisations to escalate contracts.**

Contractors, local authorities and public organisations can use these official indices for contracts for landscaping (parks and gardens, provision of grains or plants), road markings (supplies and soon the provision of services), or construction, when specific index-linking formulae make it necessary to isolate cost components: road transport of personnel or equipment (road transport), miscellaneous costs concerning a manager in charge of a construction or landscaping site (miscellaneous costs), labour cost of an engineer on a construction site, including miscellaneous costs (engineering), running cost of equipment for construction (equipment items).

The Provision of Plants (FV) and Provision of Grains (FG) indices are used to calculate the indices for landscaping work (parks and gardens). They can also be used directly, in combination with other factors, in price revision formula. [Fascicle 35 of the Technical and General Clauses of Civil Engineering Contracts covering](#) (pdf file - “landscaping, sports grounds and open air leisure facilities” - in French only), sets out the definitions and recommendations for use of these indices related to landscaping.

These “indices” consist of parametric formula of the variations in the costs of the various inputs, as recommended in [the guide entitled “Prices in Public Procurement”](#) (pdf file) published by the Legal Affairs Division of the Ministry for the Economy and Finance in April 2013 (version 1.1), or are

some of these inputs.

## Legal basis

[Decree N° 2014-114 of February 7, 2014](#) and the [circular of May 16, 2014 relative to building indices \(BT\), civil engineering indices \(TP\) and various construction indices](#) (pdf file) transferred the responsibility of these indices from the Ministry of Ecology, Sustainable Development and Energy to INSEE.

## Scope and list of various indices

The various indices in construction are matched with the activity codes in [NAF 2008](#) and [CPF 2008](#) (in French only) so as to facilitate the choice of the right index thanks to the notes to the classification available on the INSEE website:

### List of various indices for Construction

NAF / CPF 2008, rev. 2	Various index for construction	
<b>01.19</b>	FG	Provision of grains
<b>01.30</b>	FV	Provision of plants
<b>20.30</b>	PMR	Road-marking products (supplies or services)
<b>42.11.20</b>	TSH	Road marking works
<b>41 à 43</b>	FD	Miscellaneous costs item of Building and Civil engineering indices
	MABTGO	Equipment item of building structural works indices
	MABTSO	Equipment item of building finishing works indices
	MATP	Equipment item for civil engineering indices
<b>49.3</b>	TRBT	Road transport item of Building indices
<b>49.41.19</b>	TRTP	Road transport item of Civil Engineering indices
<b>71.1</b>	ING	Engineering
<b>81.3</b>	EV1	Plant-covering
	EV2	Application of phytosanitary products
	EV3	Creation of greens
	EV4	Maintenance of greens

## Technical characteristics

### Methodology

The various indices in construction are cost indices of various activities related to the construction sector, listed under 6 items according to a cost accounting approach: “cost of labour” - formerly called “wages and charges”, “materials”, “equipment”, “energy”, “transport” and “miscellaneous costs”, similar to the [“KLEMS”](#) approach used by productivity economists (K = capital for “equipment”, L = labour for “labour”, E = energy for “energy”, M = materials for “materials”, S = services for “miscellaneous costs”, here the T was added for T = transport).

The articulation between the items in the indices and the lines in the general accounting plan are as follows, considering that the item “transport” has been given priority over all the other items:

<b>Items</b>	<b>General financial accounting</b>	
<b>K Capital</b>	605	Purchase of capital assets, equipment and work
	606 \ 6061	Purchases not stored (small items)
	612 \ partial	Leasing excluding transport equipment
	6131 \ partial	Equipment hire excluding transport equipment
	615 \ partial	Maintenance and repairs excluding transport equipment
	68 \ partial	Depreciation and amortisation of fixed assets excluding transport equipment
<b>L Labour</b>	604	Purchases of services
	621	Temporary staff
	6311	Payroll tax
	64	Personnel expenses
<b>E Energy</b>	60221 \ partial	Combustibles excluding fuels
	6061	Non-stockable supplies (water, energy, electricity)
<b>M Materials</b>	601	Stored purchases
	602 \ 60221	Other supplies
	609	Rebates and allowances on purchases
<b>S Services</b>	61	External services minus 611 “general subcontracting”, minus 612 “leasing”, minus 6131 “Equipment hire”, minus 615 “maintenance and repairs”, minus 6163 “transport insurance”
	622	Remuneration of intermediaries and professional fees
	623	Advertising, public relations
	625	Travel and entertaining
	626	Postal and telecommunication charges
	68 \ partial	Depreciation and amortisation of fixed assets
<b>T Transport</b>	60221 \ partial	Fuel
	Part of 612	Leasing transport equipment
	Part of 6135	Hire of trucks without drivers
	Part of 6155	Maintenance and repair of transport equipment
	6163	Transport insurance
	624	Transport of goods and employee transport
	68 \ partial	Depreciation and amortisation of transport equipment

The weighting of each item in each index is determined by the account analysis of the involved businesses (or the involved construction works. Similarly, each item is broken up into basic indices (of cost or price) derived from public statistics, with a weighting. The weightings of the items and basic indices are normally fixed for the duration of the base. However, considering the adopted calculation formula, the modification of these parameters throughout the duration of the base would only affect the changes starting from a certain date.

## Aggregation and reference

The various indices base 2010 are Laspeyres-chained indices in reference year 2010. The items are obtained by the aggregation of the elementary indices:

$$P(t) = P(t-1)^j \frac{\sum_j \text{weights}(j,p) * J(t)}{\sum_j \text{weights}(j,p) * J(t-1)}$$

where p is the item, j the elementary index.

Then the indexes are obtained by the aggregation of the items:

$$I_i(t) = I_i(t-1)^p \frac{\sum_p \text{weights}(p,i) * P(t)}{\sum_p \text{weights}(p,i) * P(t-1)}$$

where i is the index, p the item.

## Weightings

The base 2010 weightings have generally been revised in conjunction with the business federations concerned (French Building Federation, French Public Works Federation, National Interprofessional Group for Seeds and Plants, Road Equipment Trade Association), or are the result of work undertaken by the General Commissariat for Sustainable Development of the Ministry for Ecology, Sustainable Development and Energy before 2013.

Weightings (en %)

weightings of the Various indices for Construction

Various index for construction	Items						Total
	K Capital	L Labour	E Energy	M Materials	S Services	T Transport	
ING	15.9	70.0			14.1		100.0
FD					100.0		100.0
TRBT						100.0	100.0
TRTP						100.0	100.0
PMR		20.0		80.0			100.0
TSH	8.0	35.0	6.0	40.0	5.0	6.0	100.0
EV1	10.0	40.0	5.0	35.0		10.0	100.0
EV2	10.0	40.0	5.0	35.0		10.0	100.0
EV3	9.0	55.0	6.0	21.0		9.0	100.0
EV4	15.0	75.0	10.0				100.0
FG				100.0			100.0
FV				100.0			100.0
MABTGO	100.0						100.0
MABTSO	100.0						100.0
MATP	100.0						100.0

## Composition of the various indices for construction

### 1. Parks and Gardens “EV”

These indices are monthly.

- EV1: Plant-covering.  
Materials (35%) consist of the “provision of grains”, equipment consists of “agricultural equipment” (10%), transport consists of “commercial vehicles” (10%), and the source of energy is diesel oil (5%). The cost of labour (40%) is assessed via the index of the monthly index of hourly labour cost (wages and payroll taxes) in construction sector.
- EV2: Application of phytosanitary products.  
Materials consist of “Pesticides and other agrochemicals” (35%), equipment consists of “agricultural and forestry machinery” (10%), and transport consists of “commercial vehicles” (10%). The source of energy is diesel fuel (5%). The cost of labour (40%) is assessed via the monthly index of hourly labour cost (wages and payroll taxes) in construction sector.
- EV3: Work for the creation of parks and gardens.  
Materials consist of the “provision of plants” (18%) and the “provision of grains” (3%). Equipment consists of “agricultural and forestry machinery” (9 %) and transport consists of “commercial vehicles” (9%). The source of energy is diesel oil (6%). The cost of labour (55%) is assessed via the monthly index of hourly labour cost (wages and payroll taxes) in construction sector.
- EV4: Maintenance work on parks and gardens.  
Equipment consists of “Sowing and planting equipment” (15%). The source of energy is unleaded petrol with a 98-octane index (10%). The cost of labour (75%) is assessed via the monthly index of hourly labour cost (wages and payroll taxes) in construction sector.

### 2. Equipment “MABTGO”, “MABTSO” and “MATP”

These indices are monthly.

- Equipment item of building structural works “MABTGO”.  
Changes in the cost of the equipment item for the building structural work indices (BT01, BT02, BT03, BT06, BT07 and BT50) are monitored by means of the “MABTGO” index. Equipment consists equally of machinery for excavation or construction and commercial vehicles.
- Building finishing work equipment “MABTSO”.  
Changes in the cost of the equipment item for the building finishing work indices (BT indices other than BT01, BT02, BT03, BT06, BT07 and BT50) are monitored by means of the “MABTSO” index. Equipment consists of metal forming machinery and machine tools.
- Civil engineering equipment “MATP”.  
Changes in the cost of the equipment item for the civil engineering indices are monitored by means of the “MATP” index. Civil engineering equipment consists of machinery for mining, quarrying and construction (50.4%), Repair of machinery (9.6%) and rental and leasing services of construction and civil engineering machinery and equipment (40%).
- See pdf file: Note methodologique-Composition des index MABTGO, MABTSO et MATP.

### **3. Road transport item of Building indices “TRBT”**

Changes in the cost of road transport for the building indices is monitored by means of the “TRBT” index.

This index was originally produced by the General Commissariat for Sustainable Development in consultation with representatives of professionals in the Building and Civil Engineering Sector, based on a parametric formula.

Equipment consists of “motor vehicles” (35%) and new and retreated tires (5%). The source of energy is road transport diesel oil (20%). The cost of labour (40%) is assessed via the monthly index of revised hourly labour cost (wages and payroll taxes) in sector of transportation and storage.

### **4. Road transport item of Civil Engineering indices “TRTP”**

Changes in the cost of road transport for the civil engineering indices is monitored by means of the “TRTP” index.

This index consists solely of the producer cost index for “road freight transport services of raw minerals and building materials”.

### **5. Miscellaneous costs “FD”**

This item has been defined so as to represent the overall miscellaneous costs of management of a Building or Civil Engineering firm.

Materials consist of “paper stationery articles” (16.0%). Equipment consists of the “tertiary activities rent index” (21%) and computers and peripheral equipment (5%). Transport consists of transport services (14%) and Other services related to personal transport equipment (13%).

Miscellaneous costs consist of communication expenses (21%) and Restaurants, cafes, hotels (5%). The cost of labour (5%) is assessed via monthly index of revised hourly labour cost (wages and payroll taxes) in sector of professional, scientific and technical activities.

- See pdf file: Note methodologique-Composition de l'index FD.

### **6. Engineering “ING”**

The Engineering index is calculated monthly.

Equipment consists of the “cost of construction” (3%) and MIG EBIQ - Energy, intermediate goods and capital goods (12.9%). Miscellaneous costs consist of the “transport, communications and hostels” consumer price index (12.1%). The cost of labour (70%) is assessed via the monthly index of revised hourly labour cost (wages and payroll taxes) in the sector of “professional, scientific and technical activities”.

### **7. Road Marking products “PMR”**

Metallic packages account for 10 points in the “materials” item. They are estimated from uncoated cold-rolled flat products in high-grade unalloyed steel. Other components are often very specific chemical substances: calcium carbonate, titanium dioxide, ethyl acetate, acetone, petroleum resin and paints. The cost of labour is estimated from the hourly labour costs index for manufacturing industry.

This index of supplies is calculated quarterly.

## 8. Horizontal signage work “TSH”

The cost of equipment is reflected by the equipment item index for the civil engineering indices and is monitored by means of the “MATP” index. The cost of labour is estimated from the hourly labour costs index in construction. The cost of energy is assessed via the cost of non-road-transport diesel oil. Materials are represented by the PMR index (road marking products), miscellaneous costs by the “FD” item and transport by the Civil Engineering Transport index “TRTP”.

This index of services is calculated quarterly.

## 9. Provision of grains “FG”

This index is calculated based on information provided quarterly by the National Interprofessional Group for Seeds, Grains and Plants.

It represents the change in prices of a sample of seeds including tall fescue grass, red fescue, Kentucky blue grass and English ray grass.

## 10. Provision of plants “FV”

This index is calculated annually.

It represents the change in prices of a sample of large trees, roadside trees, evergreen shrubs, deciduous shrubs and conifers.

## Sources of information

1. The “wages and charges” item consists of the index of hourly labour costs in the corresponding sector, with a time lag of three months.
2. The elementary indices for the other items consist basically of the producer price indices, especially the [Producer price indices of French industry for the French market \(base 2010\) - Purchaser's price for contract escalation](#).
3. The other indices are all based on official statistics.

## Statistical units

There is no specific survey for the various indices ; they use existing public statistics, and especially the ([OPISE survey](#)), to make up the elementary indices. Conceptually, the unit observed in relation to costs is a branch, or a sub-branch, of activity in French construction companies.

## Frequency of the operation

Monthly in general, quarterly for the “Provision of grains” and “Road-marking products”, annual for the “Provision of plants” indices.

## Dissemination

The various construction indices are distributed three months after the month reviewed on the BDM website under the theme [Prices and price indices](#), under the heading “Producer price or cost indices and import price indices”, and the sub-headings “Construction” then “Producer costs - Base 2010”. They are also published in the *Journal Officiel*.

## Rules for connection between the old and the new various indices for construction

Producer cost indices for construction of October 2014, which have been published on 15th of January 2015, have shifted at same time to base 2010. Past various indices have then be stopped, but, as for any rebasing, INSEE systematically proposes a “corresponding series” in front of each “stopped series”, with following rules:

- Before rebasing, i.e. until September 2014 included, the “stopped series” is directly accessible and is authoritative;
- After rebasing, i.e. since October 2014 included, stopped series can be extended this way: the “corresponding series” has to be multiplied by the connecting coefficient, then the obtained product rounded with one decimal.

As the list of various indices for construction has changed, one point should be watched out for:

- The TR index of the previous base presents two corresponding series in base 2010: TRBT and TRTP. Normally, the nature of the structure in question and/or the type of transport (passengers or freight) makes it possible to determine the correct corresponding series to be used to extend the old series for a given contract.

As [Direction des Affaires Juridiques des ministères économiques et financiers](#), reminds it in a [question/réponse](#) (pdf file) dedicated to this rebasing of Producer cost indices for construction:

*Il n'est pas nécessaire de rédiger un avenant pour prolonger une ancienne série par une série correspondante (nouvelle) et un coefficient de raccordement publiés par l'Insee quand la série correspondante est unique : l'information du comptable suffit. En revanche, quand plusieurs séries correspondantes sont proposées, le choix de la série correspondante doit faire l'objet d'un avenant, sauf si en raison de l'objet même du marché, l'index nouveau s'impose à l'évidence et dans la mesure où le libellé de l'index (notamment son numéro de référence BTxx ou TPxx) n'est pas substantiellement modifié. Si l'objet du marché justifie l'utilisation de plus d'un index dans la nouvelle série par rapport à la série ancienne, un avenant est également nécessaire.*

See pdf file: Note methodologique-Correspondance entre anciens et nouveaux index divers de la construction.

## History

- PsdA index - Miscellaneous goods and services, Replaced by three separate items: Transport (TR), Miscellaneous costs (FD) and Energy  
[Press release of 30 April 1992-ECOC9210083B](#) (pdf, 6,063 kB).
- [Circular of 29/02/08 on the subject of the creation of the Parks and Gardens indices](#) (pdf - 77 kB).