

## Price Index for Material Inputs to Construction Industries

<b>1. Contact</b>	
<b>1.1. Contact organisation</b>	National Statistics Office of Georgia (Geostat)
<b>1.2. Contact organisation unit</b>	Price Statistics Department
<b>1.3. Contact name</b>	Giorgi Tetrauli
<b>1.4. Contact person function</b>	Head of Price Statistics Department
<b>1.5. Contact mail address</b>	30, Tshotne Dadiani Str., 0180, Tbilisi, Georgia
<b>1.6. Contact email address</b>	<a href="mailto:gtetrauli@geostat.ge">gtetrauli@geostat.ge</a>
<b>1.7. Contact phone number</b>	+995 32 236 72 10 (400)
<b>1.8. Contact fax number</b>	-

<b>2. Metadata update</b>	
<b>2.1. Metadata last certified</b>	March 7, 2024
<b>2.2. Metadata last posted</b>	March 7, 2024
<b>2.3. Metadata last update</b>	March 7, 2024

<b>3. Statistical presentation</b>	
<b>3.1. Data description</b>	
The price index for material inputs to construction industries measures average price level of the materials purchased by construction companies compared to the reference period.	
<b>3.2. Classification system</b>	
The structure of the producer price index for material inputs to construction industries follows the Statistical Classification of Products by Activity (CPA 2008).	
<b>3.3. Sector coverage</b>	
According to CPA 2008 the index includes preparation of the construction site, building of structures and also building materials used in installation of engineering equipment, which corresponds to division 41-43 of the (section F) of the Statistical Classification of Products by Activity (CPA 2008).	
<b>3.4. Statistical concepts and definitions</b>	
The following information is published: <ul style="list-style-type: none"> <li>• Price index for material inputs to construction industries compared to previous month;</li> <li>• Price index for material inputs to construction industries compared to long term base period;</li> <li>• Price index for material inputs to construction industries compared to corresponding month of previous year;</li> <li>• Price index for material inputs to construction industries, 12-month average compared the previous 12-month average.</li> </ul>	
<b>3.5. Statistical unit</b>	
The observable statistical unit are construction companies across the country.	
<b>3.6. Statistical population</b>	
For compiling the price index for material inputs to construction industries the selection of observable organizations across the country is based on the statistical data of enterprises. The selection base comprises of 1 333 organizations, of which 238 organizations are selected this year. As a result, the selected organizations cover more than 70% of the whole sample (in terms of value).	
<b>3.7. Reference area</b>	
The prices are collected on building materials bought by construction companies operating in the country (except in occupied territories).	
<b>3.8. Time coverage</b>	
Since 2008.	
<b>3.9. Base period</b>	
2010.	

<b>4. Unit of measure</b>	
Index.	

<b>5. Reference period</b>
Month.
<b>6. Institutional mandate</b>
<b>6.1. Legal acts and other agreements</b>
The Law of Georgia on Official Statistics; <a href="https://www.geostat.ge/media/56202/The-Law-of-Georgia-on-Official-Statistics.pdf">https://www.geostat.ge/media/56202/The-Law-of-Georgia-on-Official-Statistics.pdf</a> Statistical Work Programme (annual); <a href="https://www.geostat.ge/en/modules/categories/307/statistical-work-programme">https://www.geostat.ge/en/modules/categories/307/statistical-work-programme</a> Charter of the National Statistics Office of Georgia. <a href="https://www.geostat.ge/media/20845/10%2Csaqstatis-konsolidirebuli-debuleba.pdf">https://www.geostat.ge/media/20845/10%2Csaqstatis-konsolidirebuli-debuleba.pdf</a>
<b>6.2. Data sharing</b>
-
<b>7. Confidentiality</b>
<b>7.1. Confidentiality – policy</b>
<p>1. The Law of Georgia on Official Statistics:</p> <ul style="list-style-type: none"> <li>• According to the article 5 of the law Statistical confidentiality and exclusive use for statistical purposes – individual data collected or received by the producer of official statistics, relating to natural or legal persons, must be strictly confidential and used only for statistical purposes.</li> <li>• According to the article 34 (Observing Confidentiality of Statistical Data) of the law 1. Data collected, processed, and stored to produce official statistics are confidential if they enable the direct or indirect identification of a statistical unit. In addition, aggregated data are subject to statistical confidentiality: a) Aggregates composed of 1 to 3 units, when the unit is a natural or legal person if one of these units could be identified indirectly, thereby disclosing individual data about this unit. Aggregates composed of more than 3 units may be declared confidential by the Executive Director if required to ensure statistical confidentiality; b) Information declares as a state secret on the basis of the „Law of Georgia on State Secrets“. 2. Confidential data shall be used exclusively for the purposes of producing statistics in accordance with this law. 3. Statistical data about the administrative body cannot be considered confidential information, except for the information determined by the Law of Georgia „On State Secrets“. 4. Individual data obtained from publicly available sources, which are defined as public information in accordance with the legislation of Georgia, shall not be considered confidential information. 5. Confidential (individual) data may be published if there is written consent from the statistical unit regarding the publication of such data. 6. It is not allowed to disseminate and distribute confidential data or use it for non-statistical purposes.</li> <li>• According to the article 38 (Confidentiality commitments) of the law the confidential statistical data collected and processed for statistical purposes shall not be used or disseminated either for personal, academic, research or any other activities, by the employees of the producers of Official Statistics.  <a href="https://www.geostat.ge/media/56202/The-Law-of-Georgia-on-Official-Statistics.pdf">https://www.geostat.ge/media/56202/The-Law-of-Georgia-on-Official-Statistics.pdf</a></li> </ul> <p>2. Data Confidentiality Policy at Geostat  <a href="https://www.geostat.ge/media/20860/Data-Confidentiality-Policy-at-Geostat_En.pdf">https://www.geostat.ge/media/20860/Data-Confidentiality-Policy-at-Geostat_En.pdf</a></p> <p>3. Procedure for providing access to confidential data for research purposes (in Georgian)  <a href="https://www.geostat.ge/media/58983/დაცვენილობა--3.pdf">https://www.geostat.ge/media/58983/დაცვენილობა--3.pdf</a></p> <p>4. The Law of Georgia on Personal Data Protection  <a href="https://matsne.gov.ge/en/document/view/1561437?publication=9">https://matsne.gov.ge/en/document/view/1561437?publication=9</a></p>
<b>7.2. Confidentiality – data treatment</b>
<ul style="list-style-type: none"> <li>• Confidentiality guidelines.</li> <li>• Written undertakings by an employee of Geostat on ensuring confidentiality of gained/collected data as a result of official duties.</li> </ul>
<b>8. Release policy</b>
<b>8.1. Release calendar</b>
Data dissemination dates are defined by the calendar developed on the basis of the Statistical Work Programme, which is published on the website of Geostat and is publicly available.
<b>8.2. Release calendar access</b>

<a href="https://www.geostat.ge/en/calendar">https://www.geostat.ge/en/calendar</a>
<b>8.3. User access</b>
All users have the equal access to the statistical data simultaneously.
<b>9. Frequency of dissemination</b>
Monthly.
<b>10. Accessibility and clarity</b>
<b>10.1. News release</b>
No press release.
<b>10.2. Publications</b>
-
<b>10.3. On-line database</b>
Data are available to all users on the Geostat's website: <a href="https://www.geostat.ge/en/modules/categories/32/price-index-for-material-inputs-to-construction-industries">https://www.geostat.ge/en/modules/categories/32/price-index-for-material-inputs-to-construction-industries</a> Also available in PC-Axis format: <a href="https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/?rxid=190da113-9324-45c5-8228-160074560a52">https://pc-axis.geostat.ge/PXweb/pxweb/en/Database/?rxid=190da113-9324-45c5-8228-160074560a52</a>
<b>10.4. Micro-data access</b>
-
<b>10.5. Other</b>
-
<b>10.6. Documentation on methodology</b>
The price index for material inputs to construction industries is available on Geostat's website: <a href="https://www.geostat.ge/en/modules/categories/122/methodologia-price-statistics">https://www.geostat.ge/en/modules/categories/122/methodologia-price-statistics</a>
<b>10.7. Quality documentation</b>
-
<b>11. Quality management</b>
<b>11.1. Quality assurance</b>
To ensure the quality of the statistical processes and products Geostat follows Chapter 10 – Quality of official statistics – of the Law of Georgia on Official Statistics, as well as the European Statistics Code of Practice, the UN Fundamental Principles of Official Statistics and Quality Assurance Framework of the European Statistical System (ESS QAF).
<b>11.2. Quality assessment</b>
Methodology and Quality Management Division of Geostat, along with the sectoral departments, is responsible for the quality of the produced statistical products and processes. The Division carries out quality audit, self-assessment of statistical processes and assesses the risks for the quality of statistical processes and products. Geostat has developed policy documents, guidelines and standard routine descriptions. These documents ensure the standardization of statistical processes and products and the establishment of a unified quality assurance system. Quality policy is available on the following link: <a href="https://www.geostat.ge/media/44380/QP_Geostat_EN.pdf">https://www.geostat.ge/media/44380/QP_Geostat_EN.pdf</a>
<b>12. Relevance</b>
<b>12.1. User needs</b>
The price index for material inputs to construction industries is used for the following purposes: <ul style="list-style-type: none"> <li>• The index has an important role in deflating different economic indicators;</li> <li>• The index is used for indexation of contracts in both public and private sectors;</li> <li>• The index is an analytical instrument for researchers and representatives of business sector.</li> </ul> The main users of the index are: public agencies, international organizations, researchers and students, media representatives and other stakeholders.
<b>12.2. User satisfaction</b>
In 2021 user satisfaction survey was conducted, the target of the survey was to analyze the assessment of quality of statistical data by users and explore ways to improve user services. The survey report is available on the website of Geostat (in Georgian):

<a href="https://www.geostat.ge/ka/page/customer-service">https://www.geostat.ge/ka/page/customer-service</a>
<b>12.3. Completeness</b>
Data are consistent to the international standards.
<b>13. Accuracy and reliability</b>
<b>13.1. Overall accuracy</b>
Accuracy of data is ensured by compliance with international methodology of research and calculation methods.
<b>13.2. Sampling error</b>
There is no assessment of the sampling error of the index. The sample size made from the given population is optimal, given the research objectives and limited resources.
<b>13.3. Non-sampling error</b>
Non-sampling errors in the price index for material inputs to construction industries are not assessed. To minimize this kind of errors, the index calculation step involves several levels of control.
<b>14. Timeliness and punctuality</b>
<b>14.1. Timeliness</b>
Data are published on the 19-22nd of the following month of the reporting month.
<b>14.2. Punctuality</b>
The data is published according to the date specified in the statistical work program. There has not been any violation of publication dates.
<b>15. Coherence and comparability</b>
<b>15.1. Comparability – geographical</b>
The prices are collected in different regions of the country (depending on the company locations) and practically cover all regions of Georgia. The principles of price collection and index calculation are based on international methodology and are fully consistent with it. In addition, prices are collected using the general methodology, which insures data comparability within the country.
<b>15.2. Comparability – over time</b>
The index is comparable for the whole period.
<b>15.3. Coherence – cross domain</b>
Data are coherent.
<b>15.4. Coherence – internal</b>
Indices are coherent with the initial data – indices on the aggregate level are compiled using the lowest level indices through a clearly defined procedure.
<b>16. Cost and burden</b>
In 2024 annual budget of statistical surveys of prices (consumer, producer and import prices) amounted to 282510 GEL.
<b>17. Data revision</b>
<b>17.1. Data revision – policy</b>
Statistical data revision policy is available on the website of Geostat: <a href="https://www.geostat.ge/media/59824/Data-Revision-Policy-and-Error-Correction-at-Geostat_Eng.pdf">https://www.geostat.ge/media/59824/Data-Revision-Policy-and-Error-Correction-at-Geostat_Eng.pdf</a>
<b>17.2. Data revision – practice</b>
Planned revision of data is not carried out. An Unplanned revision (to clarify data) was not carried out in 2023.
<b>18. Statistical processing</b>
<b>18.1. Source data</b>
The primary data for calculating the price index for material inputs to construction industries is the price of materials used for preparation of the construction site, building of structures and also for installation of engineering equipment, The observable price of material is the value of building materials bought by the construction companies for the preparation of the construction site, building of the structure and for installation of engineering equipment in the specified period.

The observable construction organizations are selected based on the statistical data of enterprises. All the large organizations that are relevant to the Divisions 41, 42 and 43 of the construction section (section F) in CPA 2008, as well as a sample of small and medium-size organizations are selected.

After the selection of organizations, they are surveyed in order to determine the detailed characteristics of materials. For this purpose, additional electronic questionnaires are sent to construction organizations that are selected at the previous stage. They are required to indicate the top four (less than four in case of absence) material inputs to construction purchased during the previous year, as well as their shares in the total value of all purchased materials. Furthermore, the total amount spent on materials is also indicated.

During the selection process of materials detailed specifications are determined. Following the specifications is the most important part of price registration, since the monthly recorded difference between prices should be caused by the pure price change of a material, rather than by changes in their characteristics. Relying on the obtained survey data the prices for sampled materials are recorded monthly across the year.

For the purpose of price registration for material inputs to construction industries, the sample of organizations is updated annually. The basis for the selection is the data of enterprise statistics. In case the company stops functioning in the reporting period, substitution does not occur until the sample update.

In 2024, 641 price data points will be collected monthly from 208 organizations.

### **18.2. Frequency of data collection**

Price collection fieldworks are conducted monthly, on the same date of the following month of the reporting period, from the 1<sup>st</sup> to the 8<sup>th</sup> day.

### **18.3. Data collection**

During the price collection fieldworks, the representative of the organization fills the questionnaire published on Geostat website. The price collection fieldworks are conducted from the 1<sup>st</sup> to the 8<sup>th</sup> of the month following the reporting period. The questionnaire contains information on characteristics of the selected material, measurement unit, prices in the reporting and previous months and, in case of a price change, a comment for the reason of this change. The base price for material is registered in the beginning of the reporting year and remains unchanged during the whole year. Electronic questionnaire is filled in online. The organizations fill the questionnaire independently or with the help of price enumerator. Online questionnaires are on the following link:

<http://database.geostat.ge/portal/ent/index.php>

It is possible to see the questionnaires on Geostat's website, on the following link:

<https://www.geostat.ge/en/modules/categories/557/questionnaires-price-statistics>

### **18.4. Data validation**

The validation procedure is conducted in two stages:

**On the first stage** validation takes place simultaneously with the price registration fieldworks. In case of price change, the person responsible for filling the questionnaire is required to define by the comment the reason of the change. After the data are sent to the central office, a responsible employee conducts analysis and logical control of the data.

**On the second stage** accuracy of the price, which are extremely deviated from the price of the previous month, is checked after calculating the overall index.

### **18.5. Data compilation**

During the calculation of the index, if in the reporting period no price is recorded for one of the materials, imputation method is used. The price is imputed based on the upper level group index.

Individual material weights, which are included in the price index for material inputs to construction industries, represent the share of purchased material in the total value of the purchased materials. For period t the weights from t-2 period are used. Weights are updated annually and are based on expenditures for material inputs purchased by selected companies in t-2 period. During the annual weight update the list of materials in the index might also change. An index calculated for a particular building material purchased by a construction organization represents the elementary level index for material inputs to construction industries. The long term index for the whole section compared to the price reference period is calculated using the Laspeyres-type formula. The same formula is used for calculating all upper level indices. For example, the sub-section index is calculated by weighting the long term indices of the materials, where the sum of the weights of the indices is 1. Short term index compared to the previous month is obtained from the ratio of long term indices in the reporting and previous months, calculated compared to the price reference period. During annual update of construction organizations and materials in December, prices are collected for materials both in the old and new samples. This enables chain-linking of indices, calculated for two different samples. Through chain-linking it is possible to calculate indices with a long term reference period, regardless of the changes in weights. If in the reporting month a company stopped purchasing the observed material, but purchases

another similar material, it is possible to replace the old material with the new one. If the characteristics of the observed material have changed, but the criteria for comparison are not violated, it is allowed to compare the old and new materials. In this case, it is important that the price change caused by quality change is not reflected in the index.

**18.6. Adjustment**

Not applied.

**19. Comment**

-