



مركز الإحصاء  
STATISTICS CENTRE

# Economy Statistics | 2021

## Construction Cost Index

Fourth Quarter 2021

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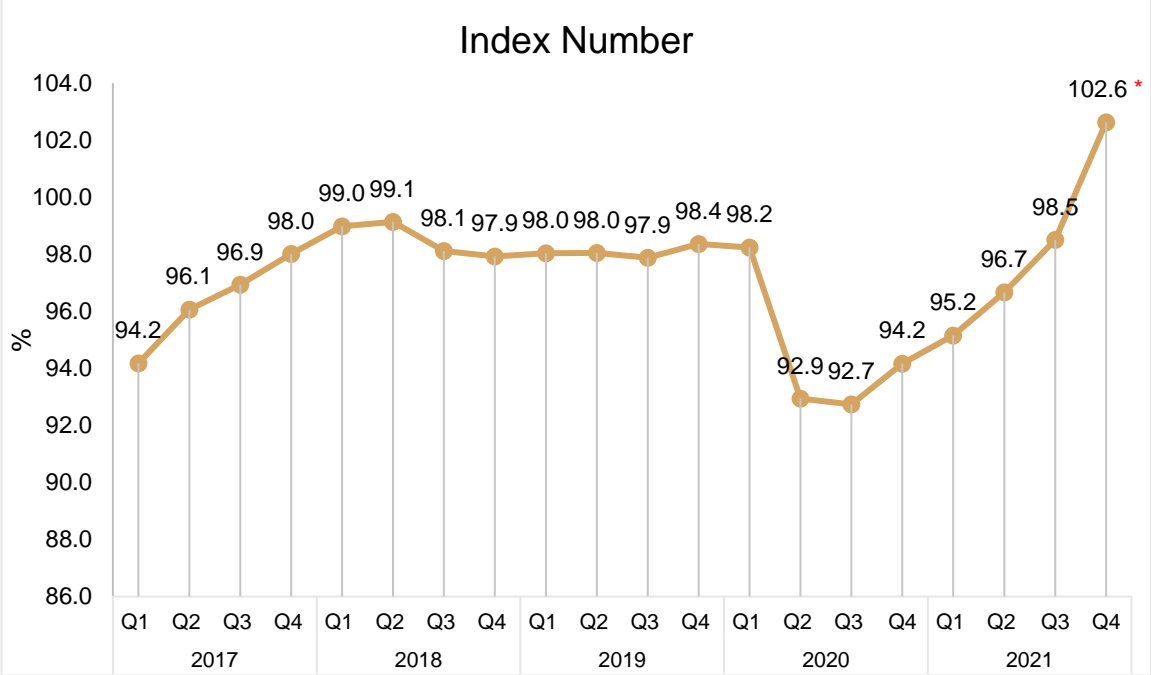
## Introduction

The Construction Cost Index (CCI) is an important statistical indicator for the purposes of planning and research in various disciplines. Statistics centers and agencies in different countries consistently compile these indices, based on the prices of a group of building materials and construction services commonly used during the construction process. The figures thus calculated constitute a time series that provides a measure of changes in the cost of construction over time.

It is worth mentioning that this publication covers only the relative importance of each one of the main construction groups for towers. Further development of the index will add the rest of the construction sectors, according to the construction classification used in the Emirate of Abu Dhabi.

This indicator is issued on a quarterly basis. Work was carried out on this project from 2013 in cooperation with the specialized authorities in this field from the Contractors Association, the Municipality of Abu Dhabi City and the Department of Economic Development, to provide the weights and list of materials and services. The classifications used for the contractors were approved by the Department of Economic Development. The methodology used in calculating the CCI is consistent with international best practices in this field and is aligned with the nature of the Emirate of Abu Dhabi.

**Figure 1: Construction Cost Index, quarterly for 2017-2021 (2013=100)**



Source: Statistics Centre - Abu Dhabi

\*Preliminary data

**Table 1: Major construction groups by weights, relative change and contribution for the fourth quarter of 2021\* compared with the fourth quarter of 2020**

Main construction groups	Weight	Relative change%	Contribution %
Construction materials	13.0	4.9	7.2
Finishing materials	26.0	7.6	23.3
Electrical works materials	8.0	6.6	6.5
Mechanical works - plumbing and drainage materials	4.0	10.3	5.0
Mechanical works - fire fighting	3.0	0.0	0.0
Mechanical works - A/C	7.0	13.3	12.1
Equipment	2.0	15.2	5.0
Manpower	29.5	14.1	36.8
Services	4.5	7.4	4.0
Finances and Bonds	3.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>9.0</b>	<b>100.0</b>

Source: Statistics Centre - Abu Dhabi

\*Preliminary data

**Table 2: Major Construction groups by weight, relative change for the fourth quarter of 2021 compared with the third quarter of 2021 %**

Main construction groups	Weight	Q3	Q4 *	Relative change%
Construction materials	13.0	98.4	101.2	2.9
Finishing materials	26.0	107.6	107.2	-0.4
Electrical works materials	8.0	111.1	111.7	0.5
Mechanical works – plumbing and drainage materials	4.0	109.7	113.6	3.6
Mechanical works - fire fighting	3.0	105.3	105.3	0.0
Mechanical works - A/C	7.0	114.6	124.2	8.4
Equipment	2.0	142.5	160.2	12.4
Manpower	29.5	77.1	85.4	10.7
Services	4.5	103.5	108.3	4.7
Finances and bonds	3.0	100.0	100.0	0.0
<b>Total</b>	<b>100.0</b>	<b>98.5</b>	<b>102.6</b>	<b>4.2</b>

Source: Statistics Centre - Abu Dhabi

\*Preliminary data

## Explanatory Notes

### Importance

The CCI is an important economic indicator that provides input into planning and research in various urban and economic fields. The Construction Cost Index provides quarterly estimates of the change in the list price of building materials and services involved in construction projects in Abu Dhabi city. The importance of this indicator lies in the need for decision makers and other users such as real estate developers to monitor the prices of building materials.

### Objectives

The CCI is an analytical tool for identifying price trends and forecasting any price changes in building materials and related services by decision makers and policy makers.

- Internal use in the SCAD for calculating other statistical indicators, short term economic indicators and GDP at constant prices.
- It is used by companies and commercial establishments specialized in the construction and building materials sector.

### Glossary

**Price:** Price is defined as the value of one unit of a material or service; this means the market value of the material or service. This value is established through the exchange of materials and services in the markets and is equivalent to the benefit achieved by the user.

**Average Price:** The sum of the commodity/service prices collected from more than one source and is divided by the number of sources for that commodity.

**Quarterly relative price change:** The percentage of increase or decrease in the average price of the current quarter compared to the average price of the previous quarter or the same quarter of the previous year.

**Construction Cost Index (CCI):** The CCI is an index that measures the rate of change in construction costs during two time periods, a base period and a comparison period for a fixed basket of certain building materials and construction services selected from the construction projects breakdown.

**Towers - medium quality:** Building construction of 15-20 stories commonly used in the Emirate of Abu Dhabi composed of medium-quality materials.

**Weight:** Weight is the relative importance of a material or service within the CCI basket compared with all other materials or services in the same basket.

**Outlet:** Outlets where building materials or services are sold such as building materials companies and factories.

### **Periods of collection**

Periods of collection are the selected periods to repeat the survey of all groups in each basket. The period might be weekly, semi-monthly, monthly or quarterly.

### **Coverage**

The CCI is considered as representative of the average prices of the list of goods and services in the Emirate of Abu Dhabi

### **Periodicity**

The CCI publication is issued quarterly.

### **Classifications**

A local classification approved by the Department of Economic Development, the Contractors Association and the Abu Dhabi Municipality was used in preparing the CCI.

### **Data source**

Data are collected from companies, factories, and shops selling building materials and construction services on a monthly / quarterly basis in the Emirate of Abu Dhabi.

### **Questionnaires**

Data is collected from the field through paper forms designed for this purpose, as well as via email.

### **Sample design**

The proportional sample method is used.

### **Data collection**

The price data for the construction cost index list is collected by communicating with the source by email and field visits.

### **Mechanism of calculating and Data Auditing**

The Jevons method is used to calculate the Construction Cost Index through the following steps:

- The geometric mean of the prices of goods/ services of subgroups is calculated for the base year, the geometric mean of the prices of goods/ services of the subgroups for the comparison period is calculated, the relative prices calculated by dividing the geometric mean of the prices of the comparison period by the geometric mean of the prices of the base year.



- Then the result is multiplied by the base year weight to obtain the new weight. Finally, the new weight is divided by the base year weight and multiplied by 100%

### **Indicators calculation**

- CCI, compared to the previous quarter, for medium quality tower projects in the Emirate of Abu Dhabi.
- CCI, compared to the same quarter of the previous year, for medium quality tower projects in the Emirate of Abu Dhabi.
- Annual CCI and its comparison with the previous year for medium quality tower projects in the Emirate of Abu Dhabi.

### **Timelines**

The CCI publication is released within 75 days after the end of the reference quarter.

### **Improvement Plans**

- Developing a CCI to classify other projects such as infrastructure, roads and bridges, and villas
- Updating the index basket weights and updating the base year.
- Automate index calculation.
- Update data according to the classifications approved by the Statistics Centre - Abu Dhabi

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