

## NOTES ON METHODOLOGY

### Introduction

Industrial producer price indices on the domestic, non-domestic and total market are presented on an interannual chain and on a month-on-month basis as well as on the fixed base year 2021 = 100 due to the harmonisation with the Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 legal acts in the field of business statistics.

**Concepts, definitions and terminology** are completely harmonised in this First Release with those used and regulated by the EU. Therefore, the term "industrial producers' price index" has been changed to "industrial producer price index".

According to the EU terminology, the term "industrial producer price index" is also known as the "industrial output index" and the term "industrial producer prices" should be considered its synonym. If not specified, the term "industrial producer price index" denotes the "total industrial producer price index" (on the domestic and the non-domestic market).

### The concept of industrial producer prices and their purpose

**Total industrial producer price index** is composed of two sub-indices, that is, the industrial producer price index on the domestic market and the industrial producer price index on the non-domestic market. The combination of sub-indices for these two markets provides the changes in given products/services, while their aggregation provides the divisions of products and activities.

**Industrial producer price index** measures the changes of producer prices of manufactured goods produced in the Republic of Croatia and sold by producers on the domestic (Croatian) and/or the non-domestic (non-Croatian) market.

**Industrial producer price index on the domestic market** measures the changes of producer prices of manufactured goods that are produced and sold by producers on the domestic (Croatian) market.

**Industrial producer price index on the non-domestic market**, further subdivided into the euro area and the non-euro area, measures the changes of producer prices of manufactured goods that are sold by producers on foreign (non-Croatian) market.

The industrial producer price index is an important short-term indicator of the business cycle that shows monthly price changes in the total industrial sector (the NKD 2007 sections B, C, D and E – only division 36) on the domestic and the non-domestic market and further subdivided into the euro area and the non-euro area. According to the EU concept, it is an important business indicator that permits monthly monitoring of prices at different stages of the manufacturing process. It is also used for distinguishing effective growth of an activity due to price changes and provides information to the business community on particular markets of their interest. It can also indicate inflationary changes before they reach consumers.

### Presentation of the industrial producer price index

All indices are presented in gross (unadjusted) form. They were calculated on the basis of data collected through the revised Monthly Survey on Industrial Producer Prices (IND-3/KPS/M form) for 2024.

### Legal and methodological framework

The Monthly Survey on Industrial Producer Prices (IND-3/KPS/M form) in 2024 is carried out directly by the Croatian Bureau of Statistics on the basis of the Official Statistics Act (NN, No. 25/20). The internet application (CAWI method) is used in data collection. The reporting units directly access this application and enter their data on the basis of the instructions given.

The concepts and definitions used in the IND-3/KPS/M Survey are harmonised with the EU concepts and definitions, especially with the Regulation (EU) 2019/2152 of the European Parliament and of the Council and the Commission Implementing Regulation (EU) 2020/1197.

### Scope and coverage

The reporting units included in the IND-3/KPS/M Survey are selected enterprises (legal entities and tradesmen) that produce selected products as defined in the Nomenclature of Industrial Products – NIP 2022, classified in the NKD 2007 (NN, Nos 58/07 and 72/07) activity sections B Mining and quarrying, C Manufacturing, D Electricity, gas, steam and air conditioning supply and E Water supply; sewerage, waste management and remediation activities (only division 36).

In order to collect data on industrial producer prices on the domestic and the non-domestic market, the IND-3/KPS/M Survey for 2024 covers a representative sample of industrial products at the level of covered activity classes of the NKD 2007, that is, all products that generated sales **exceeding 3 million euro on the domestic market and 2 million euro on the non-domestic market** according to the results of the PRODCOM Survey on Industrial Production (IND-21/PRODCOM/G form) for 2022. The selection of enterprises has been done according to their share in the production of selected products, separately for the domestic and the non-domestic market.

For monitoring the **industrial producer prices on the domestic market**, the sample for the IND-3/KPS/M Survey for 2024 covers 1 688 item prices within the selected NIP 2022 products in 1 028 enterprises (legal entities and tradesmen), while for monitoring **industrial producer prices on the non-domestic market**, it covers 1 084 item prices within the selected NIP 2022 products in 660 enterprises (legal entities and tradesmen).

### Reference point

All industrial producer prices are recorded as transaction prices in effect on the 15th day of the month indicated. The prices at which a producer sells products at the domestic and/or the non-domestic market in the largest quantities to known buyer are recorded.

Completed IND-3/KPS/M forms are delivered directly on the website of the Croatian Bureau of Statistics in the period from 16th to 26th of the current reporting month (<https://podaci.dzs.hr/en/>).

### Definitions

Producer price indices on the domestic and the non-domestic market require a separate compilation according to the destination of a product in order to obtain the producer price indices on the domestic and the non-domestic market.

The residency of the third party that has ordered or purchased the product determines the destination. The domestic market is defined when both the third party/buyer and the reporting unit are residents of the Republic of Croatia, while the non-domestic market is defined when the third party/buyer is not a resident of the Republic of Croatia.

**Industrial producer prices on the domestic market** are either the prices at which a producer sells products on the domestic market in the largest quantities, loaded free on a rail (truck) at a factory gate at the location of the producer or the price charged to another company by the producer. The selling price is increased for the amount of the compensation obtained by the seller and deducted for the amount of the discount and rebate as well as the value added tax and excises.

**Industrial producer prices on the non-domestic market** are prices at which a producer sells products on the non-domestic market in the largest quantities at the national border, FOB (free on board). The selling price is increased for the amount of the compensation obtained by the seller and deducted for the amount of the discount and rebate as well as the value added tax and excises.

### Reporting of data for the non-domestic market according to the euro area criterion

The territory of the European Union (EU-27) comprises the national territories of 27 EU Member States, and the data for producer prices of items sold on the **non-domestic market** are reported for the European Union market according to the criterion of the national markets of the Member States using the euro as currency (from the euro area) and those Member States not using the euro as currency (from the non-euro area). For the reporting of data in 2024, the following country composition of the euro area applies:

From the euro area (EA-19) – refers to the territories of 19 EU Member States that have adopted a common currency (euro), i.e. Austria, Belgium, Cyprus, Estonia, Finland, France, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Germany, Portugal, Slovakia, Slovenia and Spain.

From the non-euro area (EU-7) – refers to the territory of the other seven EU Member States that have not yet adopted a common currency (euro), i.e. to Bulgaria, the Czech Republic, Denmark, Hungary, Poland, Romania and Sweden, and to other non-EU states.

### Calculation method

Total industrial producer price index is composed of two sub-indices, that is, the industrial producer price index on the domestic market and the industrial producer price index on the non-domestic market.

Industrial producer price indices on the domestic market and the non-domestic market are calculated according to the Laspeyres formula for different levels of the NKD 2007.

Individual indices for each representative product are calculated from data on prices by dividing prices of the current period by prices of the base period (December of the previous year).

Aggregate indices, that is, indices of groups, divisions and sections of the NKD 2007. as well as the total industry index are calculated by a weighted arithmetic mean from individual indices according to the modified Laspeyres formula:

$$I = \frac{\sum \frac{P_n}{P_o} \times W_o}{\sum W_o} \times 100$$

Whereby:

I is an index of a group, division, section, subsection and the total index

P<sub>n</sub> is a price in the current period (month)

P<sub>o</sub> is a price in the base period

W<sub>o</sub> is the relative sale structure in the base period.

### Weights

The weighting system for 2024 reference year is based on the value of products sold from the PRODCOM Survey on Industrial Production (IND-21/PRODCOM/G form) for 2022. The weighting system is changed at the beginning of every reference year in relation to changes in prices.

### Data publishing

The total industrial producer price indices, both on the domestic and the non-domestic market, are published for the total industry according to the NKD 2007 sections and divisions and according to MIGs 2009. aggregates (end use of products) grouped by the NKD 2007 activity groups and divisions. The total industrial producer price indices on the non-domestic market, subdivided into the euro area and the non-euro area, are published for the total industry according to the NKD 2007 and according to the MIGs 2009 aggregates, on the fixed base year 2021 = 100, in the STS database <https://sts baza.dzs.hr/en>.

AI Intermediate goods: the NKD 2007. divisions and groups: 07 (excl. 07.21) – 09, 10.6, 10.9, 13.1 – 13.3, 16, 17, 20.1 – 20.3, 20.5, 20.6, 22 – 24, 25.5 – 25.7, 25.9, 26.1, 26.8, 27.1 – 27.4 and 27.9

AE Energy: the NKD 2007. divisions: 05, 06, 19 and 35 (excluding 35.3)

BB Capital goods: the NKD 2007. divisions and groups: 25.1 – 25.4, 26.2, 26.3, 26.5, 26.6, 28, 29, 30.1 – 30.4, 32.5 and 33

CD Consumer durables: the NKD 2007. divisions and groups: 26.4, 26.7, 27.5, 30.9, 31, 32.1 and 32.2

CN Consumer non-durables: the NKD 2007. divisions and groups: 10.1 – 10.5, 10.7, 10.8, 11, 12, 13.9, 14, 15, 18, 20.4, 21, 32.3, 32.4 and 32.9.