

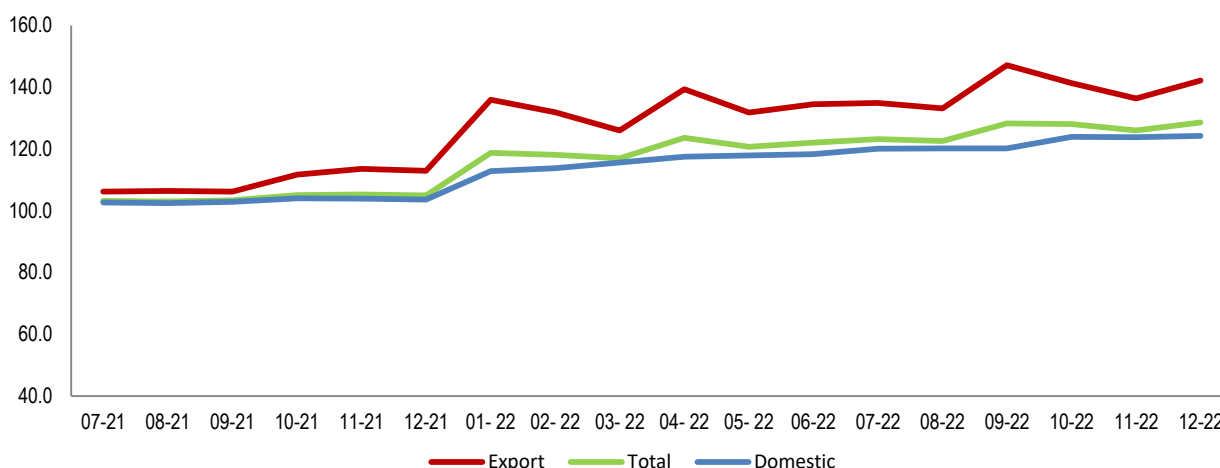
# Producer price Index

## Fourth quarter, 2022

**Tirana, on 06 March 2022:** In the fourth quarter 2022, Producer Price Index reached 127.6 compared to 2020. Compared to the fourth quarter of 2021, the Producer Price Index increased by 21.4 %, a year ago this change was 5.6 %.

Producer Price Index in the fourth quarter 2021 increased by 2.3 % compared with third quarter 2022.

**Fig.1 Producer Price Index**



**Annual change:** Compared to the fourth quarter of 2021, the largest price increase of 36.7 % is observed in the "Electricity, gas, steam and air-conditioned" section, followed by the "Mining and quarrying" section with 31.0 %. The Index of Production Prices in the "Manufacturing Industry" section has increased by 18.2 %. Within this section, the largest increase in prices is observed in the activity "Manufacturing of non-metallic mineral products" by 36.5 %, followed by the activities "Manufacturing of fabricated metal products, except machinery and equipment" by 27.5 %, "Manufacturing of chemicals and chemical products" with 26.5 %, "Manufacture of food products" with 24.3 %, etc. On the other hand, the biggest decrease in prices is observed in the activity "Manufacture of transport vehicles, trailers and semi-trailers" with 4.4 %, followed by the activity "Manufacture of optics, electronics and computer products" with 0.1 %.

**The Index of Production Prices of products for the domestic market:** Compared to the fourth quarter of 2021, the index increased by 19.4 %. The biggest increase in prices is observed in the section "Mining and quarrying" with 28.7%, followed by the section "Manufacturing" with 25.5 %, the section "Electricity, gas, steam and air conditioning" with 14.1 % and the section "Water supply, waste treatment and management activities" with 0.8 %.

**Production Price Index of products for export:** Compared to the fourth quarter of 2021, the index recorded an increase of 24.2%. The largest increase in prices was recorded in the "Electricity, gas, steam and air conditioning" section by 79.6 %, followed by the " Mining and quarrying " section with 33.3 %, the "Water supply, waste treatment and management activities, waste" section" with 27.1 % and the "Manufacturing Industry" section with 10.5 %.

**Quarterly change:** Compared to the third quarter of 2022, the largest increase of 4.4 % is observed in the "Mining and quarrying" section, followed by the "Manufacturing" section with 2.9 %. Within this section, the largest increase in prices is observed in the activities "Printing and regrouping of recorded media" with 17.2 %, "Production of electrical equipment" with 6.7 %, etc. The section "Water supply, waste treatment and management activities, and waste" recorded an increase of 0.4 % compared to the third quarter of 2022. The Production Price Index, in the section "Electricity, gas, steam and air conditioning" has decreased by 0.2 %.

**Index of Production Prices of products for the domestic market:** Compared to the third quarter of 2022, the index increased by 3.2 %. The biggest increase is observed in the "Mining and quarrying" section with 6.9 %.

**The Index of Production Prices of products for export:** Compared to the previous quarter, the index increased by 1.1 %. The biggest increase of 3.1 % is observed in the "Mining and quarrying" section.

Tab. 1 Producer Price Index

2020=100

NACE	Description	Weights %	10-22	11-22	12-22	IV-22	IV-22 /III-22	IV-22/IV-21
	<b>Total</b>	<b>100.0</b>	<b>128.1</b>	<b>126.0</b>	<b>128.6</b>	<b>127.6</b>	<b>2.3</b>	<b>21.4</b>
<b>B</b>	<b>Mining and quarrying</b>	<b>10.8</b>	<b>146.4</b>	<b>145.8</b>	<b>159.1</b>	<b>150.4</b>	<b>4.4</b>	<b>31.0</b>
06	Extraction of crude petroleum and natural gas; auxiliary services	3.7	165.1	161.8	202.5	176.5	0.9	34.6
07	Mining of metal ores	6.2	150.1	150.8	151.9	150.9	6.9	27.1
08	Other mining and quarrying	0.9	124.6	124.5	124.7	124.6	3.7	20.2
<b>C</b>	<b>Manufacturing</b>	<b>61.9</b>	<b>122.9</b>	<b>123.0</b>	<b>123.3</b>	<b>123.0</b>	<b>2.9</b>	<b>18.2</b>
10	Manufacture of food products	7.9	132.5	132.7	135.1	133.4	6.6	24.3
11	Manufacture of beverages	1.6	117.1	119.0	120.6	118.9	2.3	15.9
12	Manufacture of tobacco products	0.1	99.9	99.9	99.9	99.9	0.0	0.0
13	Manufacture of textiles	0.7	102.4	102.6	102.4	102.5	-0.7	1.5
14	Manufacture of dressing: wearing apparel	7.6	106.2	106.4	106.3	106.3	0.3	5.0
15	Manufacture of leathers and leather products	6.3	108.3	108.5	108.2	108.3	-0.1	7.4
16	Manufacture of woods and products of wood and oak, except furniture; Manufacture of articles of straw and reed	0.9	126.5	126.7	126.7	126.6	3.5	23.6
17	Manufacture of papers and paper products	0.9	114.5	114.8	115.4	114.9	2.9	14.1
18	Paper printing and regrouping of recorded media	1.7	122.3	122.3	123.1	122.5	17.2	23.7
19	Manufacture of coke and petroleum products refinery	0.7	128.7	128.7	122.6	126.6	-2.4	15.8
20	Manufacture of chemicals and chemical products	1.0	132.5	132.5	134.4	133.1	3.2	26.5
21	Manufacture of pharmaceutical products and pharmaceutical preparations	0.9	123.4	123.4	123.4	123.4	0.0	23.3
22	Manufacture of rubbers and plastic products	1.0	123.0	123.1	123.2	123.1	0.8	20.5
23	Manufacture of non-metallic mineral products	6.8	142.2	141.8	141.8	141.9	6.2	36.5
24	Metallurgy	8.5	126.8	126.8	126.9	126.8	-0.1	21.6
25	Manufacture of fabricated metal products. except machinery and equipment	4.4	132.9	133.3	133.3	133.2	3.5	27.5
26	Manufacture of optics, electronics and computer products	0.4	97.9	97.9	101.7	99.2	-0.6	-0.1
27	Manufacture of electrical equipment	1.3	103.2	103.2	101.8	102.7	6.7	4.2
28	Manufacture of machinery and equipment	0.6	102.6	102.6	102.5	102.6	0.4	2.6
29	Manufacture of transport vehicles, trailers and semi-trailers	1.0	95.0	95.0	95.0	95.0	-0.5	-4.4
30	Other transport equipment	0.1	126.0	126.0	126.0	126.0	3.8	20.5
31	Manufacture of furniture	7.1	117.3	117.4	117.5	117.4	2.7	15.3
32	Other Industries	0.2	104.2	104.2	103.9	104.1	-0.4	4.8
33	Repair and installation of machinery and equipment	0.1	106.6	106.6	106.6	106.6	2.1	4.2
<b>D</b>	<b>Electricity, gas, steam and air conditioning</b>	<b>17.5</b>	<b>148.0</b>	<b>136.3</b>	<b>142.1</b>	<b>142.2</b>	<b>-0.2</b>	<b>36.7</b>
35	Electricity, gas, steam and air conditioning	17.5	148.0	136.3	142.1	142.2	-0.2	36.7
<b>E</b>	<b>Water supply, treatment activities and waste management</b>	<b>9.7</b>	<b>103.7</b>	<b>103.7</b>	<b>103.8</b>	<b>103.7</b>	<b>0.4</b>	<b>2.8</b>
36	Water supply, treatment activities and waste management	8.5	100.6	100.6	100.6	100.6	0.0	0.1
37	Sewage removal and treatment services	0.0	100.0	100.0	100.0	100.0	0.0	0.0
38	Activities of collection, treatment and disposal of waste, materials recovery	1.2	128.6	128.8	129.4	128.9	2.6	21.5

Tab. 2 Producer Price Index for domestic market

2020=100

NACE	Description	Weights %	10-22	11-22	12-22	IV-22	IV-22 /III-22	IV-22/IV-21
	<b>Total</b>	<b>100.0</b>	<b>123.9</b>	<b>123.9</b>	<b>124.3</b>	<b>124.0</b>	<b>3.2</b>	<b>19.4</b>
<b>B</b>	<b>Mining and quarrying</b>	<b>6.9</b>	<b>145.6</b>	<b>143.5</b>	<b>144.7</b>	<b>144.6</b>	<b>6.9</b>	<b>28.7</b>
06	Extraction of crude petroleum and natural gas; auxiliary services	1.5	169.0	154.9	154.9	159.6	6.3	24.6
07	Mining of metal ores	4.2	151.1	152.4	154.2	152.6	8.3	30.6
08	Other mining and quarrying	1.3	123.2	123.2	123.5	123.3	2.5	18.9
<b>C</b>	<b>Manufacturing</b>	<b>57.7</b>	<b>131.0</b>	<b>131.1</b>	<b>131.8</b>	<b>131.3</b>	<b>4.9</b>	<b>25.5</b>
10	Manufacture of food products	9.3	138.2	138.5	142.0	139.6	8.4	29.5
11	Manufacture of beverages	2.5	116.0	118.2	120.1	118.1	2.7	15.1
12	Manufacture of tobacco products	0.1	100.0	100.0	100.0	100.0	0.0	0.0
13	Manufacture of textile	0.1	120.0	122.0	120.7	120.9	1.7	15.3
14	Manufacture of dressing; wearing apparel	1.4	105.4	105.4	105.3	105.3	0.3	4.5
15	Manufacture of leathers and leather products	0.6	115.9	115.9	110.7	114.2	-1.3	12.2
16	Manufacture of woods and products of wood and oak, except furniture; Manufacture of articles of straw and reed	0.9	130.1	130.2	130.2	130.2	0.0	26.1
17	Manufacture of papers and paper products	0.3	118.4	118.4	118.4	118.4	0.0	12.1
18	Paper printing and regrouping of recorded media	3.1	122.3	122.3	123.1	122.5	17.2	23.7
19	Manufacture of coke and petroleum products refinery	0.1	152.7	152.7	152.7	152.7	0.4	41.5
20	Manufacture of chemicals and chemical products	1.0	138.3	138.3	138.7	138.4	1.7	30.6
21	Manufacture of pharmaceutical products and pharmaceutical preparations	1.5	125.0	125.0	125.0	125.0	0.0	25.0
22	Manufacture of rubbers and plastic products	1.2	128.5	128.5	128.6	128.5	1.4	23.4
23	Manufacture of non-metallic mineral products	10.1	139.9	139.4	139.5	139.6	7.4	34.6
24	Metallurgy	7.8	139.6	139.7	139.7	139.7	-0.5	30.9
25	Manufacture of fabricated metal products, except machinery and equipment	5.6	134.8	135.4	135.4	135.2	7.5	29.3
26	Manufacture of optics, electronics and computer products	0.2	92.2	92.2	104.1	96.2	-1.7	-2.4
27	Manufacture of electrical equipment	0.0	100.2	100.2	100.2	100.2	0.2	1.0
28	Manufacture of machinery and equipment	0.1	109.9	109.9	109.6	109.8	0.6	6.2
29	Manufacture of transport vehicles, trailers and semi-trailers	0.1	93.5	93.5	93.4	93.5	-2.6	-5.3
30	Other transport equipment	0.0	100.0	100.0	100.0	100.0	0.0	0.0
31	Manufacture of furniture	11.6	117.7	117.7	117.2	117.5	2.4	15.8
32	Other Industries	0.0	110.7	110.7	110.7	110.7	4.4	12.3
33	Repair and installation of machinery and equipment	0.2	106.6	106.6	106.6	106.6	2.1	4.2
<b>D</b>	<b>Electricity, gas, steam and air conditioning</b>	<b>19.5</b>	<b>115.9</b>	<b>115.9</b>	<b>115.9</b>	<b>115.9</b>	<b>-1.0</b>	<b>14.1</b>
35	Electricity, gas, steam and air conditioning	19.5	115.9	115.9	115.9	115.9	-1.0	14.1
<b>E</b>	<b>Water supply, treatment activities and waste management</b>	<b>15.8</b>	<b>101.0</b>	<b>101.0</b>	<b>101.0</b>	<b>101.0</b>	<b>0.4</b>	<b>0.8</b>
36	Water supply, treatment activities and waste management	15.0	100.6	100.6	100.6	100.6	0.0	0.1
37	Sewage removal and treatment services	0.0	100.0	100.0	100.0	100.0	0.0	0.0
38	Activities of collection. Treatment and disposal of waste, materials recovery	0.9	101.5	101.4	100.8	101.2	6.1	12.6

Tab. 3 Export Price Index

2020=100

NACE	Description	Weights	10-22	11-22	12-22	IV-22	IV-22/III-22	IV-22/IV-21
	<b>Total</b>	<b>100.0</b>	<b>141.3</b>	<b>136.4</b>	<b>142.2</b>	<b>140.0</b>	<b>1.1</b>	<b>24.2</b>
<b>B</b>	<b>Mining and quarrying</b>	<b>16.0</b>	<b>160.2</b>	<b>160.4</b>	<b>182.7</b>	<b>167.8</b>	<b>3.1</b>	<b>33.3</b>
06	Extraction of crude petroleum and natural gas; auxiliary services	6.7	172.7	172.7	228.8	191.4	-0.5	40.3
07	Mining of metal ores	8.9	157.7	158.2	158.8	158.2	6.0	26.8
08	Other mining and quarrying	0.4	126.9	126.6	126.3	126.6	8.5	25.1
<b>C</b>	<b>Manufacturing</b>	<b>67.4</b>	<b>113.0</b>	<b>113.1</b>	<b>113.1</b>	<b>113.1</b>	<b>0.7</b>	<b>10.5</b>
10	Manufacture of food products	6.2	117.5	117.5	117.8	117.6	2.8	14.3
11	Manufacture of beverages	0.5	126.8	126.8	126.8	126.8	0.0	20.8
12	Manufacture of tobacco products	0.0	99.6	99.6	99.6	99.6	0.0	0.0
13	Manufacture of textiles	1.4	98.8	98.8	98.8	98.8	-1.1	-0.4
14	Manufacture of dressing: wearing apparel	15.8	106.4	106.6	106.4	106.5	0.3	5.1
15	Manufacture of leathers and leather products	13.7	107.8	108.0	108.0	107.9	0.0	7.1
16	Manufacture of woods and products of wood and oak, except furniture; Manufacture of articles of straw and reed	0.9	122.3	122.8	122.7	122.6	7.7	21.1
17	Manufacture of papers and paper products	1.7	113.7	114.0	114.7	114.1	3.4	14.5
19	Manufacture of coke and petroleum products refinery	1.4	127.2	127.2	120.8	125.1	-2.6	14.4
20	Manufacture of chemicals and chemical products	1.0	124.2	124.2	128.0	125.5	5.4	21.3
21	Manufacture of pharmaceutical products and pharmaceutical preparations	0.1	104.1	104.1	104.1	104.1	0.0	-0.5
22	Manufacture of rubbers and plastic products	0.8	114.5	114.8	114.6	114.6	-0.3	15.1
23	Manufacture of non-metallic mineral products	2.5	165.8	165.8	165.8	165.8	0.4	46.5
24	Metallurgy	9.5	114.7	114.6	114.8	114.7	0.4	11.7
25	Manufacture of fabricated metal products, except machinery and equipment	2.9	127.2	127.2	127.2	127.2	-5.9	23.1
26	Manufacture of optics, electronics and computer products	0.6	100.8	100.8	100.5	100.7	-0.1	1.0
27	Manufacture of electrical equipment	2.9	103.3	103.2	101.8	102.8	6.7	4.2
28	Manufacture of machinery and equipment	1.3	102.0	102.0	101.9	102.0	0.4	2.4
29	Manufacture of transport vehicles, trailers and semi-trailers	2.1	95.2	95.2	95.2	95.2	-0.4	-4.3
30	Other transport equipment	0.1	129.3	129.3	129.3	129.3	4.2	23.4
31	Manufacture of furniture	1.3	116.8	116.8	121.4	118.3	5.0	12.3
32	Other Industries	0.4	104.1	104.1	103.8	104.0	-0.5	4.7
<b>D</b>	<b>Electricity, gas, steam and air conditioning</b>	<b>14.9</b>	<b>440.6</b>	<b>370.2</b>	<b>404.9</b>	<b>405.2</b>	<b>0.8</b>	<b>79.6</b>
35	Electricity, gas, steam and air conditioning	14.9	440.6	370.2	404.9	405.2	0.8	79.6
<b>E</b>	<b>Water supply, treatment activities and waste management</b>	<b>1.7</b>	<b>145.6</b>	<b>145.9</b>	<b>147.6</b>	<b>146.4</b>	<b>0.8</b>	<b>27.1</b>
38	Activities of collection, treatment and disposal of waste, materials recovery	1.7	145.6	145.9	147.6	146.4	0.8	27.1

# Methodology

INSTAT calculates Producer Price Index for Domestic Production and Export Price Index. Calculation and publication of Producer Price Index in Albania include:

- Producer Price Index in Total
- Producer Price Index for Domestic Production
- Export Price Index

Producer price index measures the change in the prices of products at the first point of sale after production. Producer Price Index is compatible with Eurostat methodology and covers following economic activities:

- Section B - Extracting industry
- Section C - Manufacturing industry
- Section D - Electric power, water and gas
- Section E - Water supply, treatment activities and waste management

These indices are calculated for each product classified according to the Classification of Products by Economic Activity (CPA) in 6 - digit level and are published in two digits level. Renovation of the basket of enterprises and products is based on the results of Annual Structural Survey of Enterprises. For calculation of products weights of Producer Price Index for Domestic Production are used data coming from SBS while for calculation of products' weights of Export Price Index are used data coming from Foreign Trade Statistics.

Producer Price Index (PPI) is calculated taking into consideration 2020 as base year (2020 = 100). Calculation's method used in compiling of this index is Laspayer chain - index. It means that each transaction will be compared with its previous year December price (y -1).

## Index calculation

For calculation of index is used Laspeyer type and is calculated as following:

$$I_{2020}^{y.m} = \frac{100}{12 \sum_{F-1.Dec}^{Dec} I_{F-1.Dec}^{F.M}} + I_{F-1.Dec}^{y-1, F.M} * I_{y-1.Dec}^{y.m}$$

- The first part before the equal sign is stating the price level of December 2020 in percent of the average price level during 2020. Hence adjusting the average of 2020 to 100.
- The second term is the chained index movement from December 2020 to December y-1 (a product of yearly index links [short-term - links] from December to December).
- The last part is showing the movement from December y-1 to month m year y.

#### Measures of index

The annual change measures the price change between the current quarter and the same quarter of previous year. This measure is responsive to recent changes in price levels but can be influenced by one-off effects in either quarter.

Quarterly change measures the price changes between current quarter and previous quarter.