



rtly,



#### PREFACE

The plastic industry is one of the most important actors of the Turkish economy. Today, the contribution of the plastics industry to the country's economy is gradually increasing with the total production exceeding 9 million tons, and 33 billion dollars' worth of turnover, the approaching direct exports of 5 billion dollars and the annual growth over GDP growth rate the last 10 years.

Our industry, with its production capacity, has reached the second place in Europe and the sixth place in the world. As PAGEV, we continue to lead the industry successfully in the framework of the "Unifying Power" mission of the Turkish Plastics Industry.

We also know that having the right and reliable data and information is the most important part of the solution when we sign the indispensability of Plastics in our lives and sign our work to tackle our industrial problems with concrete steps based on scientific evidence. In this direction we constantly investigate, collect new data, compile, and report them. We present our reports that we believe are important for the development of our industry and our booklets containing important information to the plastics industry representatives, stakeholders, and public institutions.

As PAGEV, we prepared a report set that will contribute to the industry in a serious way in the face of our long and dedicated researches. With our reports, we made booklets with the comments of our expert reporters about the point where the Turkish Plastics Industry is in the right and reliable light, common problems and what should be the search for concrete solutions. We believe that our reports and information set will benefit all our stakeholders, especially our members, and will guide the plastics world. At the same time, we are pleased that our public institutions have reached the most up-to-date and accurate information about the plastics industry.

On the other hand, with our sector reports in English, we think that our colleagues will be able to share the potential of our country's plastics industry with the most up-to-date business partners in the global marketplace.

Hereby, presenting our current reports and information files relating with our industry, we would like to thank all our colleagues who have contributed to this day's achievement of our industry, who has taken a position as a locomotive mission in the development of our country.

## Best regards, Yavuz EROĞLU PAGEV President



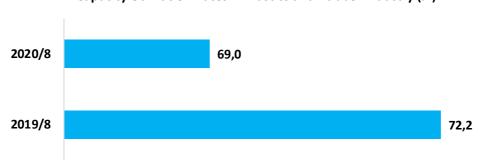
# CONTENTS

- **1. CAPACITY UTILIZATION**
- 2. 2019 & 2020 8 MONTHS COMPARISION OF SUPPLY AND DEMAND IN PLASTICS END PRODUCTS INDUSTRY AND 2020 EXPECTATIONS
- 3. PLASTICS END PRODUCTS IMPORTS BY COUNTRIES
- 4. PLASTICS END PRODUCTS EXPORTS BY COUNTRIES
- 5. PLASTICS EXPORTS BY IMMIB (ISTANBUL MINERAL AND METALS EXPORTERS' ASSOCIATION) (ISTANBUL MINERAL AND METALS EXPORTERS' ASSOCIATION)
- 6. PEER PERIOD COMPARISION OF PLASTICS PROCESSING MACHINERY INDUSTRY – MACHINERY INVESTMENT OF PLASTIC INDUSTRY



## 1. CAPACITY UTILISATION

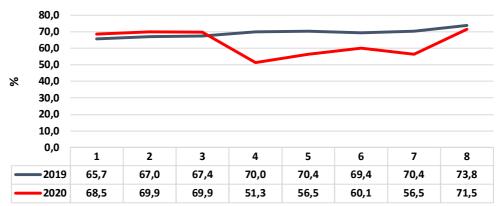
According to Turkish Republic Central Bank, capacity utilization rates which was 72,2% in the January – August period, declined to 69% in the 8 months of 2020.



## Capacity Utilization Rates in Plastics and Rubber Industry (%)

However, it is seen that the capacity utilization rates in January, February, and March of 2020, increased but dropped significantly after April with respect to the peer period of 2019.

Although capacity utilization rates increased again in August and approached the 2019 August levels, it is still 2.3 points below.



Monthly Comparison of Capacity Utilization Rates in Plastics Industry (%)

Source: Turkish Republic Central Bank

Source: Turkish Republic Central Bank



# 2. 2019 & 2020 / 8 MONTHS COMPARISION OF SUPPLY AND DEMAND IN PLASTICS END PRODUCTS INDUSTRY AND 2020 EXPECTATIONS

In the January - August period of 2020, compared to the peer period of 2019 on **amount basis**:

- **Production:** increased by 4.3%,
- Imports: increased by 3.5%,
- **Exports:** increased by 18%,
- **Domestic Consumption:** increased by 0.9%,
- Foreign Trade Surplus: increased by 24%.

If it continues with the same trend, it is estimated by the end of 2020 compared to 2019 that <u>on</u> <u>amount basis</u>.

- **Production:** will decline by 1%,
- Imports: will decline by 3.2%,
- Exports: will increase by 8%,
- Domestic Consumption: will decline by 3.5%,
- Foreign Trade Surplus: will increase by 12.5%

#### Supply and Demand Equilibrium in Plastics End Products Industry (1000 MT) (2020 / 2019 January – August Comparison and Estimates for 2020)

	2019/8	2019	2020 /8	2020/T	% Increase 2020/2019 (8 M )	% Expected Increase 2010 / 2019
Production	6.156	9.243	6.418	9.146	4,3	-1,0
Imports	367	559	380	542	3,5	-3,2
Exports	1.258	1.959	1.485	2.116	18,0	8,0
Domestic Consumption	5.265	7.843	5.313	7.571	0,9	-3,5
Foreign Trade Surplus	891	1.400	1.105	1.575	24,0	12,5

Source: Turk Stat



In the January - August period of 2020, compared to the peer period of 2019, on value basis:

- **Production:** increased by 3,2%,
- Imports: increased by 7,3%,
- Exports: increased by 7%,
- Domestic Consumption: increased by 3%,
- Foreign Trade Surplus: increased by 6,6%.

If it continues with the same trend, it is estimated by the end of 2020 compared to 2019 that <u>on</u> value basis.

- **Production:** will decline by 7,5%,
- **Imports:** will decline by 1,4%,
- Exports: will decline by 0,5%,
- Domestic Consumption: will decline by 8,1%,
- Foreign Trade Surplus: will increase by 0,5%

## Supply and Demand Equilibrium in Plastics End Products Industry – Million \$ ( 2020 / 2019 January – August Comparison and Estimates for 2020 )

	2019/8	2019	2020 /8	2020/T	% Increase 2020/2019 (8 M )	% Expected Increase 2010 / 2019
Production	21.634	32.680	22.334	30.235	3,2	-7,5
Imports	1.655	2.568	1.776	2.531	7,3	-1,4
Exports	3.174	4.862	3.394	4.837	7,0	-0,5
Domestic Consumption	20.115	30.386	20.716	27.928	3,0	-8,1
Foreign Trade Surplus	1.519	2.295	1.618	2.306	6,6	0,5

Source: Turk Stat

# 3. PLASTICS END PRODUCTS IMPORTS BY COUNTRIES

- In the 8 months of 2020, 10 countries shared 71% of total plastic end products imports on amount and 74% on value basis.
- In the said period, China ranked the first place on amount and Germany on value basis, in total plastic end products imports.
- Germany, China, and Italy constituted the countries from where highest imports were realized.



Plastics End Products imports by countries ( 2020 January – August )							
	1000 MT	Million \$	% Share Amount	% Share Value			
Germany	62	343	16	19			
China	89	304	23	17			
Italy	39	204	10	12			
France	16	105	4	6			
S.Korea	19	94	5	5			
USA	7	82	2	5			
UK	8	56	2	3			
Belgium	13	48	3	3			
Poland	8	44	2	2			
Spain	8	42	2	2			
10 Countries Total	269	1.323	71	74			
Others	111	453	29	26			
Total	380	1.776	100	100			

Plastics End Products Imports by Countries (2020 January – August)

Source: Turk Stat

#### 4. PLASTICS END PRODUCTS EXPORTS BY COUNTRIES

- In 8 months of 2020, 51% of total plastic end products exports on amount and 49% on value basis were realized from 10 countries.
- Iraq ranked first place in plastic product exports in the said period.
- Iraq, Germany, and UK constituted the countries where the highest plastic products exports were realized.

	1000 MT	Million \$	% Share Amount	% Share Value
Iraq	175	285	12	8
Germany	75	251	5	7
UK	102	240	7	7
Israel	101	186	7	5
USA	52	133	3	4
Italy	66	133	4	4
France	41	125	3	4
Romania	50	120	3	4
Spain	42	96	3	3
Libya	48	87	3	3
10 Countries Total	752	1.656	51	49
Others	733	1.738	49	51
Total	1.485	3.394	100	100
Source: TURK STA	Т			

#### Plastics End Products Exports by Countries (2020 January – August )





# 5. PLASTICS EXPORTS BY IMMIB (ISTANBUL MINERAL AND METALS EXPORTERS' ASSOCIATION) (ISTANBUL MINERAL AND METALS EXPORTERS' ASSOCIATION )

According to IMMIB (Istanbul Mineral and Metals Exporters' Association) data.

- Exports of plastic products (total plastic raw materials and plastic end products) amounted to 3 billion 931 million dollars in the 8 months of 2020 and decreased by 3% compared to the peer period of 2019.
- The share of the plastics in the total chemical industry exports, which was 30% in the 8 months of 2019, increased to 34% in the peer period of 2020.

	8 Months Cumulative			
Product Group	2019	2020	Increase (%)	
PLASTICS PRODUCTS	4.050	3.931	-3	
MINERAL FUELS, MINERAL OILS AND PRODUCTS	3.900	2.054	-47	
INORGANIC CHEMICALS	1.186	1.020	-14	
VOLATILE OILS, COSMETICS AND SOAP	751	836	11	
PHARMACY PRODUCTS	636	757	19	
RUBBER PRODUCTS	826	699	-15	
MISCELLANEOUS CHEMICALS	462	683	48	
PAINT, VARNISH, INK AND PREPARATIONS	541	518	-4	
WASHING PREPARATIONS	301	383	27	
ORGANIC CHEMICALS	417	289	-31	
FERTILIZERS	193	190	-1	
ADHESIVES, ADHESIVES, ENZYMES	132	145	10	
EXPLOSIVE SUBSTANCES AND DERIVATIVES	6	8	25	
PRODUCTS USED IN PHOTOGRAPHY AND CINEMATICS	9	6	-27	
GLYCERINE, HERBAL PRODUCTS, DEGRA, OILY SUBSTANCES	1	1	77	
PROCESSED AMIANT AND MIXTURES, ITS PRODUCTS	0	1	767	
TOTAL	13.411	11.521	-14	

#### Total Chemical Industry Exports (Comparison of 8 Months of 2019 and 2020) (Million \$)

Source: IMMIB (Istanbul Mineral and Metals Exporters' Association)

• On the other hand, according to Turk Stat data, the exports of plastics products (total of plastic raw materials and end products) amounted to 4 billion 307 million dollars in the 8 months of 2020 and increased by 3.8% compared to the peer period of 2019.



Flastics industry Exports by Furk Stat ( Willion \$ )						
	2019/8	2020/8	% Increase			
Plastics Raw Materials	977	913	-6,6			
Plastics End Products	3.174	3.394	6,9			
Total	4.151	4.307	3,8			

Plastics Industry Exports by	Turk Stat (Million \$)
------------------------------	------------------------

Source: Turk Stat

- The main reasons for the difference in IMMIB (Istanbul Mineral and Metals Exporters' Association) and Turk Stat export statistics; It is because IMMIB (Istanbul Mineral and Metals Exporters' Association) is based on the declarations and the declared figure is accepted as export. Declarations can be changed later by some companies and export figures are then renewed.
- Another reason for the difference is that IMMIB (Istanbul Mineral and Metals Exporters' Association) and Turk Stat interpret HS codes differently on sectoral basis. Turk Stat accepts some HS Codes that are not accepted by Istanbul Mineral and Metals Exporters' Association) in that sector.

# 6. PEER PERIOD COMPARISION OF PLASTICS PROCESSING MACHINERY INDUSTRY – MACHINERY INVESTMENT OF PLASTIC INDUSTRY

In the January - August period of 2020, compared to the peer period of 2019, in the plastic processing machines industry on <u>value basis</u>:

- Production: decreased by 6%,
- Imports: increased by 33%,
- Exports: decreased by 6%,
- Domestic Consumption (Machinery Investment of Plastics Industry): increased by 18%,

	2019/8	2019	2020 /8	2020 T	% Increase 8 Months	% Expected Increase 2020 / 2019
Production	284	507	267	400	-6	-21
Imports	265	421	352	528	33	26
Exports	128	197	120	180	-6	-9
Domestic Consumption	421	730	499	748	18	2
Foreign Trade Surplus	-76	-223	-173	-329	128	47
Source: Turk Stat						

# Comparison of Supply and Demand in Plastics Processing Machines Industry (Million \$)



If it continues with the same trend, it is estimated by the end of 2020 compared to 2019 that <u>on</u> <u>value basis</u>.

- **Production:** will decline by 21%,
- Imports: will increase by 26%,
- **Exports:** will decrease by 9%,
- **Domestic Consumption ( Machinery Investment of Plastics Industry ):** will increase by 2%,
- It is estimated that the machinery and equipment investment of the plastics industry, which realized as 730 million dollars in 2019, will increase to 748 million dollars in 2020 and the share of imports in total investment will increase from 58% to 72%.







