

**MANUFACTURING, MINING
AND QUARRYING, AND
OTHERS INDUSTRIES
OBSERVATORY**

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2021

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Introduction

Industry is a historical component of the Monegasque economy. In 2021, there were 182 companies employing 2,579 individuals, i.e. almost 5% of the employed population. Moreover, with 809.6 million euros of revenue, Industry is the fifth most important sector in Monaco (excluding financial and insurance activities).

The industrial companies present in Monaco are more akin to light industry, that means intended for the production of consumer goods. Due to the small size of the territory, most of the activities are characterized by a low need for capital and raw materials. With the exception of a few groups with large infrastructures and a large workforce, most of the companies are small structures with a small workforce that carry out all stages of production (manufacturing, processing or repair) up to marketing.

On the one hand, the Manufacturing industry represents nearly 90% of the companies in the sector. The manufacture of rubber and plastic products is preponderant and accounts for nearly 30% of industrial revenue each year. The Manufacture of chemicals and chemical products has the most employees in the sector (23.6% in 2021), mainly in the cosmetics sector. The pharmaceutical and textile industries are also long-established activities in the Principality. The Repair and installation of machinery and equipment is very widespread, as it is the manufacturing branch with the most establishments in the territory. Finally, the Manufacture of food products perfectly illustrates the industry present in Monaco. The bakery-pastry shops symbolize these human-sized factory which manages the making of products right up to their sale to the final consumer.

On the other hand, this Major Economic Sector (MES) also includes companies related to the production and distribution of electricity and water, as well as remediation activities, whose main players are historical concessionaires such as SMEG and SMEAUX. Moreover, it gathers Mining support activities, and even the agri-food and fisheries exploitations.

The Principality of Monaco confirms its economic recovery in 2021, after a year marred by the COVID-19 pandemic and the resulting restrictions. In order to contain the spread of the virus, the public authorities put in place drastic measures which also resulted in the paralysis of many activities and an unprecedented crisis. However, the gradual lifting of restrictions, combined with the stimulus plan drawn up by the Government, have enabled a rebound in the Monegasque economy. Thus, in 2021, the Gross Domestic Product amounted to 7.27 billion euros, recording an annual growth rate of 21.6%, but above all an increase of 5.8% compared to 2019.

Like all activities in the Principality, Industry is also experiencing an upturn. Indeed, the turnover of this sector in 2021 is up by 16.0% compared to last year. It will reach €809.6 million, even surpassing its pre-crisis level (€807.9 million in 2019). However, these good economic results must be put into perspective and compared with a structural reality that is quite different. Indeed, industry in Monaco has been in gradual decline for over ten years. Like its neighbours, the Principality has been facing a wave of relocations to countries outside the European Union since the end of the 2000s. Due to these exogenous reasons and national geographical constraints, it is difficult to maintain and develop industries that require space and regular supplies. As a result, Monaco deplores the closure of large groups in key manufacturing sectors. Their disappearance has had a direct impact on the Industry's turnover and its employed population. Generally speaking, this sector is very sensitive to the variations of a few major players.

In this context, the aim of this observatory is to provide a snapshot of the state of Monegasque Industry in 2021, as well as to explain the major trends observed over the last decade.

The industrial economy concerns those activities combining factors of production (facilities, supplies, work, knowledge) to produce material goods intended for the market¹.

The Industry as referred to in this report refers to the Major Economic Sector (MES) of Manufacturing, mining and quarrying, and others Industries. It groups together all the companies involved in the mass production of goods through the transformation of raw materials or materials that have already undergone one or more transformations and the exploitation of energy sources. It also includes agricultural activities, production and distribution of electricity, gas and water, sanitation and crafts.

¹ Source: [Insee](#)

Key figures: Manufacturing, mining and quarrying, and others industries

Active establishments



↗ **2.8%**
compared to 2020

1.9%
of total

↗ **2.2%**
in 10 years

11th
out of 12 MES

Revenues



↗ **16.0%**
compared to 2020

5.0%
of total

↘ **-35.4%**
in 10 years

5th
out of 11 MES

Employees



↗ **0.8%**
compared to 2020

5.5%
of total

↘ **-22.9%**
in 10 years

7th
out of 12 MES

GDP



↗ **28.9%**
compared to 2020

3.4%
of total

↘ **-13.0%**
in 10 years

11th
out of 12 MES

1. Establishments

1.1. The number of industrial establishments remains stable overall

Table 1. Number of active establishments by MES

	2012	2021	Average annual growth rate
Scientific and technical activities, administrative and support service activities	1,399	2,536	6.1%
Real Estate activities	1,498	2,001	2.9%
Wholesale trade	1,003	1,315	2.7%
Other service activities	591	1,209	7.4%
Retail trade	806	844	0.5%
Financial and insurance activities	447	671	4.1%
Construction	410	497	1.9%
Information and communication	255	434	5.5%
Public administration, education, human health and social work activities	213	431	7.3%
Transportation and storage	254	316	2.2%
Accommodation and food service activities	301	308	0.2%
Manufacturing, mining and quarrying, and others industries	178	182	0.2%
Total	7,355	10,744	3.9%

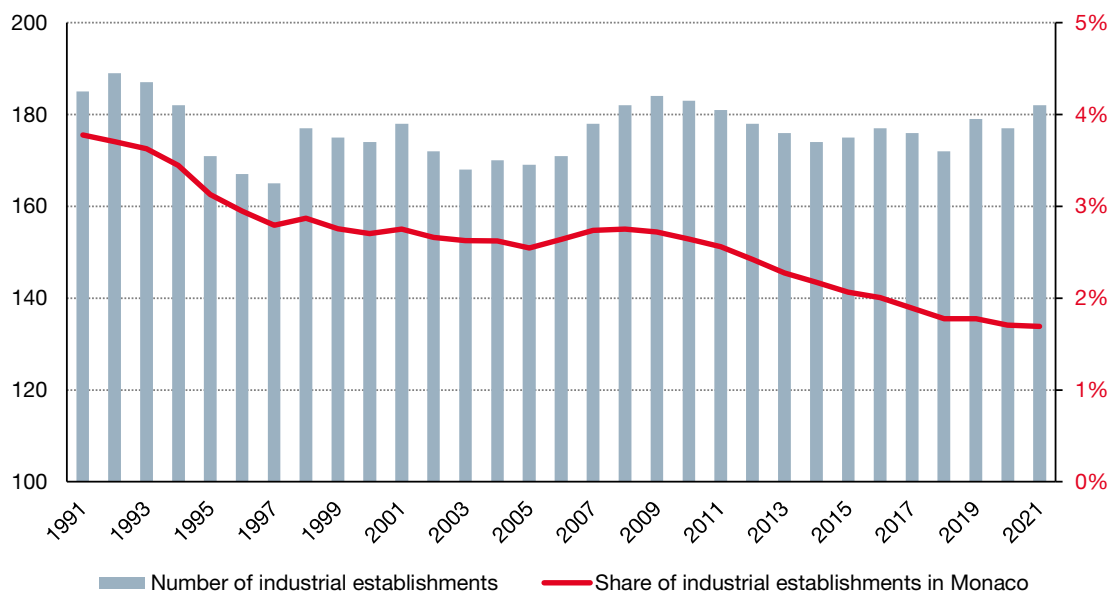
Note to the reader: On average, the overall number of establishments in the Principality of Monaco has increased each year by 3.9% between 2012 and 2021.

Sources: Business Development Agency, Monaco Statistics

Over the last decade, the number of establishments in the Principality has grown strongly. It has increased by 46.1% (i.e. more than 3,000 additional units). Many MESs show strong variations over this period, following the example of Other services activities, where the number of companies has increased by more than 7% on average each year between 2012 and 2021.

With 182 active establishments among the 10,744 in 2021, Industry ranks last among the MESs in terms of number of establishments. Moreover, this sector of activity has seen very little growth in its total number of establishments over the ten years, resulting in the lowest average annual growth rate throughout the decade (+0.2%).

Figure 1. Evolution in the number of industrial establishments and of their share in Monaco since 1991



Sources: Business Development Agency, Monaco Statistics

Over the last 30 years, the number of industrial establishments has been relatively stable. It varies between 165 and 189 entities. In 2021, the industry has 182 active establishments, 5 more than the previous year (+2.8%). This is the highest number of entities since 2010 (183).

However, the share of Industry continues to decrease from year to year. In fact, this sector of activity represents 1.7% of the Principality's active entities in 2021, compared to 3.8% in 1991, despite a similar number of establishments (185).

1.2. The Manufacturing industry represents almost 90% of the MES

Table 2. Breakdown of industrial establishments by NAF Section

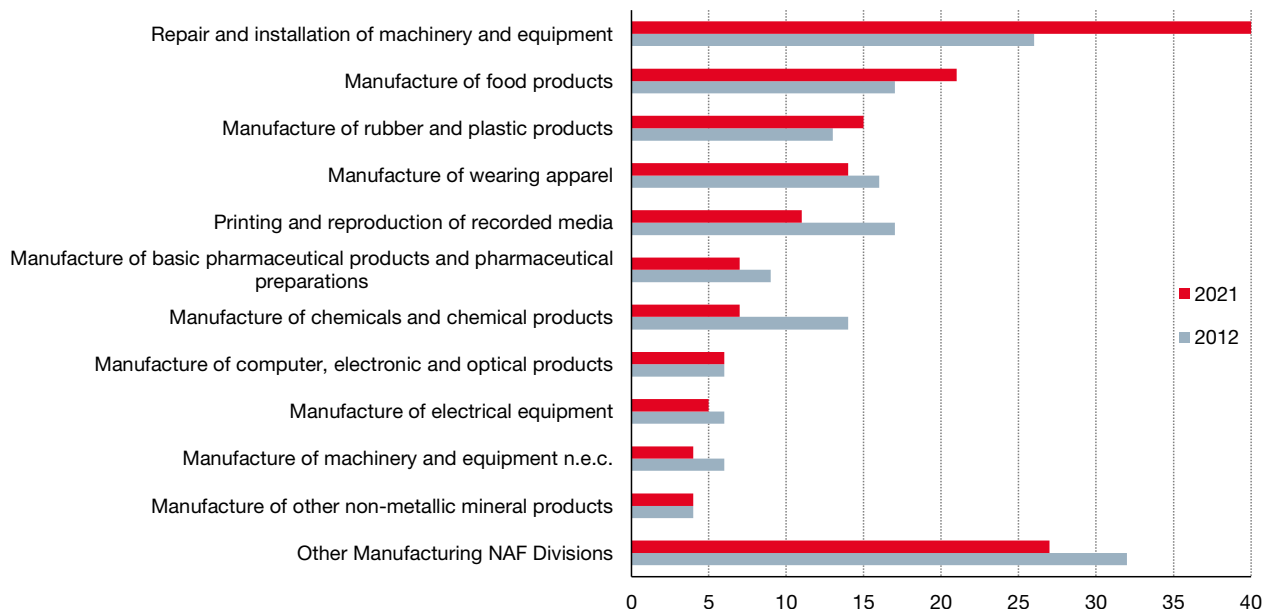
	2012	2021	Share
Manufacturing	166	161	88.5%
Water supply; sewerage, waste management and remediation activities	7	13	7.1%
Electricity, gas, steam and air conditioning supply	1	3	1.6%
Agriculture, forestry and fishing	2	3	1.6%
Mining and quarrying	2	2	1.1%
Total	178	182	100%

Sources: Business Development Agency, Monaco Statistics

Historically, Manufacturing is the backbone of Monegasque industry. At the end of the 2000s, it counted 175 companies. The following decade was marked by a decline in the number of its establishments, reaching its lowest total in the last thirty years in 2018 (154). In 2021, Manufacturing has 161 active establishments (88.5% of the sector), 4 more than last year.

The Water supply, sewerage, waste management and remediation activities is the second most represented industrial branch with 13 active entities (7.1%) in 2021. In ten years, its number has doubled, mainly thanks to the development of Sewerage activities (+4).

Figure 2. Comparison of the number of industrial establishments by NAF Division between 2012 and 2021



Sources: Business Development Agency, Monaco Statistics

With 40 entities in 2021, the Repair and installation of machinery and equipment remains the activity with the most establishments, so a quarter of manufacturing companies. It includes mainly the activities of Installation of industrial machinery and equipment (18) and Repair and maintenance of ships and boats (16). The growth of the latter largely explains the increase of more than 50% in the number of establishments in this branch over the last decade.

Other growing activities include the Manufacture of food products and the Manufacture of rubber and plastic products, which also saw their total number of production sites increase to 21 and 15 establishments, respectively, by 2021.

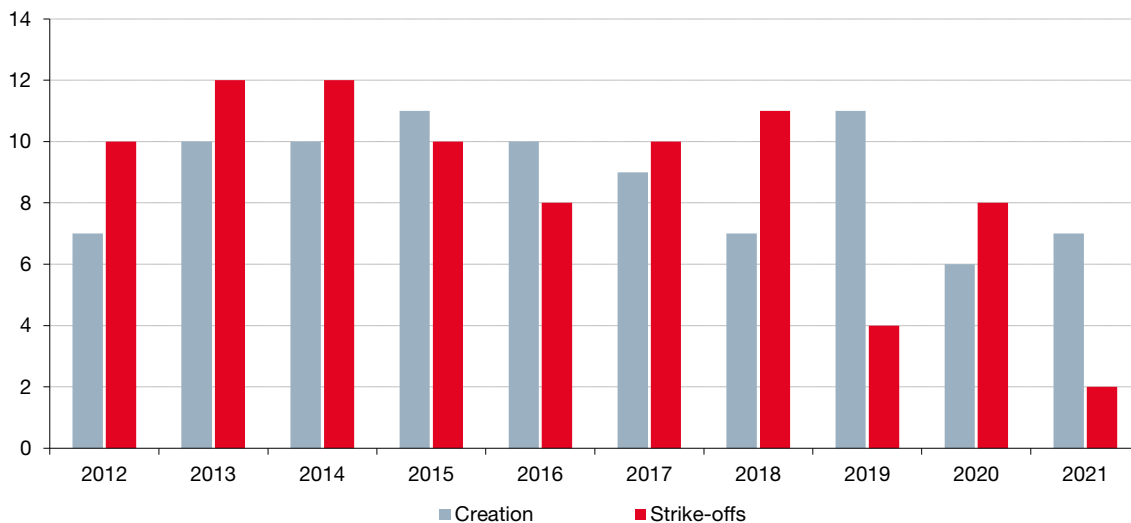
Conversely, between 2012 and 2021, nine manufacturing industries experienced a decrease in production units. This is particularly true of two important industrial activities in the Principality. Following a decline in activity in the Manufacture of perfumes and toilet preparations, the Manufacture of chemicals and chemical products has lost half of its establishments and will have 7 in 2021, marking the biggest drop over the period. The Manufacture of basic pharmaceutical products and pharmaceutical preparations also currently has 7 firms, down two from 2012.

Printing and reproduction of recorded media is the activity that has been most affected over the past 15 years. In 2021, it has 11 entities, compared to 17 in 2012 and 25 in 2006. This trend can be explained by the gradual disappearance of Pre-press and pre-media services.

1.3. In ten years, as many creations as strike-offs

Over the last ten years, the cumulative number of establishments created and those struck off is similar (88 creations versus 87 strike-offs). During the last decade, 6 years have seen a higher number of deletions than creations. The year 2019 marks the largest gap between the number of creations and strike-offs with a positive balance of 7.

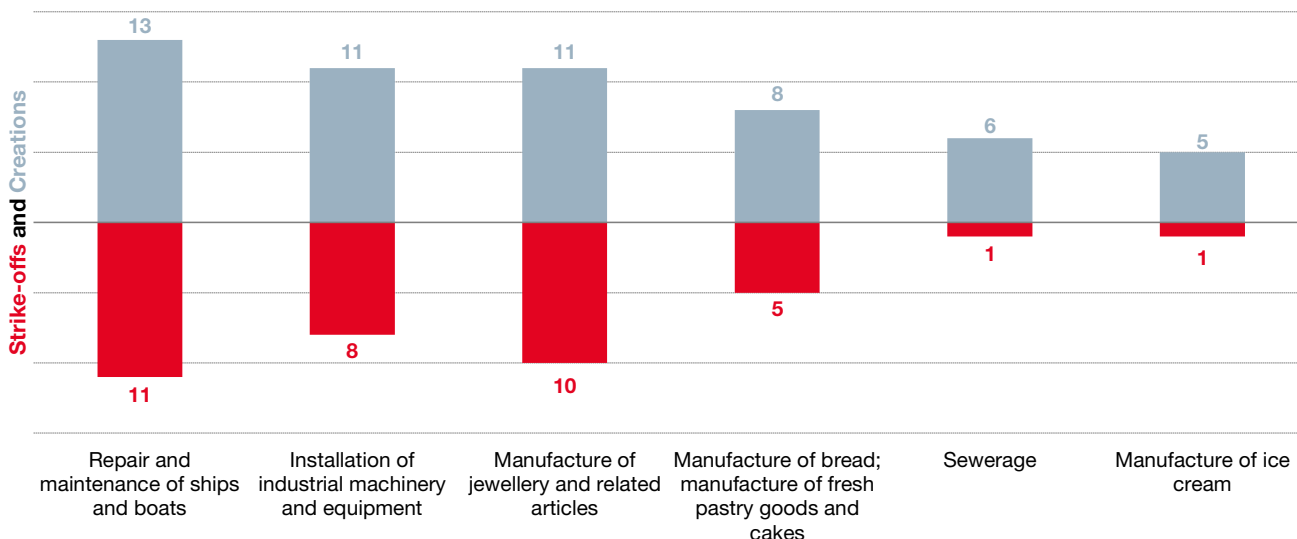
Figure 3. Number of creations and strike-offs in the Industry since 2012



Sources: Business Development Agency, Monaco Statistics

On average since 2012, 9 industrial entities have been both created and deleted each year, making Industry the sector of activity with the least annual variations. Furthermore, Industry is the only MES in the Principality to observe on average as many creations as deletions each year, while the other eleven MES record a positive net creation balance every year.

Figure 4. Creations and strike-offs of the 6 NAF classes which have created the most industrial establishments since 2012



Sources: Business Development Agency, Monaco Statistics

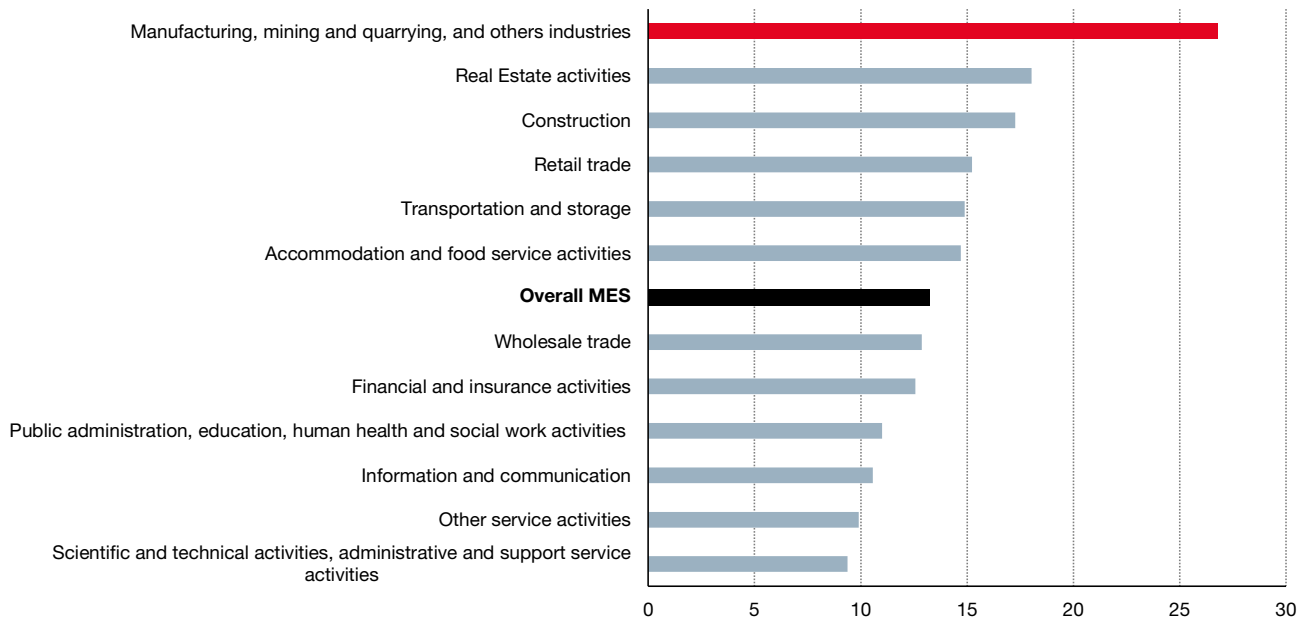
With 13 establishments created and 11 deregistered since 2012, Repair and maintenance of ships and boats is both the industrial NAF class that has created the most entities and the one that has seen the most strike-offs.

More generally, Repair and installation of machinery and equipment holds the record for the number of establishments registered in the last ten years. This branch, led mainly by Repair and maintenance of ships and boats and the Installation of industrial machinery and equipment, recorded 30 new businesses, i.e. more than a third of the creations over the period. Conversely, it is also the activity that has recorded the most disappeared entities (19 or 21.8%).

The Manufacture of food products, which includes the Manufacture of bread, fresh pastry goods and cakes as well as the Manufacture of ice cream, recorded a total of 13 new production sites in the Principality, compared to 9 deletions.

1.4. Industry, an ageing sector

Figure 5. Average age of establishments by MES in 2021



Sources: Business Development Agency, Monaco Statistics

The industrial entities are rather old. The low number of business creations leads to an ageing of the sector. At 26.8 years, the average age of establishments in Industry is the highest of all the MESs. This corresponds to twice the overall average age of all companies in the Principality (13.2 years).

Table 3. Distribution of active industrial establishments by seniority in 2021

	Number of industrial establishments		Total number of establishments of all MESs	
	Nombre	Part	Nombre	Part
Less than 5	38	20.9%	3,845	35.8%
Between 5 and 9	33	18.1%	2,458	22.9%
Between 10 and 29	44	24.2%	3,112	29.0%
Between 30 and 49	32	17.6%	976	9.1%
Between 50 and 69	19	10.4%	276	2.6%
70 and more	16	8.8%	74	0.7%
Total	182	100%	10,741	100%

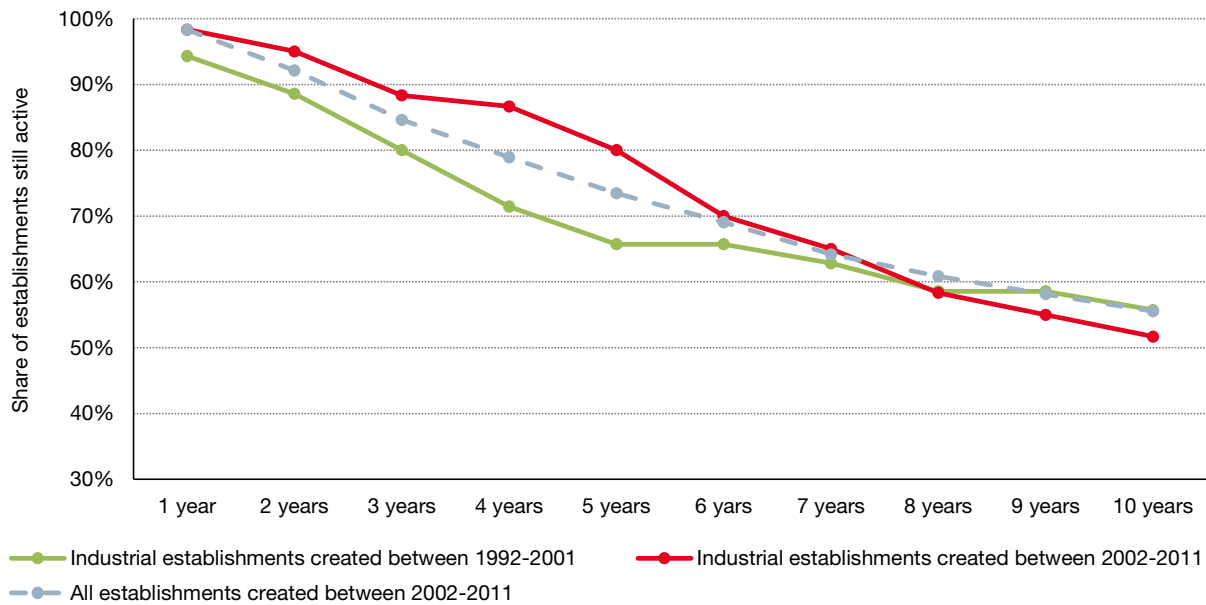
Sources: Business Development Agency, Monaco Statistics

In total, one in three industrial establishments is at least 30 years old. 42.3% of the sector's entities are between 5 and 29 years old, and almost 21% were created less than 5 years ago.

This distribution is singular among all the sectors of activity in the Principality. Taking all MESs together, only 12.3% of entities are over 30 years old.

With 182 entities out of 10,741, Industry only represents 1.7% of active establishments in the Principality. However, among those that have been in existence for at least 50 years, one activity in ten comes from Industry (35 out of 350). Furthermore, Monaco has 74 companies that are 70 years old or more, 16 of them are industrial entities (i.e. 21.6%).

Figure 6. Sustainability rate of industrial establishments created between 1992-2001 and 2002-2011



Note to the reader: 80.0% of the industries created between 2002-2011 were active 5 years after their creation, 51.7% were active 10 years after.
Sources: Business Development Agency, Monaco Statistics

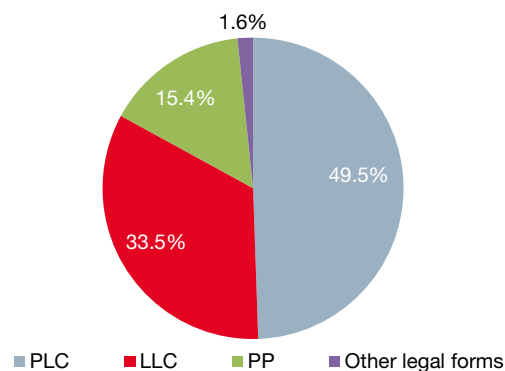
Between 2002 and 2011, 60 industries were created. Among these companies created, 51.7% were still active ten years after their creation, compared to 55.6% for all MESs.

The comparison between the two periods observed shows a change in the average life span of establishments in the Industry. Entities created in 2002-2011 appear to be more robust during their first eight years of existence than industries born in 1991-2002. Five years after their creation, only 20.0% of establishments created between 2002 and 2011 ceased their activity, compared with 34.3% for those created in the previous generation.

In contrast, the sustainability of industries appears to be deteriorating over the long term. The 10-year sustainability rate declines from one decade to the next. Indeed, 55.7% of the 70 industrial entities registered between 1992 and 2001 were still in business 10 years later, i.e. 4 points more than the following period.

1.5. The LLC continues to grow

Figure 7. Distribution of active industrial establishments by legal form in 2021



Sources: Business Development Agency, Monaco Statistics

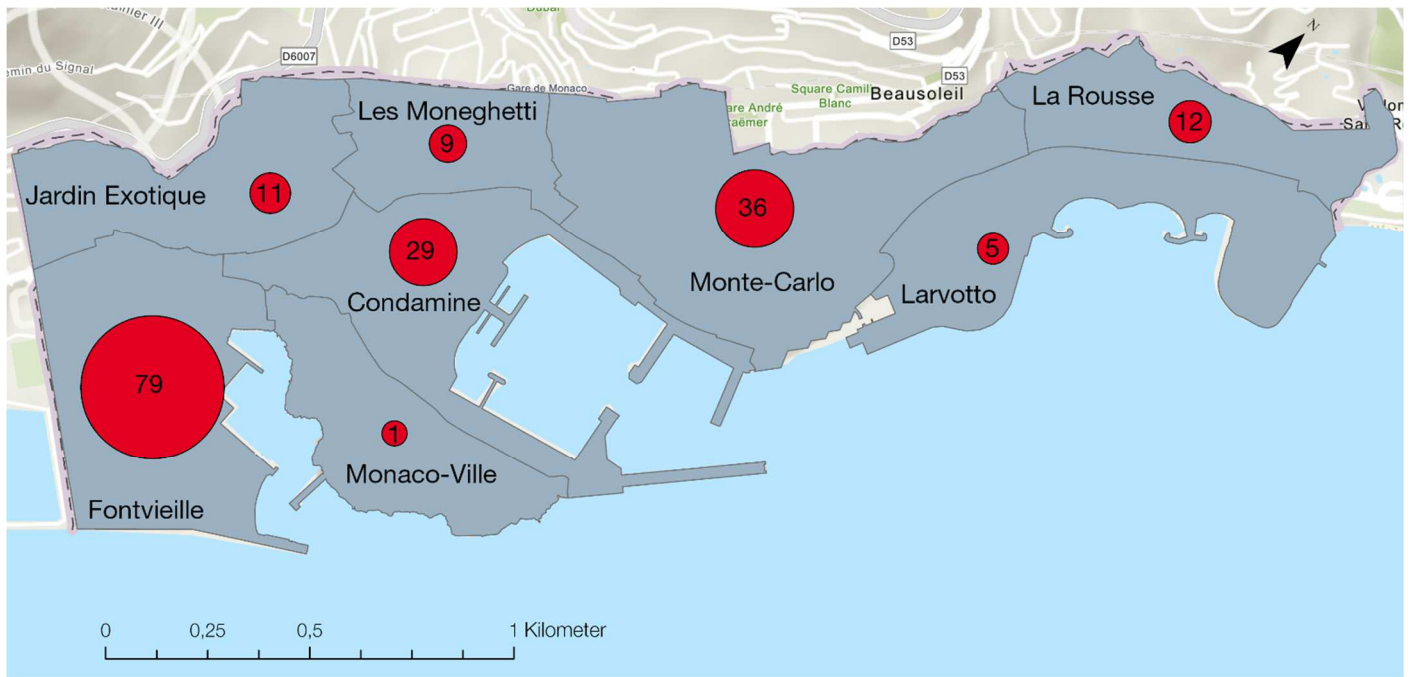
In 2021, the Public Limited Company is the most common legal form, almost one in two entities is a PLC, compared with 13.5% for all MESs combined. One third are limited liability companies (30.3% overall). However, it should be remembered that the LLC is a young legal form in Monaco (introduced in 2007). As industrial establishments are generally old, this explains the strong presence of PLC in the sector.

An evolution in the choice of legal form among industrialists has been observed over the last decade. In 2021, the LLC liability represents 33.5% of establishments in the sector, whereas this share reached 14.0% ten years earlier. Since 2012, among the 88 businesses created, 54 have opted for the LLC (61.4%) and only 15 have been struck off.

Conversely, this clear increase in the number of limited liability companies has been at the expense of natural persons. In 2012, they constituted 21.9% of industrial entities, compared with 15.5% in 2021. Over the last ten years, 23 establishments have been created under this legal form, and 34 have been struck off.

1.6. Industry is concentrated in Fontvieille

Figure 8. Map of active industrial establishments by district in 2021



Sources: Business Development Agency, Monaco Statistics

Industrial establishments are distributed heterogeneously across the Monegasque territory. In 2021, almost one industry in two is located in the Fontvieille district (79 out of 182). 36 were in Monte Carlo, while Condamine had 29.

Historically, Fontvieille is the main industrial area of the Principality. Over the last thirty years, the number of establishments has remained stable varying (between 75 and 85). In 2021, the Manufacture of plastics products (13), Printing and service activities related to printing (7) and Manufacture of bakery and farinaceous products (6) are the industries with the most establishments in this district.

Monte-Carlo concentrates a less visible but very real industry, more akin to craft activities. Indeed, due to its small size, this district is far from a so-called mass industry, but instead welcomes small structures. Between 2012 and 2021, 25 new entities have decided to set up in this district compared to 21 in Fontvieille. Of the 36 present in Monte-Carlo, 16 have no employees, and 11 are manufacturing companies employing less than five people. This district is home to a quarter of the companies in the Repair and installation of machinery and equipment (10), particularly those specialising in Repair and maintenance of ships and boats. The Manufacture of wearing apparel is also well established here, with 6 of its 14 establishments.

The Condamine district also has a significant number of industrial establishments. Like Monte Carlo, 25% of the entities in the Repair and Installation of machinery and equipment sector operate in Condamine. Furthermore, a third of the Manufacture of food products (7) is located in this district, with the presence of 4 of the 6 ice cream manufacturers in the Principality.

The industry is gradually moving to the east of the area. In fact, La Rousse and Larvotto together had only 4 establishments in the sector in 2000. La Rousse began to industrialise in 2003, with an additional company setting up there every year during this decade. Since 2012, the number of industries in this district has been stable (between 10 and 13), attracting mainly industries in the Installation of industrial machinery and equipment (4 in 2021). Larvotto is experiencing a more recent boom, with 5 in 2021, 3 more than in 2013.

2. Revenues

2.1 Industrial activity falls by a third in ten years

Table 4. Evolution of revenues by MES (2012-2021)

	2012	2021	Share	Average annual growth rate
Wholesale trade	7,961.6	5,213.7	32.3%	-4.1%
Scientific and technical activities, administrative and support service	1,226.3	2,638.7	16.3%	8.0%
Construction	791.8	2,146.7	13.3%	10.5%
Retail trade	1,222.3	1,932.7	12.0%	4.7%
Manufacturing, mining and quarrying, and others industries	1,253.9	809.6	5.0%	-4.3%
Other service activities	313.8	753.3	4.7%	9.2%
Real Estate activities	317.0	705.1	4.4%	8.3%
Information and communication	583.6	687.0	4.3%	1.6%
Transportation and storage	437.7	588.5	3.6%	3.0%
Accommodation and food service activities	583.7	578.9	3.6%	-0.1%
Public administration, education, human health and social work activities	75.9	100.1	0.6%	2.8%
<i>Financial and insurance activities</i>	<i>1,478.4</i>	<i>1,738.8</i>		
Total	14,767.6	16,154.3	100%	0.9%

Note for the reader: Total revenue does not include revenue from Financial and insurance activities. As revenue is a less relevant indicator than for other sectors, it is given as an indication.

Unit: million euros

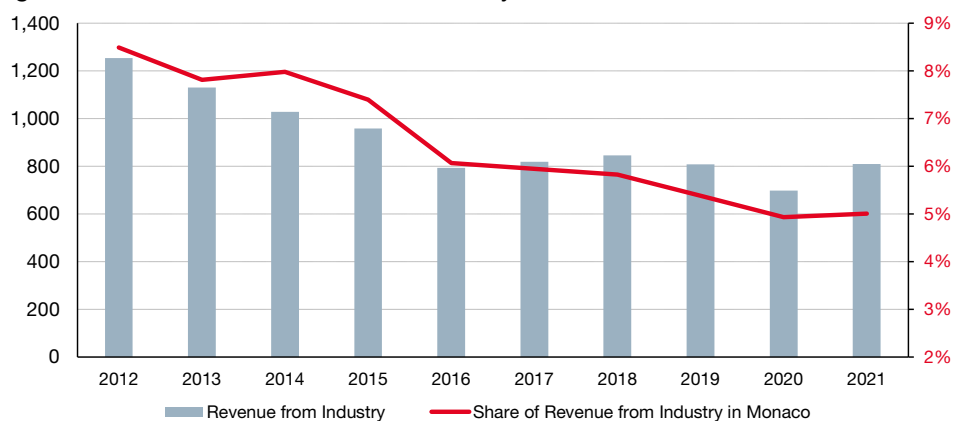
Sources: Department of Tax Services, Monaco Statistics

In 2021, Industry is the fifth GSA with the highest revenue with 809.6 million euros (excluding Financial and insurance activities). However, its share of overall turnover has been declining over the last ten years, since this sector was still the second largest contributor in 2012, accounting for 8.5% of the Principality's overall revenue.

The sectoral turnover also depends on the number of entities. Although it is the sector of activity with the fewest active establishments in 2021 (182), Industry generates relatively more turnover than other MESs which are much more represented in the Principality. By way of comparison, Information and Communication has almost twice as many establishments (434), but generates almost 15% less revenue. Thus in 2021, Industry is the leading sector of activity in terms of average turnover per establishment with €4.4 million, ahead of Construction (€4.3 million) and Wholesale Trade (€4.0 million).

Since 2012, Industry revenue has been decreasing by 4.3% in average every year. This is the lowest average annual variation rate among all sectors of activity.

Figure 9. Evolution of revenue from Industry and its share between 2012 and 2021



Unit: million euros

Sources: Department of Tax Services, Monaco Statistics

In ten years, the Industry's revenue has fallen by more than a third (-35.4%) compared to its 2012 level, i.e. a loss of 444.3 million euros.

The last decade has been marked by contrasting results. Industry peaked at €1.25 billion in 2012, before gradually declining. In 2015, Industry recorded a turnover of 958.0 million euros, marking the end of ten consecutive years above the billion euro mark. Since 2016, industrial activity has stabilised, fluctuating between €793.8 and €846.0 million (except for the year 2020, which recorded €698.2 million following the COVID-19 pandemic).

2.2 The decline in Manufacturing is dragging down the rest of the sector

Industrial production in the Principality is mainly based on Manufacturing. In 2021, it will represent almost 78% of the revenue.

Table 5. Breakdown of the revenue from the Industry by NAF Section

	2012	2021	Share	Variation
Manufacturing including:	1,125.3	630.4	77.9%	-44.0%
Manufacture of rubber and plastic products	385.8	242.0	29.9%	-37.3%
Manufacture of chemicals and chemical products	168.6	128.2	15.8%	-24.0%
Manufacture of basic pharmaceutical products and pharmaceutical preparations	189.9	52.2	6.4%	-72.5%
Manufacture of wearing apparel	47.6	49.5	6.1%	4.0%
Water supply; sewerage, waste management and remediation activities	49.9	68.8	8.5%	37.8%
Mining and quarrying and others industries	78.7	110.4	13.6%	40.3%
Total	1,253.9	809.6	100%	-35.4%

Unit: million euros

Sources: Department of Tax Services, Monaco Statistics

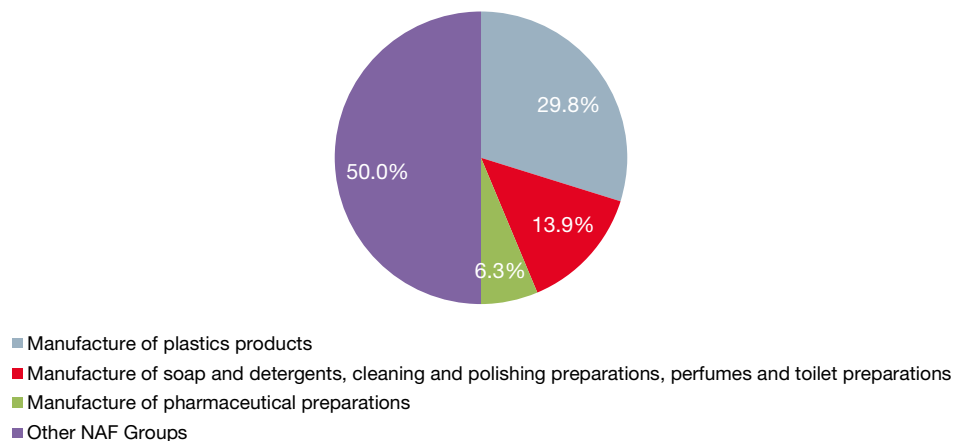
The decline in the sector since 2012 is explained by the fall in turnover in manufacturing industries. Manufacturing saw its turnover almost halved over the period, falling from €1.1 billion to €630.4 million.

The Manufacture of basic pharmaceutical products and pharmaceutical preparations recorded a drop of 72.5%. In addition, the Manufacture of rubber and plastic products fell by 37.3%, but remains the most important industrial branch in terms of turnover. To a lesser extent, the Manufacture of chemicals and chemical products saw its turnover fall by almost a quarter compared to 2012.

In contrast, the other components of the MES show a very different trend. The Manufacturing industry has seen its share weaken in favour of other industrial sections. In 2012, it accounted for around 90% of the sector compared to 77.9% today, highlighting a slight diversification of the Industry as a whole.

The Water supply; sewerage, waste management and remediation activities has been growing in recent years. Its activities amounted 68.8 million euros, a third more than in 2012. Its share of total turnover has doubled over the last decade (from 4.0% to 8.5%).

Figure 10. Distribution of revenue from Industry by NAF Group in 2021



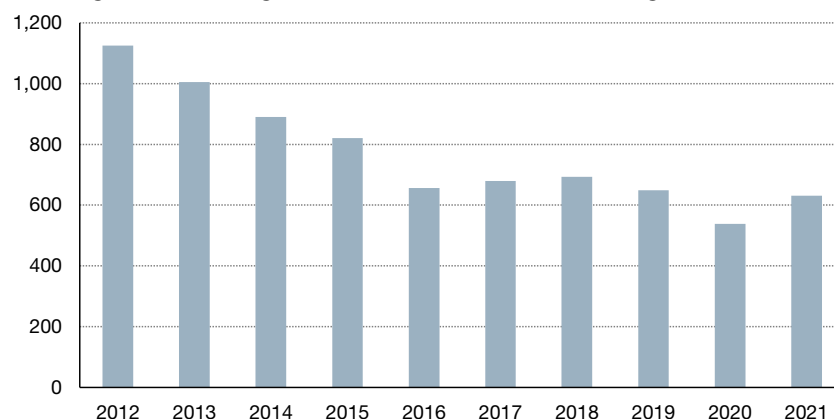
Sources: Department of Tax Services, Monaco Statistics

The activity of the Manufacturing industry greatly determines the economic results of the MES.

Indeed, three industries, the Manufacture of plastics products, the Manufacture of soap and detergents, cleaning and polishing preparations and perfumes and the Manufacture of pharmaceutical preparations, make up the bulk of Monaco's industrial fabric. They alone generate half of the sector's turnover.

2.3 Manufacturing has experienced strong variations

Figure 11. Change in revenue from Manufacturing since 2012



Unit: million euros

Sources: Department of Tax Services, Monaco Statistics

The last decade has seen a marked decline in Manufacturing. Since 2012, its turnover has fallen by an average of 5.6% every year, reaching 630.4 million euros in 2021.

Between 2012 and 2016, Manufacturing sales fell sharply by 41.7%, falling below €800 million for the first time since 2001.

Table 6. Variation of the revenue from Manufacturing between 2012 and 2021

	2012	2021	Share	Variation
Manufacture of rubber and plastic products	385.8	242.0	38.4%	-37.3%
Manufacture of chemicals and chemical products	168.6	128.2	20.3%	-24.0%
Manufacture of basic pharmaceutical products and pharmaceutical preparations	189.9	52.2	8.3%	-72.5%
Manufacture of wearing apparel	47.6	49.5	7.9%	4.0%
Repair and installation of machinery and equipment	18.5	27.6	4.4%	49.3%
Manufacture of machinery and equipment n.e.c.	130.2	19.9	3.2%	-84.7%
Manufacture of food products	17.0	18.9	3.0%	11.2%
Manufacture of paper and paper products	14.3	18.7	3.0%	30.8%
Printing and reproduction of recorded media	16.4	12.6	2.0%	-22.9%
Other manufacturing	17.2	9.2	1.5%	-46.6%
Manufacture of electrical equipment	20.3	7.8	1.2%	-61.8%
Manufacture of computer, electronic and optical products	3.4	3.7	0.6%	10.3%
Other Manufacturing NAF Divisions	96.3	40.2	6.4%	-58.2%
Total revenue from Manufacturing	1,125.3	630.4	100%	-44.0%
Total revenue from Industry	1,253.9	809.6	77.9%	-35.4%

Unit: million euros

Sources: Department of Tax Services, Monaco Statistics

Since 2012, Manufacturing has experienced major changes in the composition of its revenue. For this reason, the sectors that historically generate the most turnover have experienced very sharp falls in their sales over the last decade. Some branches, more residual, have on the contrary recorded good progress, but insufficient to compensate for the general trend.

The Manufacture of plastic packing goods improved by 26.0% (€5.5m in 2012 to €6.9m in 2021). Conversely, the Manufacture of other plastic products decreased from €161.1m in 2012 to €31.3m in 2021 (-80,6 %). As a result, the Manufacture of rubber and plastic products fell by 37.3% over the period.

The sharp decline in the Manufacture of perfumes and toilet preparations, from €154.3 million to €112.2 million, has caused the Manufacture of chemicals and chemical products to lose almost a quarter of its turnover since 2012.

In 2021, the Manufacture of basic pharmaceutical products and pharmaceutical preparations only achieved a quarter of the revenue it generated ten years earlier. Indeed, after a 40.1% increase in two years, it was the second largest sector in 2012. Following the closure of a major player in the Manufacture of pharmaceutical preparations, its turnover is divided by four, reaching 46.0 million euros in 2017.

The fall in Manufacturing sales is also attributed to the collapse of the Manufacture of machinery and equipment n.e.c., which lost almost 110 million euros during the period under review (-84.7%). This trend was precipitated in 2015-2016 by the phasing out of the Manufacture of fluid power equipment, which represented more than half of this branch. Over a decade, its contribution to Manufacturing revenue fell from 11.6% to 3.2%.

The Manufacture of electrical equipment suffered from the disappearance of a major employer in the Manufacture of electric domestic appliances between 2015 and 2017, and saw its turnover almost halved in ten years. Since then, this industry has relied mainly on the Manufacture of electricity distribution and control apparatus.

In Monaco, the Other Manufacturing brings together two types of activity. The Manufacture of medical and dental instruments and supplies, whose turnover has stagnated at around 2.9 million euros since 2012 (-0.5%), and the Manufacture of jewellery and related articles which has seen its sales halved in 10 years (from €12.2m to €6.1m).

The term Other Manufacturing NAF Divisions groups together activities that are globally residual or emerging in Monegasque Industry. This group has suffered a loss of 58.2% over the last decade. The reason for this variation lies in the disappearance of the Building of ships and boats four years ago. 78.1 million, the fifth largest turnover in the Manufacturing industry.

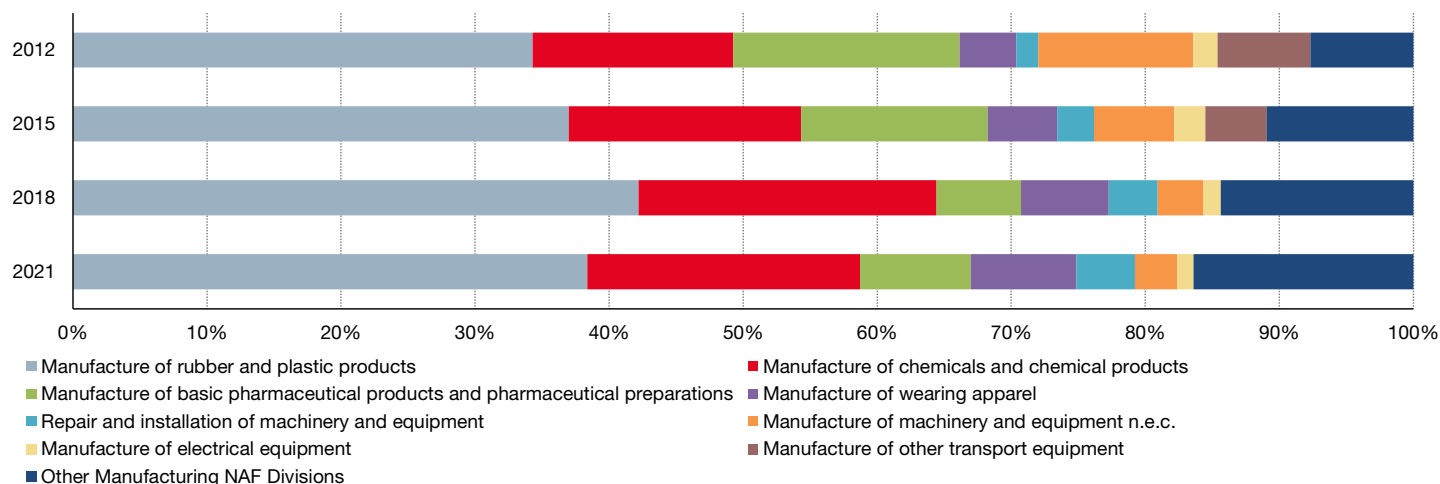
At the same time, certain branches have been growing in recent years, such as the Manufacture of wearing apparel, which has developed slightly (+4.0%). In the Principality, this type of production mainly concerns the Manufacture of knitted and crocheted articles and wearing apparel, except fur apparel. Among them, the Manufacture of other wearing apparel and accessories accounts for 58.8% of this branch's turnover with 29.1 million euros in 2021.

Another fast-growing activity, Repair and installation of machinery and equipment, has almost increased its turnover by 50%. Repair and maintenance of ships and boats saw a 25.7% increase between 2014 and 2015, and has since stabilised at around €8 million in turnover. The Installation of industrial machinery and equipment has also been booming since 2012, with +41.9% to reach 16.5 million euros in 2021.

The Manufacture of food products has also grown in ten years (+11.2%). The Manufacture of bread, fresh pastry goods and cakes, which accounts for 56.2% of its turnover, has fallen by 9.5% since 2012. On the other hand, the Manufacture of ice cream is booming with an increase of 62.5% to reach 1.1 million euros in turnover in 2021.

Finally, the Manufacture of paper and paper products is experiencing a more recent development (+19.1% between 2017-2019, to reach €18.6 million in turnover). This sector includes exclusively the Manufacture of corrugated paper and paperboard and of containers of paper and paperboard, as well as the Manufacture of paper stationery.

Figure 12. Evolution of breakdown of the revenue from Manufacturing between 2012 and 2021



Sources: Department of Tax Services, Monaco Statistics

The last ten years have thus accelerated the transformation of the Manufacturing industry. Due to the strong variations observed among most manufacturing branches, the composition of turnover is significantly different in 2021 than it was ten years ago.

In general, the top three positions are occupied by the same manufacturing activities. The Manufacture of rubber and plastic products is still the activity generating the most turnover (38.4% in 2021). The Manufacture of chemicals and chemical products is increasingly becoming the second most important sector (15.0% in 2012 against 20.3% in 2021). It is thus displacing the Manufacture of basic pharmaceutical products and pharmaceutical preparations, whose contribution has halved since 2012, falling from 16.9% to 8.3%, but remains among the branches that generate the most turnover

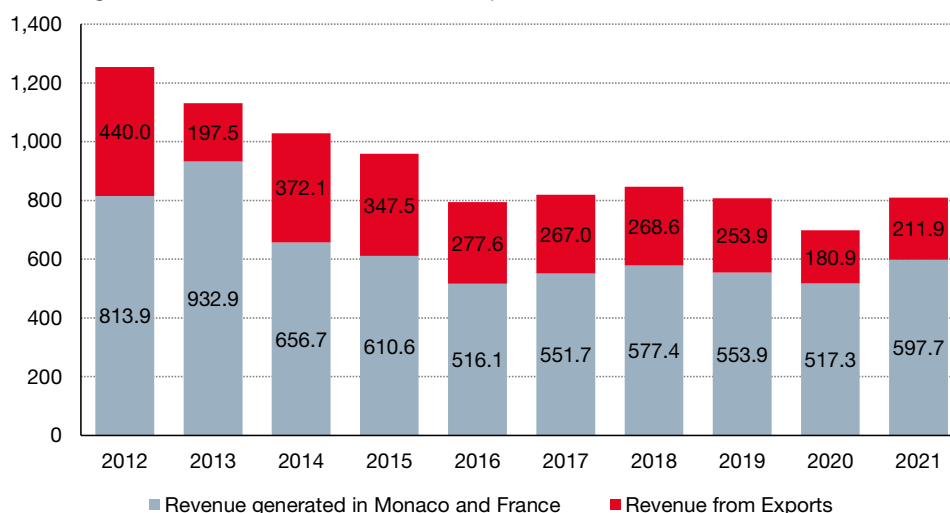
The Manufacture of basic pharmaceutical products and pharmaceutical preparations is followed by the Manufacture of wearing apparel. Thanks to a slight improvement in turnover since 2012 (+4.0%), the textile industry will see its share double over the period to almost reach 8% of Manufacturing turnover in 2021. A breakthrough made at the expense of the Manufacture of machinery and equipment n.e.c. In 2012, it accounted for 11.6% of Manufacturing sales, the fourth largest turnover. Its strong variation over the period (-84.7%) has caused it to fall to seventh place (3.2%).

On the strength of its economic growth between 2012 and 2021 (+49.3%), the Repair and installation of machinery and equipment is gaining in importance and now accounts for 4.4% of turnover, compared with 1.6% ten years earlier.

Despite a turnover that has deteriorated by more than 60%, the share of Manufacture of electrical equipment remains stable over time and varies around 1.5%.

2.4 Foreign trade weakens

Figure 13. Evolution of industrial export sales between 2012 and 2021



Unit: million euros

Sources: Department of Tax Services, Monaco Statistics

Exports are a key item for the Industry as they account for a significant proportion of its turnover. In 2021, total sales outside the Monegasque and French territories amounted to 211.9 million euros, i.e. more than a quarter of turnover (26.2%).

However, industrial exports are deteriorating over time. Over the last decade, sales abroad have fallen by 51.8%, a variation twice as great as that of turnover generated in Monaco and France (-26.6%).

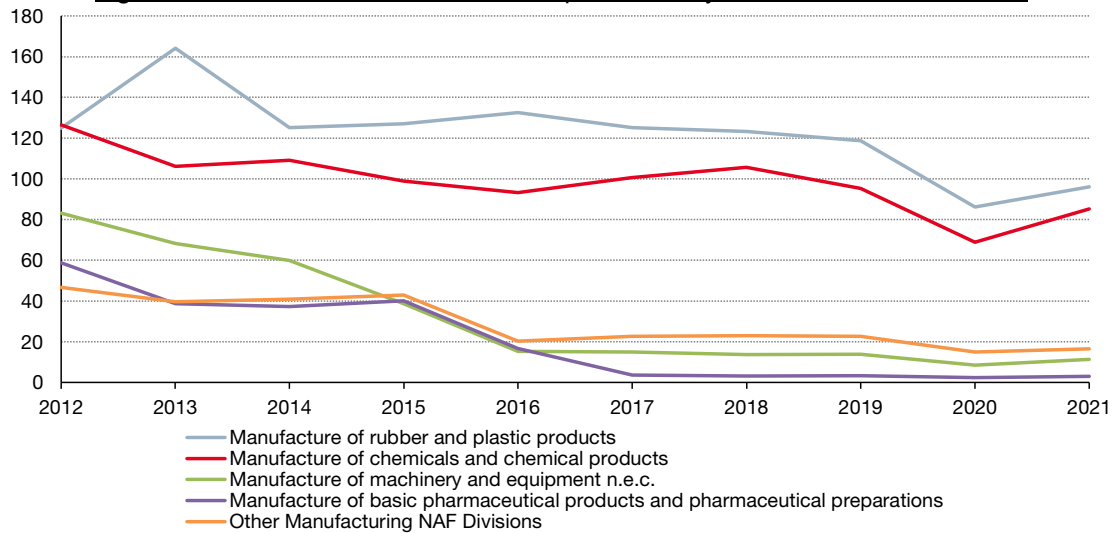
Exports to European Union countries (excl. France) were more severely impacted over the period. They have collapsed by 57.5% since 2012 to reach 119.7 million euros. In 2021, exports outside the EU amounted to 92.3 million euros, 66.1 million less than in 2012 (-41.7%).

Generally speaking, the contribution of Industry to total exports has been weakening over the last ten years. In 2012, it was the second most exporting MES with 32.1% of the Principality's export turnover (excluding Financial and insurance activities), after Wholesale Trade (51.1%). A decade later, Industry contributes only for 16.3%, behind Wholesale Trade (59.6%) and Retail Trade (19.6%).

The variations displayed by industrial exports are reflected in Monaco's foreign trade as a whole. Since 2012, total export turnover (excluding Financial and insurance activities) has fallen by 5.1%. This decline has been mitigated by the good results of the Wholesale trade (+10.7%) and Retail trade (+24.6%).

Following the COVID-19 pandemic, industrial exports fell by almost 30% between 2019 and 2020, compared with 10.2% for the MESSs as a whole. The economic recovery that followed was also felt in foreign sales with an increase of 17.2% between 2020 and 2021, surpassing that of all Monegasque exports (+15.6%). This improvement is mainly due to exports outside the EU, which increased by half over this period (92.3 M€ compared to 61.3 M€).

Figure 14. Evolution of revenue from Export sales by NAF Divisions since 2012



Unit: million euros

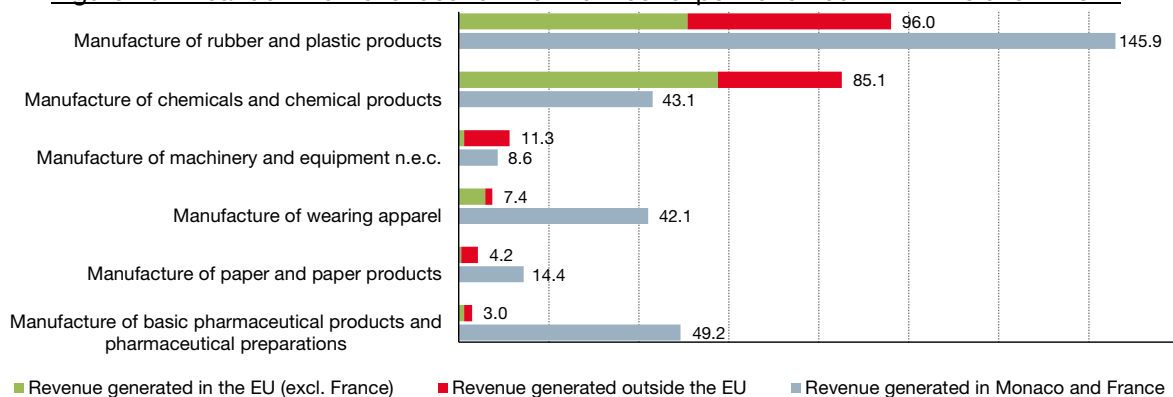
Sources: Department of Tax Services, Monaco Statistics

Industrial exports are mainly supported by two activities. The Manufacture of rubber and plastic products and the Manufacture of chemicals and chemical products had the same level of export turnover in 2012 (€124.8m and €126.5m), and then followed similar trajectories (-23.1% and -32.7%).

The peak reached by the Manufacture of rubber and plastic products in 2013 was achieved thanks to the results of the Manufacture of plastic plates, sheets, tubes and profiles (€140.0 M against €107.1 M), but which were quickly erased the following year. Between 2019 and 2020, exports of this branch were impacted by the health crisis (-27.4%), and will struggle in 2021 to recover their pre-crisis level. The Manufacture of chemicals and chemical products is also experiencing a decline in foreign sales, similarly accelerated by the pandemic (-27.7%). With €75.2 million in 2021, the Manufacture of perfumes and toilet preparations has not managed to reproduce its 2019 export turnover (€87.2 million).

The last decade marks the end of a diversification of foreign trade in this sector. The Manufacture of machinery and equipment n.e.c. accounted for almost 19% of industrial export turnover 10 years ago (5.3% in 2021). This activity saw its exports fall by 81.8% between 2012 and 2016. The Manufacture of basic pharmaceutical products and pharmaceutical preparations accounted for 13.4% of exports in 2012 compared to 1.4% ten years later. Between 2015 and 2017, it lost around 90% of its foreign sales, almost entirely in the Manufacture of pharmaceutical preparations.

Figure 15. Breakdown of revenues for the five most export-oriented NAF Divisions in 2021



Unit: million euros

Sources: Department of Tax Services, Monaco Statistics

Export turnover from the Manufacture of rubber and plastic products is evenly divided between sales to EU countries excluding France (€50.8m) and those outside the EU (€45.2m). The Manufacture of chemicals and chemical products makes the majority of its exports through in the EU (67.7%), as does the Manufacture of wearing apparel (78.8%). On the other hand, trade in products from the Manufacture of machinery and equipment n.e.c. is mainly with non-EU countries (89.6%), as is the case for the Manufacture of paper and paper products (86.6%).

Certain Monegasque industries are very dependent on their sales outside the monegasque and french territory. Among the various branches of the sector, two generate more turnover outside its borders than in Monaco and France. This is the case for the Manufacture of chemicals and chemical products (66.4%) and the Manufacture of machinery and equipment n.e.c. (56.7%).

2.5 Industry facing the COVID-19 pandemic

Table 7. Variation of Industry's revenue between 2019 and 2021

	2019	2020	2021	Var 2019/20	Var 2019/21
Manufacturing including:	648.6	538.7	630.4	-16.9%	-2.8%
Manufacture of rubber and plastic products	250.7	196.6	242.0	-21.6%	-3.5%
Manufacture of chemicals and chemical products	134.0	107.9	128.2	-19.5%	-4.3%
Manufacture of basic pharmaceutical products and pharmaceutical preparations	44.2	43.8	52.2	-0.9%	18.1%
Manufacture of wearing apparel	51.3	50.5	49.5	-1.7%	-3.5%
Repair and installation of machinery and equipment	29.7	26.0	27.6	-12.6%	-7.2%
Manufacture of machinery and equipment n.e.c.	23.7	16.3	19.9	-31.3%	-16.2%
Manufacture of food products	18.1	15.0	18.9	-17.3%	4.4%
Manufacture of paper and paper products	18.6	14.1	18.7	-24.1%	0.5%
Printing and reproduction of recorded media	15.1	11.6	12.6	-22.6%	-16.1%
Other Manufacturing NAF Divisions	63.1	56.9	60.8	-9.8%	-3.7%
Water supply; sewerage, waste management and remediation activities	65.9	64.6	68.8	-1.9%	4.4%
Mining and quarrying and others industries	93.4	94.9	110.4	1.6%	18.2%
Total	807.9	698.2	809.6	-13.6%	0.2%

Unit: million euros

Sources: Department of Tax Services, Monaco Statistics

The year 2021 marks the return of normal industrial activity with 16.0% in annual growth, even exceeding its turnover achieved in 2019. The pandemic was a real shock for the Monegasque Industry. The sanitary measures led to a slowdown in production. In one year, the industrial activity fell by 13.6%, making it the fourth MES most affected by the crisis. It should be noted that this annual variation is not the strongest in recent years, since this sector recorded a 17.1% drop in turnover in 2016.

Manufacturing has suffered the most from the situation, losing around 110 million euros in turnover between 2019 and 2020 (-16.9%). Despite the economic recovery of their activities in 2021 (+17.0%), the production and processing industries are struggling to return to their pre-crisis standards. Depending on the sector to which they belong, companies have been unequally affected.

Some activities have been able to return to a result close to that of the pre-crisis period. This is the case for the Principality's leading manufacturing sectors. In 2021, the Manufacture of rubber and plastic products, the Manufacture of chemicals and chemical products and the Manufacture of wearing apparel are less than 5% of their 2019 turnover.

Few sectors achieved better sales in 2021 than in 2019. The sanitary restrictions have had very little effect on the turnover of the Manufacture of basic pharmaceutical products and pharmaceutical preparations (-0.9%), which even stands out during this period with an increase of 18.1% in two years.

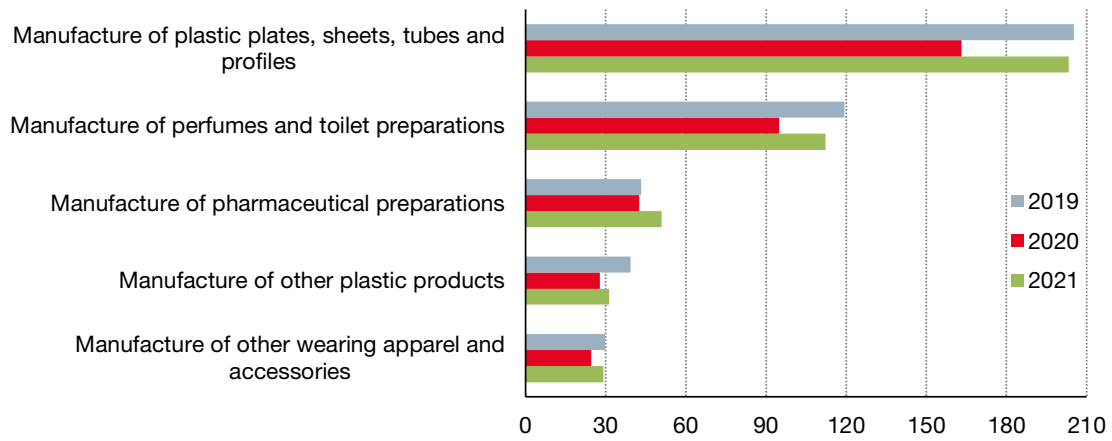
Similarly, the drop of 2 million in turnover in the Industrial manufacture of bread and fresh pastry led to a decline in the Manufacture of food products in 2020 (-17.3%), but also to a recovery in the following year of 26.2%. On the other hand, the Manufacture of paper and paper products suffered a sharp decline in 2020 (-24.1%). The revenue from the Manufacture of corrugated paper and paperboard and of containers of paper and paperboard decreased by 4.4 million euros (-24.4%), but then rebounded by 33.1%, thereby boosting the entire sector.

Many manufacturing industries are struggling to recover from this period of recession. In 2021, revenues from the Manufacture of machinery and equipment n.e.c. and Printing and reproduction of recorded media were 19.9 and 12.6 million euros, almost 16% below their 2019 levels. To a lesser extent, this is also the case for the Repair and installation of machinery and equipment, which fell by 7.2% over the period under review.

Water supply, sewerage, waste management and remediation activities was slightly affected by the pandemic. This sector showed a slowdown of almost 2% in 2020, and then rebounded by 6.4%. Water collection, treatment and supply and Waste collection saw their turnover fall slightly in 2021 (-4.5% and -3.9%), before returning to their pre-crisis level the following year. Sewerage and Remediation activities, on the other hand, experienced a boom during this period, increasing by 17.1% and 13.5% respectively in two years.

In contrast, other sectors have been able to benefit from the crisis. The Mining and quarrying industry, Electricity, gas, steam and air conditioning supply and the Agriculture, forestry and fishing even managed to grow their turnover in 2020. Over the period under review, these activities combined have outperformed, with growth of 18.2%.

Figure 16. Revenues of the 5 NAF classes generating the most revenue in Manufacturing between 2019 and 2021



Unit: million euros

Sources: Department of Tax Services, Monaco Statistics

In 2019, five activities accounted for more than half of industrial turnover (54.1%). During the COVID-19 crisis, their variations globally explain those of their respective branches.

The decrease in sales of products from the Manufacture of plastic plates, sheets, tubes and profiles of 41.9 million euros, and from Manufacture of other plastic products (-29.4%) caused the slowdown in the Manufacture of Rubber and Plastic Products in 2020 (-21.6%).

In 2020, the Manufacture of perfumes and toilet preparations generated 25 million euros less than in 2019 (-20.5%), then experienced an 18.3% increase the following year, but this was not enough to make up for the loss in the previous year.

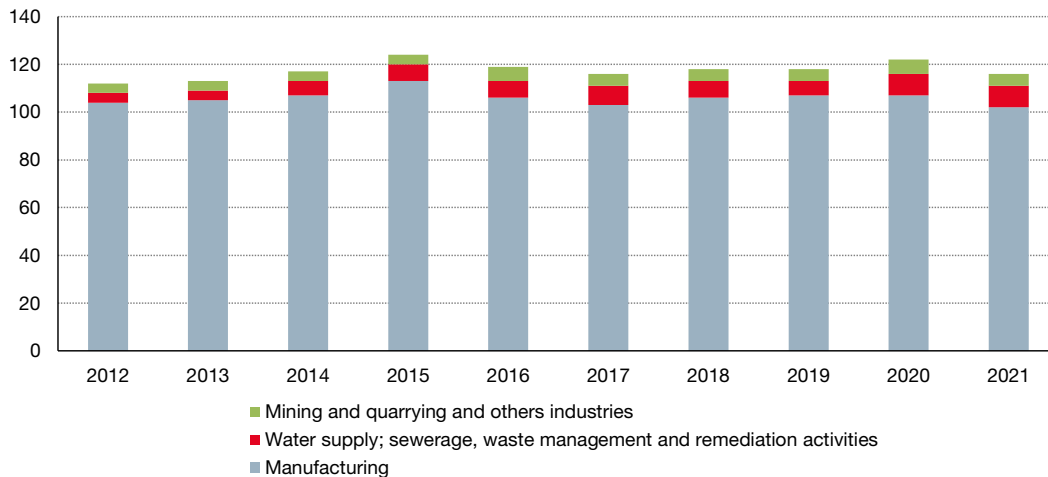
Despite the pandemic, the Manufacture of basic pharmaceutical products remained stable (€43.2m in 2019 against €42.5m in 2020), before reaching €50.9m in 2021.

After falling by 17.6% in 2020, the Manufacture of other wearing apparel and accessories is almost back to the level reached two years earlier (€29.1m in 2021 compared to €29.7m in 2019).

3. Employment

3.1 A stable number of employers, but an evolving sector

Figure 17. Evolution of the number of employers in the Industry



Sources: Caisses Sociales de Monaco, Monaco Statistics

The number of employers has remained stable over the past decade. In total, 116 structures employed workers in 2021, 4 more than in 2012 (+3.6%). This stagnation is not representative of the evolution in the Principality, since the number of employers, all MESs combined, has increased by 19.2% over the period (6,308 compared to 5,291).

In 2021, Industry is the sector with the fewest employers behind the Public administration, education, human health and social work activities (87), but close behind Transportation and storage (123) and Information and communication (130).

Since 2012, the highest number of employers was reached in 2015 with 124 entities. Between 2019 and 2020, Industry is one of the four MESs to see an increase in the number of employers (+4), ahead of Financial & Insurance Activities (+3). Conversely, Industry is the only sector to record a negative change the following year (-6).

Table 8. Breakdown of employers in the Industry

	2012	2021	Share
Manufacturing including:	104	102	87.9%
Repair and installation of machinery and equipment	13	17	14.7%
Manufacture of food products	11	12	10.3%
Manufacture of rubber and plastic products	11	11	9.5%
Printing and reproduction of recorded media	10	9	7.8%
Manufacture of basic pharmaceutical products and pharmaceutical preparations	7	7	6.0%
Manufacture of wearing apparel	7	7	6.0%
Manufacture of computer, electronic and optical products	5	5	4.3%
Manufacture of chemicals and chemical products	8	5	4.3%
Other Manufacturing NAF Divisions	32	29	25.0%
Water supply; sewerage, waste management and remediation activities	4	9	7.8%
Agriculture, forestry and fishing	1	2	1.7%
Mining and quarrying	2	2	1.7%
Electricity, gas, steam and air conditioning supply	1	1	0.9%
Total	112	116	100%

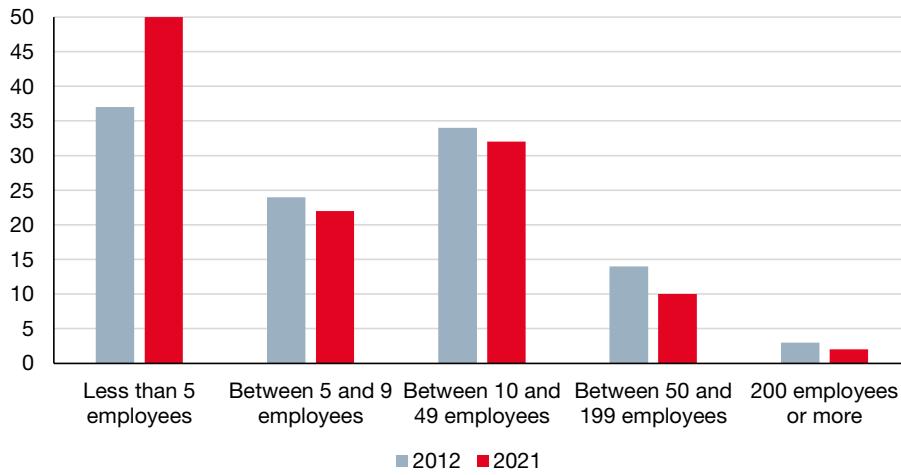
Sources: Caisses Sociales de Monaco, Monaco Statistics

In 2021, 102 manufacturing industries employ workers, 5 fewer than last year. This is the lowest total over the period since 2017 (103). In contrast, the highest number of manufacturing employers was reached in 2015 (113), thanks in particular to the development of the Manufacture of ice cream (+4 in four years).

Overall, the number of employers has varied very little in each of the manufacturing industries over the last ten years. Repair and installation of machinery and equipment is an exception with 5 more structures compared to 2013. In addition, it is worth noting the disappearance of activities in the Manufacture of other transport equipment in 2018, following the closure of its 4 employers specialising in the Building of ships and boats.

Water supply; sewerage, waste management and remediation activities accounts for nearly 8% of employers in the sector, up from 3.6% ten years ago. This sector has grown with 5 more employers than in 2012, mainly in the Sewerage.

Figure 18. Distribution of the number of industrial employers by number of employees



Sources: *Caisses Sociales de Monaco, Monaco Statistics*

Although the number of industrial employers is broadly similar after ten years, the difference is in their size. Large companies are gradually giving way to smaller companies with fewer employees.

In 2021, 50 structures employ less than 5 employees, compared to 37 in 2012. They are mainly present in Manufacturing (45). A quarter of these employers are engaged in the Repair and installation of machinery and equipment (12).

Overall, small companies with less than 10 employees are increasing, rising from 61 to 72 entities in ten years. Those employing between 10 and 49 workers remain stable (32 against 34). Conversely, the number of employers with at least 50 employees have fallen by almost 30% (-5) over the period observed.

Between 2012 and 2021, this trend is illustrated in key branches of Monegasque manufacturing. The Manufacture of rubber and plastic products had 4 employers with 50 or more employees, compared to 2 in 2021, to the benefit of companies with less than 10 employees, which rose from 4 to 7. Similarly, 5 Manufacture of basic pharmaceutical products and pharmaceutical preparations have fewer than 10 employees, 3 more than ten years ago. An identical variation in the Manufacture of computer, electronic and optical products, which in addition to this sees the disappearance of 2 large structures, each employing between 50 and 199 employees.

These changes have a direct impact on industrial employment given the size of the sector.

3.2 Almost a quarter of industrial employees less since 2012

The number of employees in the Industry has been steadily decreasing from one year to the next over the last decade. This trend is explained by a series of relocations of large industrial groups and the social plans they have generated. Most of the closures involved large companies, some of them employing around 100 workers, and in key branches of the sector such as the chemical and plastics industries.

As a result, the data on the evolution of the number of industrial employees shows significant volatility in certain activities. These variations must therefore be put into perspective, given the high concentration of the workforce in a small number of players.

Table 9. Number of employees by MES between 2012 and 2021

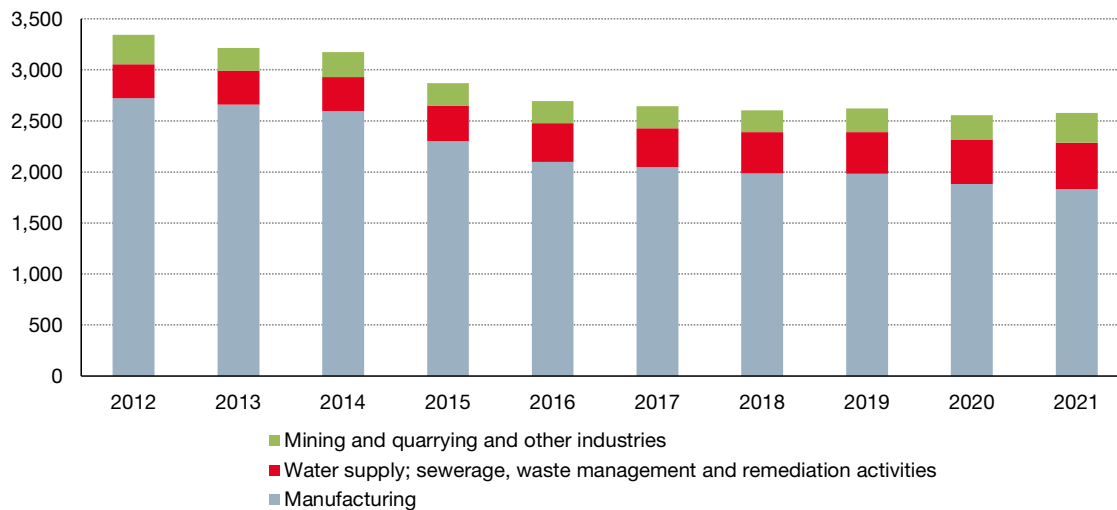
	2012	2021	Average annual growth rate
Scientific and technical activities, administrative and support service activities	9 814	12 672	2,6%
Accommodation and food service activities	5 647	7 148	2,4%
Other service activities	6 237	6 142	-0,2%
Construction	4 190	5 662	3,1%
Public administration, education, human health and social work activities	3 432	4 214	2,1%
Financial and insurance activities	3 424	4 134	1,9%
Retail trade	2 652	2 960	1,1%
Manufacturing, mining and quarrying, and others industries	3 345	2 579	-2,6%
Wholesale trade	2 230	2 552	1,4%
Transportation and storage	1 842	1 962	0,6%
Real Estate activities	1 427	1 653	1,5%
Information and communication	1 202	1 401	1,5%
Total	45 441	53 079	1,6%

Sources: *Caisses Sociales de Monaco, Monaco Statistics*

At the end of 2021, the industry had 2,579 employees, or 4.9% of the private sector workforce.

Since 2012, while the number of employees has increased in the Principality (+16.8%), this sector has lost almost a quarter of its workforce, representing 766 employees.

Figure 19. Evolution of the number of employees in the Industry between 2012 and 2021



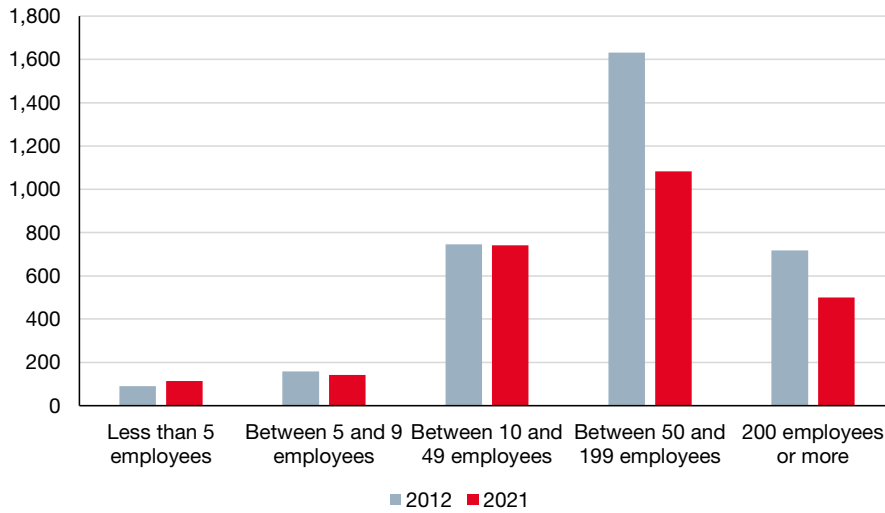
Sources: *Caisses Sociales de Monaco, Monaco Statistics*

In 2012, 2,721 individuals worked in the Manufacturing industry, representing 81.1% of the sector. This share gradually declines to 71.1% (1,832 employees) ten years later.

Two trends have emerged in recent years. Firstly, the Manufacturing industry experienced a sharp change in its workforce between 2012 and 2017 (-24.7%) and lost an average of 135 employees per year, falling from 2,721 to 2,048. Since then, the number of employees continues to decline, but more slowly (-10.5% between 2017 and 2021).

Water supply; sewerage, waste management and remediation activities changes differently over this period. 120 more individuals are employed in this sector, bringing the total number of employees to 452 in 2021. Waste collection and Remediation activities show the strongest growth.

Figure 20. Distribution of the number of employees by their employers' size



Sources: *Caisses Sociales de Monaco, Monaco Statistics*

The sharp decline in the number of employees is felt more in large companies. In 2021, 1,082 people work in groups with between 50 and 199 employees, compared to 1,633 in 2012. Similarly, industries with more than 200 employees have seen their workforces fall by almost 30% (500 compared to 718).

Medium-sized organisations maintain an unchanged number of employees. Employers between 10 and 49 stagnate at around 740 employees.

On the other hand, more people are working in small companies. Those with fewer than 5 employees employ 113 workers in 2021, 23 more than in 2012.

3.3 Number of employees in Manufacturing falls by a third in ten years

Table 10. Variation of the number of employees by Manufacturing NAF division between 2012 and 2021

	2012	2021	Share	Variation
Manufacture of chemicals and chemical products	457	432	23.6%	-5.4%
Manufacture of rubber and plastic products	763	390	21.3%	-48.9%
Manufacture of wearing apparel	213	239	13.0%	12.1%
Manufacture of food products	161	145	7.9%	-10.0%
Repair and installation of machinery and equipment	103	101	5.5%	-1.7%
Manufacture of machinery and equipment n.e.c.	116	98	5.3%	-15.6%
Printing and reproduction of recorded media	105	83	4.5%	-21.0%
Manufacture of paper and paper products	84	65	3.5%	-22.6%
Manufacture of basic pharmaceutical products and pharmaceutical preparations	224	57	3.1%	-74.5%
Manufacture of electrical equipment	52	56	3.1%	7.7%
Manufacture of computer, electronic and optical products	280	22	1.2%	-92.0%
Other Manufacturing NAF Divisions	164	145	7.9%	-11.9%
Total	2,721	1,832	100%	-32.7%

Sources: *Caisses Sociales de Monaco, Monaco Statistics*

Between 2012 and 2021, the Manufacturing industry has almost 900 fewer employees. The distribution of the workforce between the different branches of industry reveals very pronounced falls in the number of employees, particularly among the Principality's historic activities. These variations are often due to the closure of a major company in the sector.

Nearly one in four employees will be working in the Manufacture of chemicals and chemical products in 2021. It will overtake the Manufacture of rubber and plastic products as the industrial branch employing the most people. This is noteworthy in view of the small number of employers in this sector (5 in 2021). Compared to the other sectors, it registers a slight decrease over the period (-25), mainly in the Manufacture of perfumes and toilet preparations.

The number of employees in the Manufacture of rubber and plastic products has halved in ten years. This sector accounted for 28.0% of the total number of employees in the Manufacturing industry, compared to 21.3% in 2021. This decrease in the number of employees is mainly due to the closure of three factories specialising in the Manufacture of plastics products, each employing between 50 and 199 people.

The Manufacture of wearing apparel is an exception, with a 12.1% increase in employment over the last ten years, driven by the Manufacture of knitted and crocheted apparel.

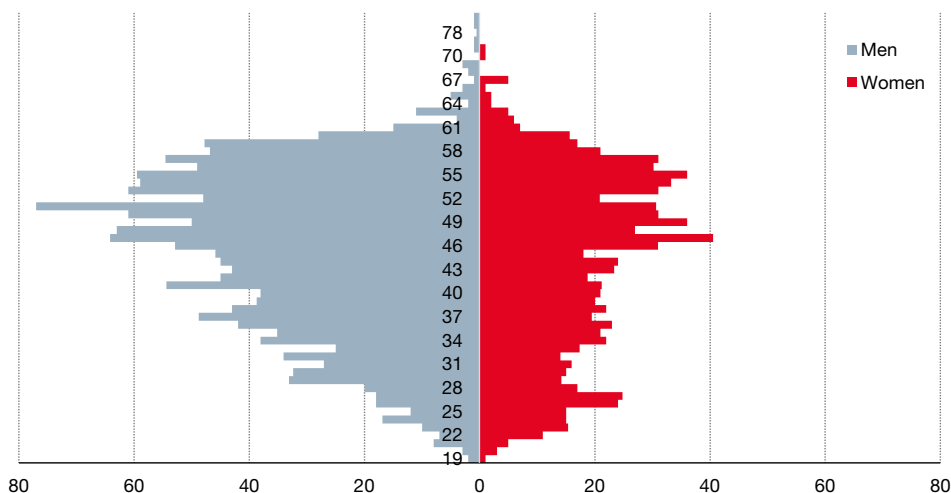
The closure of a pharmaceutical products laboratory resulted in hundreds of employees being made redundant in stages between 2012 and 2016. As a result, the Manufacture of basic pharmaceutical products and pharmaceutical preparations has shed three quarters of its employees in ten years.

The closure of 2 companies employing between 50 and 199 employees has led to a drastic decrease in the number of employees in the Manufacture of computer, electronic and optical products (-92.0%) over the last decade. In 2012, it was the third most labour-intensive manufacturing branch (10.3%), and now ranks eleventh (1.2%).

The Other Manufacturing NAF Divisions show a variation of -11.9%, partly due to the cessation of production in the Building of ships and boats (-51 employees in 2012). However, the Manufacture of medical and dental instruments and supplies has more than doubled its workforce in ten years (from 20 to 48).

3.4 One in three employees is over 50

Figure 21. Age pyramid of Industry employees by gender in 2021



Sources: Caisses Sociales de Monaco, Monaco Statistics

Industry is a rather male sector, with almost two thirds of its employees being men (64.2%) in 2021. This proportion is higher than in the overall employed population in the Principality (60.7%). The gender distribution of employees in this sector is slightly more unbalanced than it was ten years ago. In fact, women working in the Industry represent 35.8% of its active population in 2021, compared to 37.9% in 2012.

Generally speaking, the workforce in Industry has been ageing over the last decade, since the average age has risen from 43.3 to 44.5 years old. In 2021, it is higher than that of the Monegasque employed population (42.5 years old). The average age is 45.0 years old for men (43.2 in 2012) and 43.5 years old for women (43.4 in 2012).

One third of employees in the Industry are between 45 and 54 years old, and one in five employees is over 55. Conversely, 20.7% of those working in the sector are under 34 years old. Women in the sector are younger, with a quarter of them under 34, compared to 18.4% of men.

3.5 Three quarters of employees in the industry are French

Figure 22. Distribution of Industry employees by nationality in 2021



Sources: Caisses Sociales de Monaco, Monaco Statistics

In 2021, almost 75% of the sector's employees are of French nationality. This is the third MES where this nationality is most represented, behind Information and Communication (86.0%) and the Public administration, education, human health and social work activities (85.7%). 543 French nationals do not work anymore in Industry since 2012.

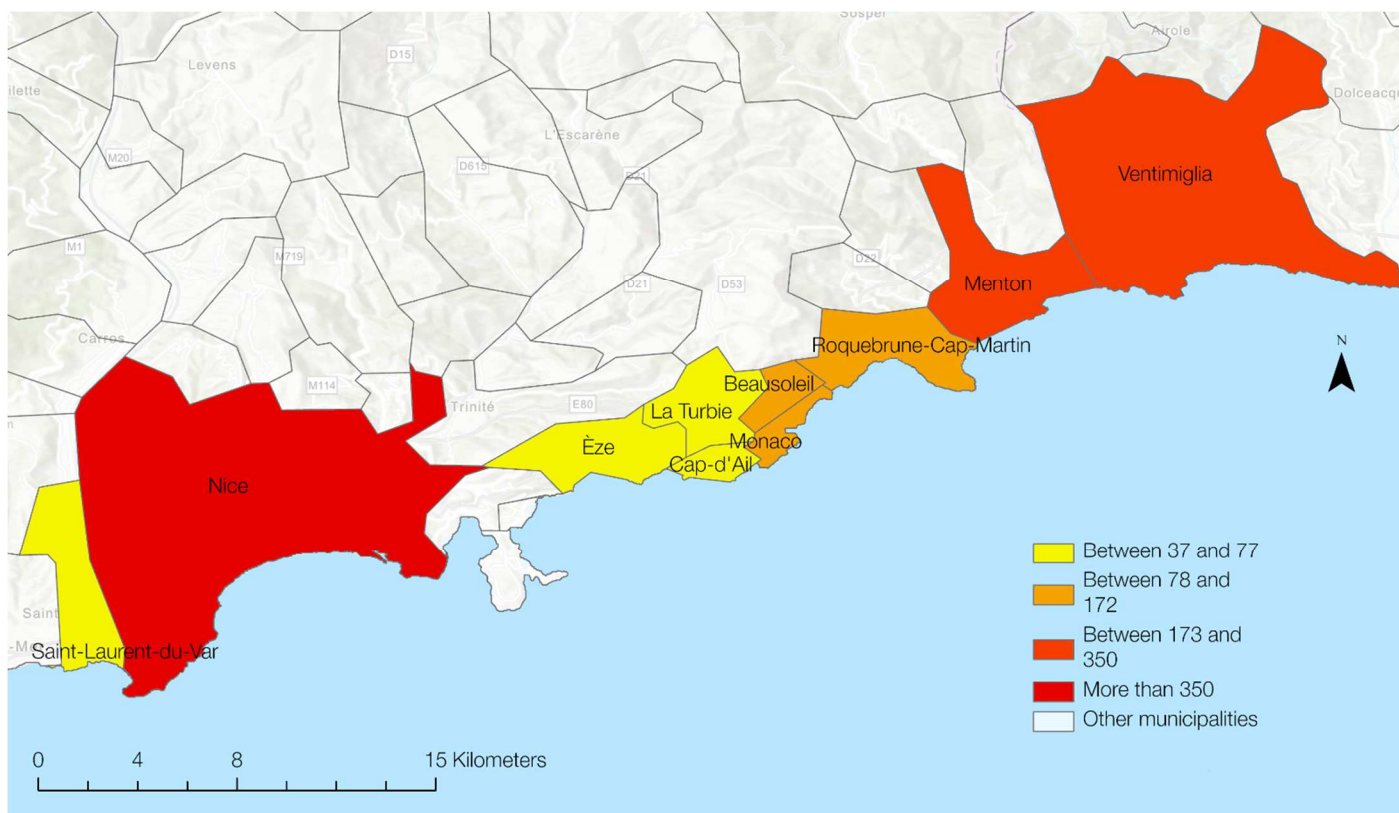
Italians account for 16.7% of the industrial workforce with 430 individuals. They are mainly present in the Manufacture of wearing apparel and in the Manufacture of rubber and plastic products (108).

The number of employees of Portuguese nationality has fluctuated between 41 and 50 for the last ten years, and will be 49 in 2021. A quarter of them work in the Manufacture of wearing apparel.

Industry is the seventh largest MES employing Monegasque nationals (39, or 4.0%), followed by Retail Trade (45).

3.6 A quarter of employees in the industry live in Nice

Figure 23. The 10 municipalities where the majority of Industry employees come from in 2021



Sources: *Caisses Sociales de Monaco, Monaco Statistics*

In 2021, 2,060 employees live in the Alpes-Maritimes (79.9%), of which 437 are in neighbouring municipalities (17.0%). Roquebrune-Cap-Martin has 165 and Beausoleil 160. One worker in four comes from Nice (665) and 13.8% from Menton (350).

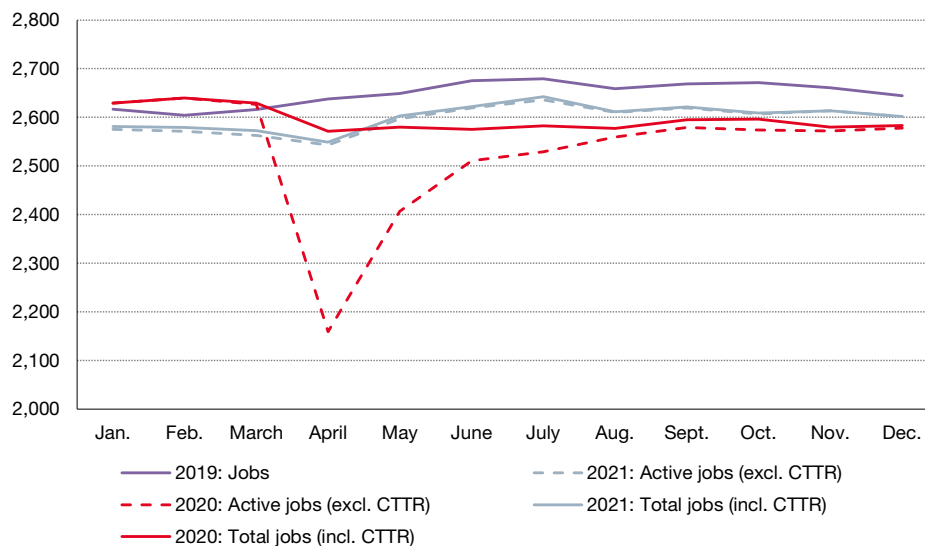
In addition, 324 workers come from Italy (12.6%). Moreover, Ventimiglia is the third most represented municipality among the sector's employees (210), ahead of Monaco.

Industry employs 172 residents of the Principality, the lowest number after Information and Communication activities (118). In volume, only 6.7% of employees in Industry live in Monaco, making it the MES with the lowest proportion of resident employees after Construction (4.5%).

Of the 432 employees in the Manufacture of chemicals and chemical products in 2021, 311 come from the Alpes-Maritimes outside the neighbouring municipalities (including 123 from Nice). Similarly, this manufacturing branch also has the most residents in the Principality (31). Residents of neighbouring municipalities work mainly in Waste collection. Almost one Italian resident in three is employed in the Manufacture of wearing apparel.

3.7 Industrial employment preserved during the COVID-19 pandemic

Figure 24. Evolution of the number of jobs in the Industry between 2019 and 2021



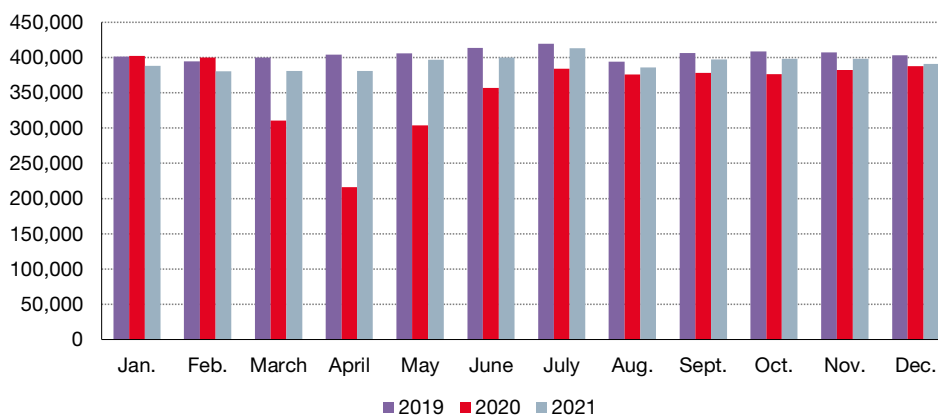
Sources: Caisses Sociales de Monaco, Monaco Statistics

Following the COVID-19 pandemic, the year 2020 was marked by a period of containment with a major impact on employment in the Principality. From March 2020, the number of monthly jobs is lower than the previous year. However, the Strengthened provision for temporary layoff (CTTR) made it possible to preserve many jobs, and thus limited job losses at the height of the crisis.

In April 2020, 412 jobs in the sector benefited from the CTTR (16.0% of jobs filled in that period). In total, the Industry had 2,571 jobs (of which 2,159 were active), compared to 2,638 in April 2019.

The CTTR is fading fast in this sector. In May 2020, 173 jobs are affected by this measure, and 64 the following month. Between November 2020 and October 2021, the CTTR is applied to about ten jobs.

Figure 24. Evolution of the number of hours worked in the Industry between 2019 and 2021



Sources: Caisses Sociales de Monaco, Monaco Statistics

The year 2020 started with a higher volume of hours worked than the previous year (+0.1% in January and +1.3% in February). The lockdown led to a partial shutdown of industrial activity: in April 2020, this sector had 216,259 hours worked, almost half the total recorded in April 2019 (404,095). Thereafter, despite steady growth since the second quarter of 2020, the pace of hours worked struggles to return to pre-crisis levels.

Table 14. Variation of the number of Industry employees between 2019 and 2021

	2019	2020	2021	Var 2019/20	Var 2019/21
Manufacturing including:	1,982	1,882	1,832	-5.0%	-7.5%
Manufacture of chemicals and chemical products	430	405	432	-5.8%	0.4%
Manufacture of rubber and plastic products	477	410	390	-14.0%	-18.3%
Manufacture of wearing apparel	253	263	239	3.8%	-5.8%
Manufacture of food products	169	142	145	-16.4%	-14.5%
Repair and installation of machinery and equipment	95	99	101	3.9%	6.7%
Manufacture of machinery and equipment n.e.c.	113	104	98	-8.0%	-13.3%
Printing and reproduction of recorded media	98	95	83	-3.2%	-15.3%
Manufacture of paper and paper products	73	75	65	2.3%	-11.0%
Manufacture of basic pharmaceutical products and pharmaceutical preparations	59	62	57	5.7%	-2.9%
Manufacture of electrical equipment	53	55	56	3.3%	5.1%
Manufacture of computer, electronic and optical products	25	24	22	-6.3%	-10.5%
Other Manufacturing NAF Divisions	136	149	145	9.8%	6.4%
Water supply; sewerage, waste management and remediation activities	409	434	452	5.9%	10.4%
Mining and quarrying and other industries	231	242	294	4.5%	27.1%
Total	2,623	2,558	2,579	-2.5%	-1.7%

Sources: *Caisses Sociales de Monaco, Monaco Statistics*

Between 2019 and 2020, the number of employees in the Industry has decreased very slightly (-2.5%). This is a smaller variation than for the Principality's salaried population as a whole (-3.9%). However, in two years, Industry has lost 1.7% of its employees, behind Accommodation and food service activities (-12.5%) and Transportation and storage (-6.5%).

The manufacturing branch of Industry has suffered the most from the sanitary crisis with 150 fewer employees between 2019 and 2021. Its different activities have been unevenly impacted by the pandemic. Some, such as the Manufacture of chemicals and chemical products, have been able to bounce back and increase their workforce after two years. For others, the health situation has only accelerated an already existing trend of workforce reduction over the last ten years. This is the case in particular for the Manufacture of rubber and plastic products, which, while having 87 fewer employees in two years, was already losing 98 between 2016 and 2019.

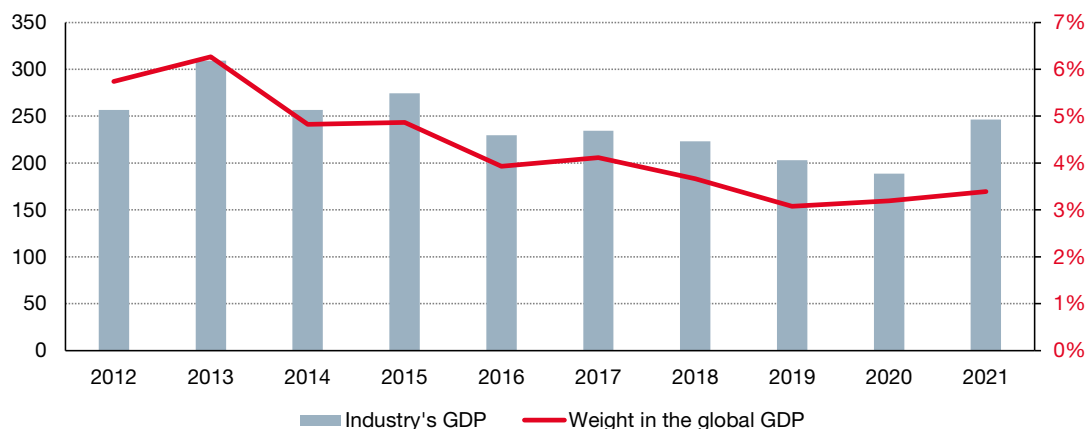
In two years, 41 more employees work in Water supply; sewerage, waste management and remediation activities. An increase coming from the activities of Waste collection.

Similarly in Mining and quarrying, the increase of more than a quarter in the number of employees comes mainly from Mining support service activities.

4. Gross Domestic Product (GDP)

4.1 In 2021, Industrial GDP emerges from three years of recession

Figure 26. Evolution of Industry's GDP in nominal terms and its share between 2012 and 2021



Unit: million euros

Source: Monaco Statistics

The economic recovery in the Industry in 2021 is reflected in the increase of its GDP by 28.9% (in constant euros²), reaching 246.2 million euros (compared to 188.4 last year). It is the fifth MES with the best growth rate over this period, even exceeding the national average (+21.6%).

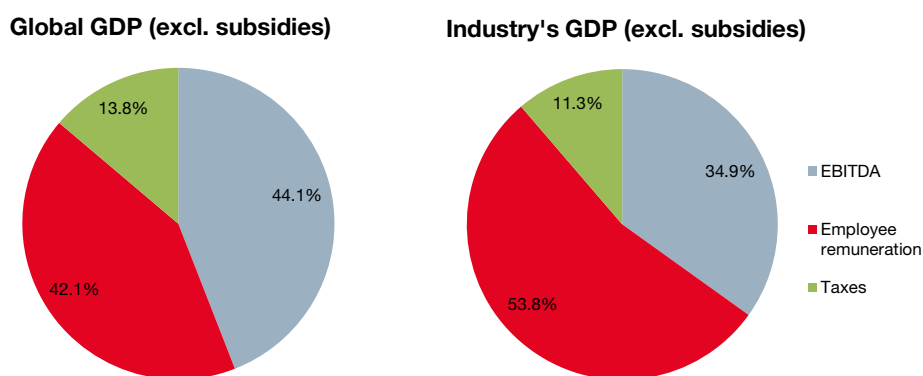
However, the good economic results must be put into perspective by looking at them over a longer period. Over the last ten years, Industry is the only sector with a negative variation (-13.0%).

In 2021, Industry will represent 3.4% of the Principality's GDP, the second lowest contribution of a sector of activity in the country's production (behind Transportation and storage with 2.7%). A share in the Monegasque GDP which is constantly decreasing, as it reached 5.7% ten years ago.

The year 2021 compensates for a decade marked by the slowdown in Industry production. After peaking in 2013 at 309.3 million euros, the trend was downwards to 203.0 million in 2019, a variation of -37.6% (in constant euros). Between 2019 and 2020, the health situation weakened the Industry's GDP by 9.7% to its lowest level in the decade (188.4 million euros).

4.2 The wage bill is the main component of industrial GDP

Figure 27. Breakdown of global GDP and Industry's GDP in 2021



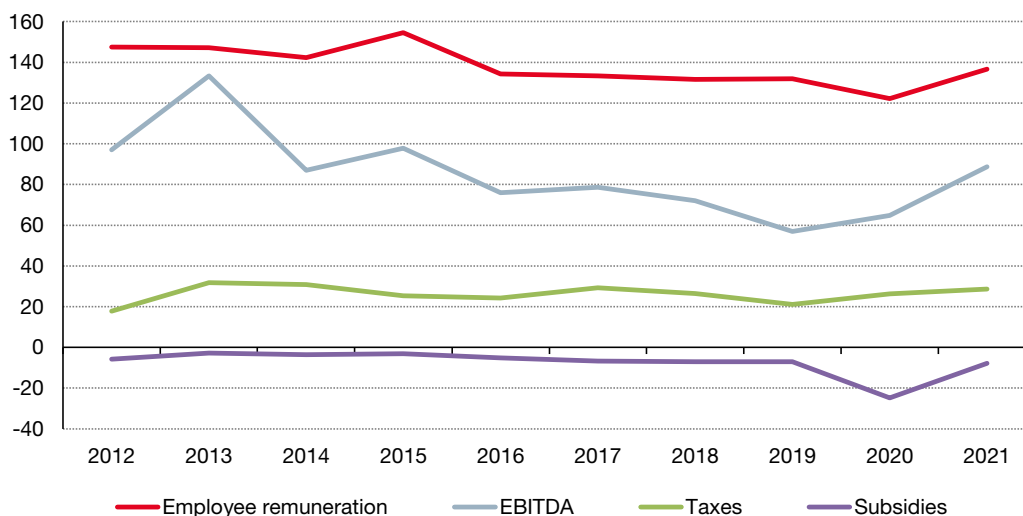
Source: Monaco Statistics

² Adjusted for inflation.

The structure of industrial GDP differs from that of overall GDP. Indeed, the employee remuneration³ remains historically the most important component of industrial GDP. In 2021 it will represent 53.8% of the wealth created (excluding subsidies).

The Earnings Before Interest, Taxes, Depreciation and Amortisation⁴ (EBITDA) in Industry (€88.7m in 2021) accounts for more than a third of the sectoral GDP.

Figure 28. Evolution of Industry's GDP components since 2012



Unit: million of current euros

Source: Monaco Statistics

In 2020, the aid measures deployed by the Government mitigated the negative consequences of the health crisis. The employee remuneration in the Industry had fallen by 10.0%, only to rebound in the same proportions the following year (+10.5%) to reach 136.7 million euros. However, in line with the evolution of its workforce, the wage bill in Industry has been weakening for ten years (-16.0% in constant euros), breaking with the overall trend (+20.8%).

The economic recovery in Industry is reflected in particular in 2021 by an increase in EBITDA of more than a third (+35.1%). The previous year, this sector was one of the only ones to show positive growth in EBITDA (+10.5% against -10.1% overall). Nevertheless, EBITDA is the industrial GDP item that has been most affected since 2012 (-17.2% in constant euros).

Between 2020 and 2021, taxes generated by the Industry increased by 7.5% to 28.6 million euros. For the past ten years, taxes have been a relatively stable component.

The economic support policy put in place by the Government has made it possible to support local businesses. As a result, the subsidies granted to industries have more than tripled between 2019 and 2020 (7.1 versus 24.7 million euros). In 2021, the amount of subsidies for the sector will be 7.8 million euros, returning to its pre-crisis level.

³ The employee remuneration corresponds to the redistribution in the form of salaries and social security contributions of the annually created wealth.

⁴ Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA), which corresponds to the "remuneration" (productive income) of companies.

Manufacturing, mining and quarrying, and others industries Observatory

December 2022

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