

CHEMICAL INDUSTRY IN UAE

September 2019

Economic Research Department
Dubai Chamber of Commerce and Industry



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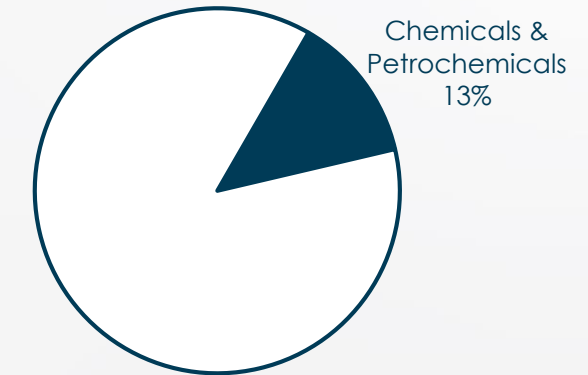
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UAE CHEMICAL INDUSTRY- OVERVIEW

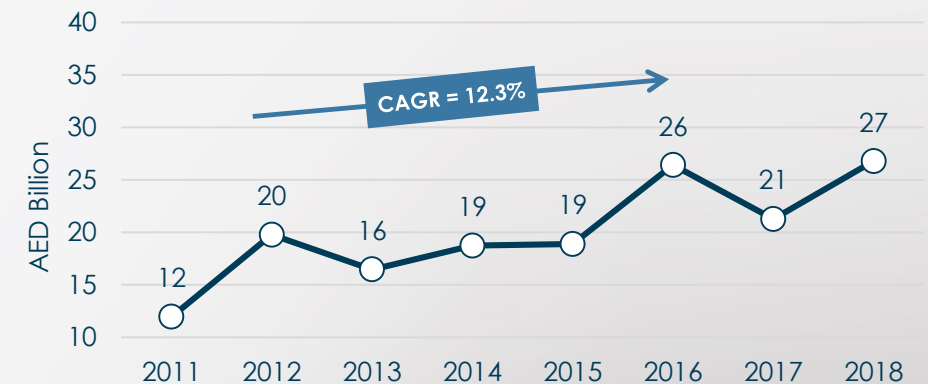
- Chemical industry is one of the important industries in UAE economy, especially in the manufacturing sector. Today the UAE chemical industry is predominantly focused on petrochemicals production, positioned in Abu Dhabi and driven principally by its direct access to feedstock for petrochemicals. In Abu Dhabi, major petrochemical products include polyethylene, polypropylene, ammonia, and urea fertilizer.
- Moreover, chemicals have diversified product portfolio, such as anti-corrosion materials, paints, disinfectants, solvents, soap and haircare, insecticides, inks and other products. In 2018, the share of chemical and petrochemical products (from HS28 to HS39) in UAE exports was 13%.
- Furthermore, in 2018, UAE exports of chemical and petrochemical products reached its highest level of AED27 bn, a 29% growth with respect to the previous year. Moreover, UAE exports of these products grew with a CAGR of around 12.3% from 2011 to 2018.

Share of Chemical and Petrochemical Products in UAE Exports to the World, 2018



Source: FCSA

UAE Exports of Chemical and Petrochemical Products to the World, 2011-2018 (HS28-HS39)



Source: FCSA

UAE CHEMICAL INDUSTRY- OVERVIEW

- UAE chemical industry has a significant role in supplying chemical products for the domestic market and also these products are one of the top product groups in UAE exports to the world.
- According to Federal Competitiveness and Statistics Authority (FCSA), in 2018 polymers of ethylene (HS3901) had the largest share of 31% (AED 8.2 billion) in global UAE exports of chemical and petrochemical products. The second largest product in this group was polymers of propylene (HS 3902) with a share of 9%, followed by perfumes and toilet waters (4%), not cellular plastic plate sheet (4%), hair preparations (3%) and other products. In general, the top 10 products accounted for about 66% of total UAE exports of chemical and petrochemical products to the world in 2018.
- The data indicate that UAE exports of chemical and petrochemical products are diversified and the major partners include China, India, Egypt, Pakistan and other countries.
- In this report, we describe in detail the UAE exports of top 10 chemical and petrochemical products to the world and show potential export opportunities in these products.

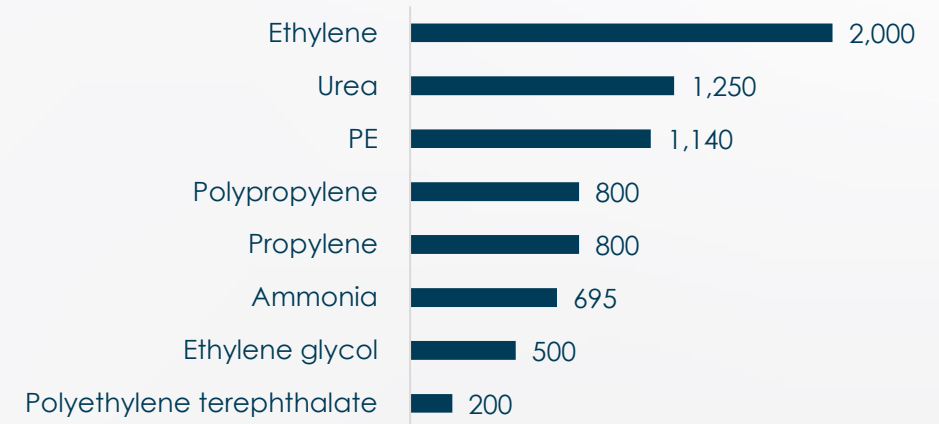
Top 10 Exported Chemical and Petrochemical Products of UAE to the world, Export Value (AED bn) and % share, 2018

Product names	Value AED bn	Share
3901 - Polymers of ethylene	8.2	31%
3902 - Polymers of propylene	2.5	9%
3303 - Perfumes and toilet waters	1.2	4%
3920 - Plastic plate, sheet, film not cellular	1.1	4%
3305 - Hair preparations	0.9	3%
3208 - Polymer based paints	0.9	3%
3923 - Plastic containers, bobbins and packages	0.8	3%
3401 - Soaps	0.8	3%
3304 - Beauty, make-up and skin care preparations	0.7	3%
3307 - Shaving and toilet preparations n.e.s.	0.6	2%
Others	9.0	34%
Total	27.7	100%

UAE CHEMICAL INDUSTRY- PETROCHEMICALS

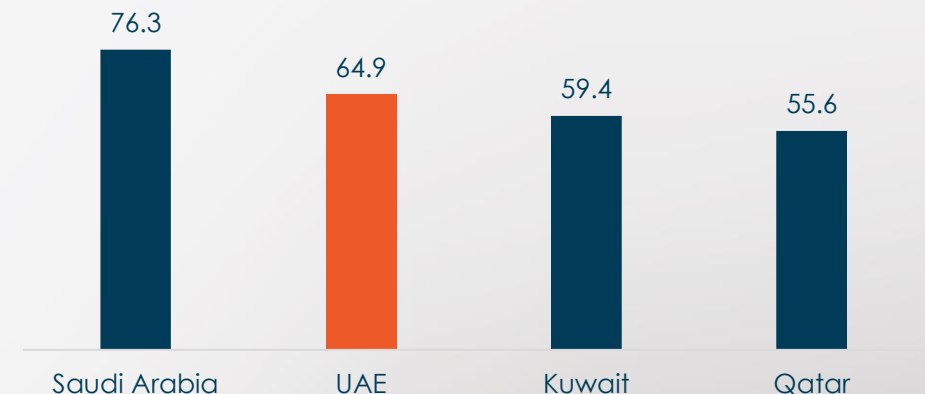
- Gulf Petrochemical and Chemical Association reports that total petrochemical capacity of UAE was 13.7 million tons per annum (tpa) in 2018, and the country plans to increase this capacity to 14.4 million tpa by 2025.
- According to Fitch Solutions, UAE focuses on the production of high volume and low value petrochemical products. The latest data show that ethylene has the highest production capacity of 2 million tpa among the petrochemical products of UAE, followed by urea (1.25 million tpa), polyethylene (1.14 million tpa), polypropylene (800,000 tpa) and other petrochemical products.
- There is now construction of new polypropylene (PP) plant which will be finished in the third quarter of 2021 and increase PP production capacity by 28% in UAE. Also, ADNOC is also planning to build petrochemical plants for the production of 1.4 million tpa of paraxylene and 400,000 tpa of benzene.
- According to Fitch Solutions' Middle Eastern Petrochemicals Risk/Reward Index, UAE has a score of 64.9 points in Q4 2019, which was 0.1 higher than the previous quarter. UAE took the second place in GCC region with lower risk petrochemical production capacity in the last quarter of 2019.

UAE Petrochemicals Sector Capacities, 000' tpa, 2018



Source: Fitch Solutions

Scores in Petrochemicals Risk/Reward Index in Selected GCC Countries, Q42019*



Note: *Scores out of 100: higher score=lower risk

Source: Fitch Solutions

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PLASTICS- POLYMERS OF ETHYLENE

- Polymers of ethylene in primary forms (HS 3901) was the 6th largest exported product group in UAE exports to the world in 2018. FCSA data shows that in 2018, UAE exports of polymers of ethylene reached AED 8.2 billion, and between 2012 and 2018 exports grew with CAGR of 4.2%.
- In the same year, China was the largest importer of polymers of ethylene from the UAE with 41% market share, followed by India (13%), Singapore (6%), Egypt (5%), Pakistan (4%) and others (31%).
- According to FCSA, last year polyethylene with a specific gravity of $\geq 0,94$, in primary forms (HS 390120) was the largest product in UAE exports of Polymers of Ethylene group with a share of 73%.
- As reported by Fitch Solutions, the total production capacity of UAE for Polyethylene is 2.6 million tons per annum (tpa) and the largest part of it is produced in Borouge 3 complex, located in Abu Dhabi.
- Export Potential Map of International Trade Center (ITC) shows that there is still untapped potential of AED 840 mn in China for UAE exports of polyethylene. The other countries with the highest untapped potential include India (AED 448 mn), Turkey (AED 327 mn), Belgium (AED 264 mn) and Kenya (AED 216 mn).

UAE Exports of Polymers of Ethylene (HS 3901) to the World (2012-2018) and Top 5 Export Partners (% share, 2018)

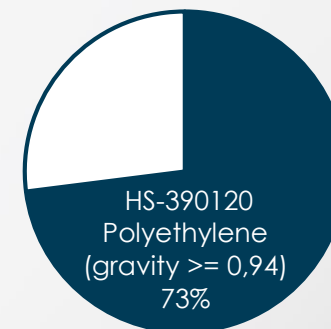


Source: FCSA

Note: *Share in UAE exports of HS3901 in 2018.

UAE's Largest Exported Ethylene Product (% share, 2018) and Top 5 Potential Countries to Export This Product

Largest Exported Product*



Top 5 Potential Countries

Countries	Untapped potential, AED mn**
China	840
India	448
Turkey	327
Belgium	264
Kenya	216

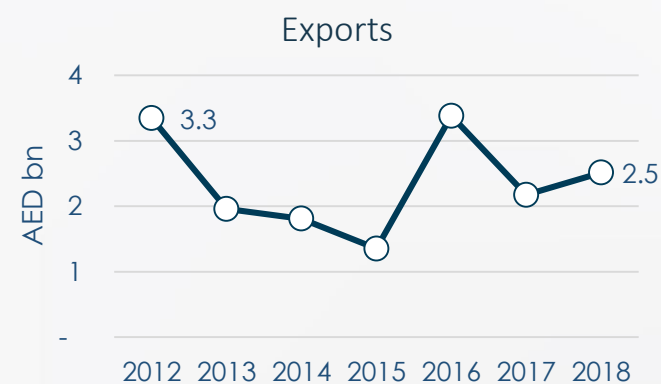
Note: *Share in UAE exports of HS3901 in 2018. **Untapped potential=Export potential – Actual Exports

Source: FCSA and Export Potential Map

PLASTICS- POLYMERS OF PROPYLENE

- FCSA data indicate that in 2018, Polymers of propylene in primary forms (HS 3902) was the 9th largest exported product group in UAE exports to the world. Furthermore, the data show that in 2018, UAE exports of polymers of propylene reached AED 2.5 billion, a 16% growth with respect to 2017.
- Moreover, in 2018, India was the largest importer of polymers of propylene from the UAE with 17% market share, followed by Egypt (13%), China (13%), Pakistan (4%), Bangladesh (6%) and others (39%). In general, the top 5 countries accounted for 61% of total UAE exports of polymers of propylene to the world in 2018.
- According to FCSA, polypropylene in primary forms (HS 390210) was the largest product in UAE exports of Polymers of propylene group in 2018 with a share of 77%.
- As reported by Fitch Solutions, the total production capacity of UAE for Polypropylene is 1.8 million tpa and the largest part of these products also produced in Borouge 3 complex.
- Export Potential Map shows that countries with the largest potential for UAE exports of polypropylene include Pakistan (AED 186 mn), Turkey (AED 113 mn), Malaysia (AED 100 mn), Nigeria (AED 75 mn) and Uzbekistan (AED 66 mn).

UAE Exports of Polymers of Propylene (HS 3902) to the World (2012-2018) and Top 5 Export Partners (% share, 2018)



Source: FCSA

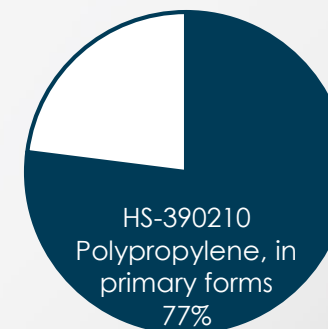
Top 5 Partners

Countries	Share*
India	17%
Egypt	13%
China	13%
Pakistan	12%
Bangladesh	6%
Others	39%

Note: *Share in UAE exports of HS3902 in 2018.

UAE's Largest Exported Propylene Product (% share, 2018) and Top 5 Potential Countries to Export This Product

Largest Exported Product*



Top 5 Potential Countries

Countries	Untapped potential, AED mn**
Pakistan	186
Turkey	113
Malaysia	100
Nigeria	75
Uzbekistan	66

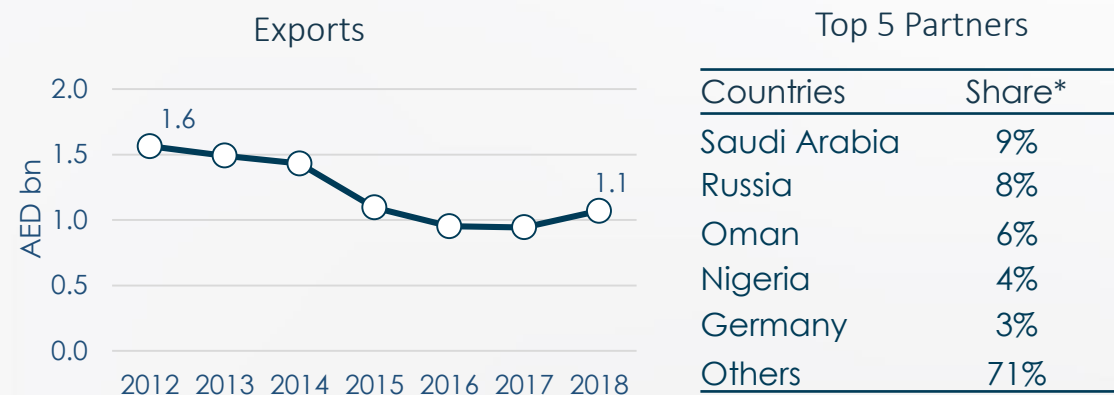
Note: *Share in UAE exports of HS3902 in 2018. **Untapped potential=Export potential – Actual Exports

Source: FCSA and Export Potential Map

PLASTICS- NOT CELLULAR PLASTIC PLATE, SHEET AND FILM

- According to FCSA data in 2018, plastic plate sheet and film not cellular forms (HS 3920) had important role in UAE exports to the world. Furthermore, the data show that in 2018 UAE exports of this product reached AED 1.1 billion, a 13% growth with respect to previous year.
- Furthermore, in 2018 Saudi Arabia was the largest importer of plastic plate and sheet from the UAE with 9% market share, followed by Russia (8%), Oman (6%), Nigeria (4%), Germany (3%) and others (71%). In general, the data indicate that UAE exports of this product are very diversified and the top 5 countries accounted for 29% of total UAE exports of plastic plate, sheet and film to the world in 2018.
- According to FCSA, non-cellular ethylene polymers (HS 392020) was the largest product in UAE exports of plastic plate and sheet (HS 3920) group with a share of 38% in 2018.
- Export Potential Map indicates that countries with the largest potential for UAE exports of non-cellular ethylene polymers include China (AED 48 mn), Iraq (AED 26 mn), Afghanistan (AED 20 mn), India (AED 17 mn) and Turkey (AED 11 mn).

UAE Exports of Plastic Plate, Sheet and Film (HS 3920) to the World (2012-2018) and Top 5 Export Partners (% share, 2018)

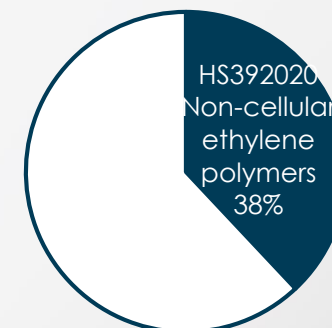


Source: FCSA

Note: *Share in UAE exports of HS3920 in 2018.

UAE's Largest Exported Plastic Plate, Sheet and Film (% share, 2018) and Top 5 Potential Countries to Export This Product

Largest Exported Product*



Top 5 Potential Countries

Countries	Untapped potential, AED mn**
China	48
Iraq	26
Afghanistan	20
India	17
Turkey	11

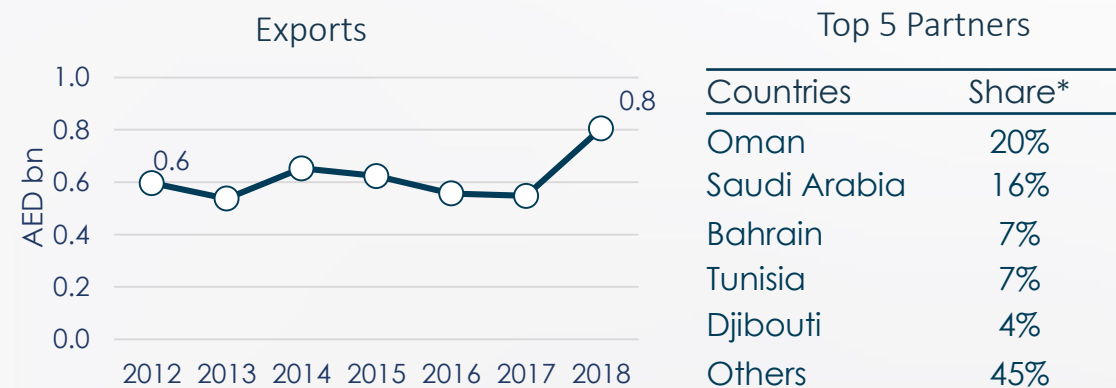
Note: *Share in UAE exports of HS3920 in 2018. **Untapped potential=Export potential – Actual Exports

Source: FCSA and Export Potential Map

PLASTICS- BOTTLES AND ARTICLES FOR PACKAGING

- In 2018, plastic bottles and articles of it for packaging (HS 3923) had important role in UAE exports to the world. Furthermore, the data show that in 2018 UAE exports of this product reached its highest level of AED 804 million, an annual growth of 47% in comparison to 2017.
- Furthermore, in 2018 Oman was the largest importer of plastic bottles from the UAE with 20% market share, followed by Saudi Arabia (16%), Bahrain (7%), Tunisia (7%), Djibouti (3%) and others (45%). In general, the data indicate that more than half of UAE exports of this product went to these top 5 countries in 2018.
- According to FCSA, in 2018, plastic carboys, bottles, etc. (HS 392330) was the largest product in UAE exports of this product group (HS 3920) with a share of 40%.
- Export Potential Map indicates that countries with the largest potential for UAE exports of this product include Iraq (AED 99 mn), Saudi Arabia (AED 33 mn), Bahrain (AED 20 mn), USA (AED 18 mn) and Kuwait (AED 15 mn).

UAE Exports of Plastic Bottles and Articles for Packaging (HS 3923) to the World (2012-2018) and Top 5 Export Partners (% share, 2018)

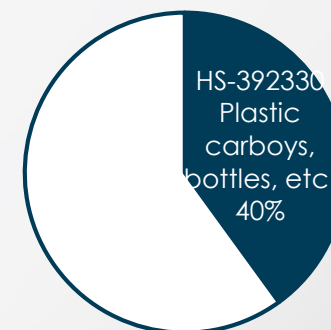


Source: FCSA

Note: *Share in UAE exports of HS3923 in 2018.

UAE's Largest Exported Plastic Bottles and Articles (% share, 2018) and Top 5 Potential Countries to Export This Product

Largest Exported Product*



Top 5 Potential Countries

Countries	Untapped potential, AED mn**
Iraq	99
Saudi Arabia	33
Bahrain	20
USA	18
Kuwait	15

Note: *Share in UAE exports of HS3923 in 2018. **Untapped potential=Export potential – Actual Exports

Source: FCSA and Export Potential Map

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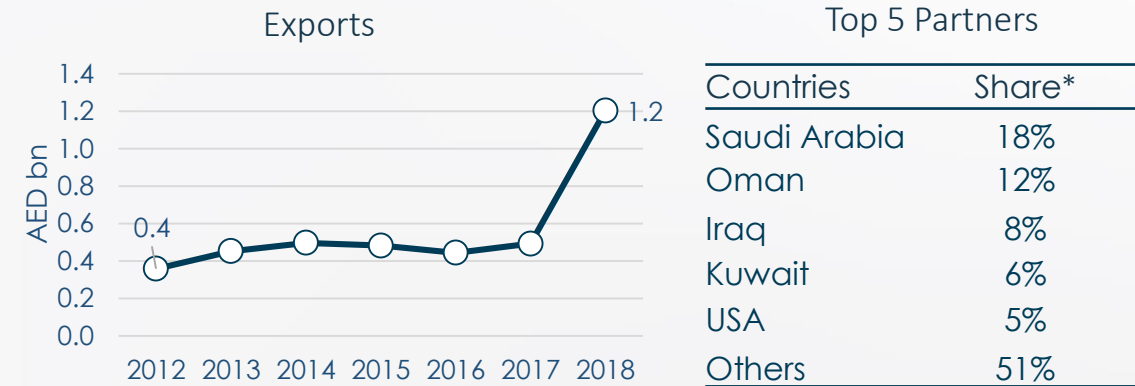
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PERFUMERY AND COSTMETICS- PERFUMES

- UAE exports of perfumes and toilet waters (HS 3303) to the world reached its highest level of AED 1.2 billion in 2018, and exports of these products more than doubled between 2017 and 2018. In addition, from 2012 to 2018 exports of these products grew with CAGR of 22.4%.
- In 2018, Saudi Arabia was the biggest partner in UAE exports of perfumes to the world, with a share of 18%, followed by Oman (12%), Iraq (8%), Kuwait (6%), USA (5%) and other countries (51%). In general, last year, the top 5 countries accounted for almost half of UAE exports of perfumes to the global market.
- In UN trade classification perfumes and toilet waters are not divided by product. In particular, according to trade data, it is impossible to get trade data for perfumes by type (e.g. male, female or unisex perfumes).
- Though UAE exports perfumes to Oman, there is still untapped potential of AED 57 mn in the Oman market, according Export Potential Map. Other potential countries with the highest unexploited potential include Malaysia (AED 25 mn), Singapore (AED 23 mn), China (AED 19 mn) and Saudi Arabia (AED 17 mn).

UAE Exports of Perfumes and Toilet Waters (HS 3303) to the World (2012-2018) and Top 5 Export Partners (% share, 2018)



Source: FCSA

Note: *Share in UAE exports of HS3303 in 2018.

UAE's Largest Exported Perfumes and Toilet Waters (% share, 2018) and Top 5 Potential Countries to Export This Product

Largest Exported Product*



Top 5 Potential Countries

Countries	Untapped potential, AED mn**
Oman	57
Malaysia	25
Singapore	23
China	19
Saudi Arabia	17

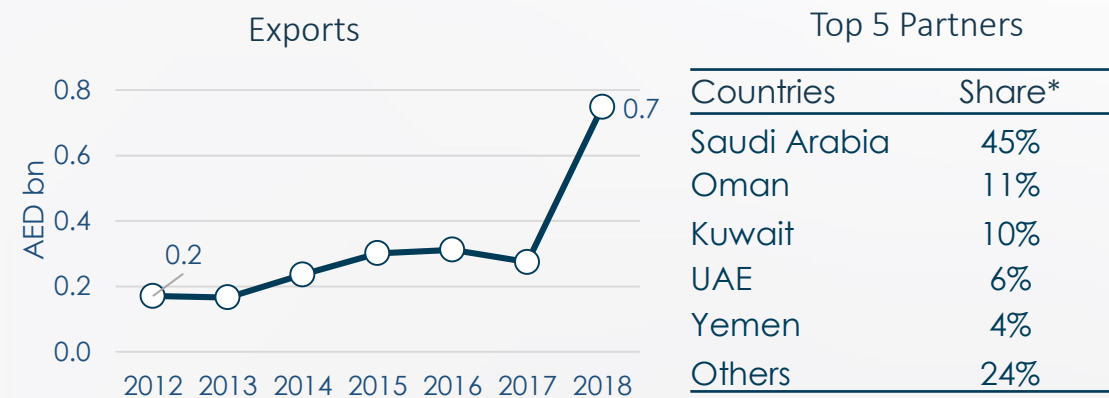
Note: *Share in UAE exports of HS3303 in 2018. **Untapped potential=Export potential – Actual Exports

Source: FCSA and Export Potential Map

PERFUMERY AND COSTMETICS- MAKE-UP AND SKIN CARE

- In 2018, UAE exported to the world AED 0.7 billion make-up and skin care products (HS 3304), a growth of 173% in comparison to 2017. Beside, UAE global exports of these products grew with CAGR of 28% from 2012 to 2018.
- Last year, Saudi Arabia accounted for 45% of total UAE exports of make-up and skin care products to the world. The other biggest partners in this product are Oman (11%), Kuwait (10%), UAE free zones (6%) and Yemen (4%). Other countries accounted for almost one fourth of UAE exports in 2018.
- In make-up and skin care product group there are lip, eye, manicure and other make-up preparations. According to FCSA trade data, UAE is mainly specialized in exports of other make up and skin care preparations such as sunscreen creams or suntan preparations (HS 330499). The data show that the share of these products in UAE exports of make-up and skin care products (HS 3304) was 93% in 2018.
- According Export Potential Map, China can be a very attractive market for UAE's make-up and skin care products, since there is an untapped potential of AED 91 million. Other potential markets for this product include Hong Kong, Singapore, South Korea and the USA.

UAE Exports of Make-up and Skin Care (HS 3304) to the World (2012-2018) and Top 5 Export Partners (% share, 2018)

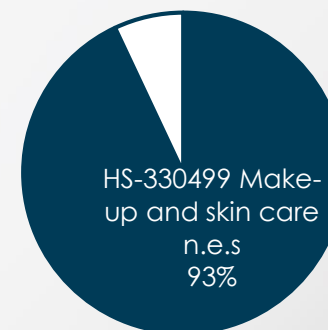


Source: FCSA

Note: *Share in UAE exports of HS3304 in 2018.

UAE's Largest Exported Make-up and Skin Care (% share, 2018) and Top 5 Potential Countries to Export This Product

Largest Exported Product*



Top 5 Potential Countries

Countries	Untapped potential, AED mn**
China	91
Hong Kong	46
Singapore	22
South Korea	14
USA	11

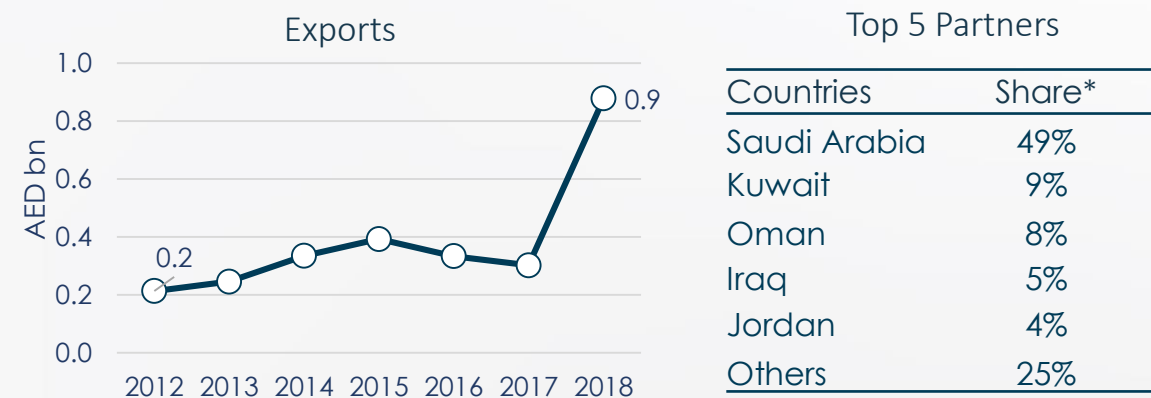
Note: *Share in UAE exports of HS3304 in 2018. **Untapped potential=Export potential – Actual Exports

Source: FCSA and Export Potential Map

PERFUMERY AND COSTMETICS- HAIR PREPARATIONS

- According to FCSA, there was a significant jump in UAE exports of hair preparations (HS 3305) to the world between 2017 and 2018. In particular, UAE exports of this product reached its highest level of AED 0.9 billion in 2018. Beside, from 2012 to 2018, UAE exports of hair preparations grew with CAGR of 27%.
- In 2018, Saudi Arabia imported almost half of UAE exports of hair preparations to the world. The other largest importers in this product include Kuwait (9%), Oman (8%), Iraq (5%), Jordan (4%) and other countries (25%).
- FCSA data show that shampoos were the largest exported product with a share of 59% in UAE exports of hair preparation to the world in 2018. Other exported products in this group include hair lacquers, preparations for permanent waving or straightening and other products.
- Export Potential Map data indicate that Afghanistan has potential to be a very attractive market for UAE exporters of shampoos, because of the large untapped market potential of AED 75 million. Moreover, other possible countries for UAE's locally manufactured shampoos include Iraq, Kuwait, China and Hong Kong.

UAE Exports of Hair Preparations (HS 3305) to the World (2012-2018) and Top 5 Export Partners (% share, 2018)

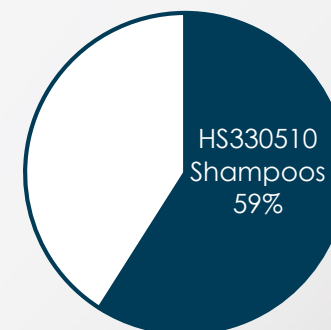


Source: FCSA

Note: *Share in UAE exports of HS3305 in 2018.

UAE's Largest Exported Hair Preparation (% share, 2018) and Top 5 Potential Countries to Export This Product

Largest Exported Product*



Top 5 Potential Countries

Countries	Untapped potential, AED mn**
Afghanistan	75
Iraq	61
Kuwait	28
China	17
Hong Kong	11

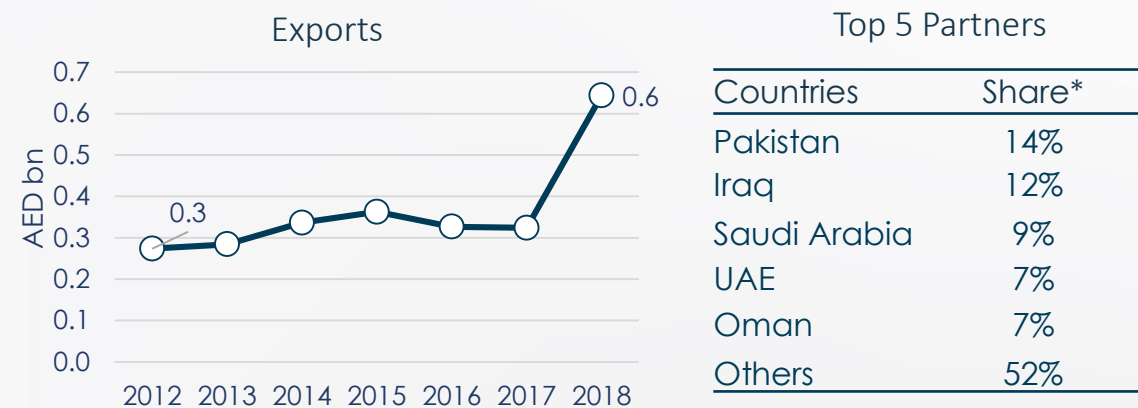
Note: *Share in UAE exports of HS3305 in 2018. **Untapped potential=Export potential – Actual Exports

Source: FCSA and Export Potential Map

PERFUMERY AND COSTMETICS- SHAVING PREPARATIONS

- UAE exports of shaving and toilet preparations (HS 3307) reached its highest level of AED 0.6 billion in 2018, with annual growth of 99% in comparison to 2017. Furthermore, UAE exports of this product group grew with CAGR of 15% from 2012 to 2018.
- In 2018, UAE exports of shaving and toilet preparations were very diversified. The top 5 countries nearly covered half of UAE exports of these products to the world in 2018. The largest partner in this product group was Pakistan with a share of 14%, followed by Iraq (12%), Saudi Arabia (9%), UAE free zones (7%), Oman (7%) and other partners (52%).
- Deodorants and antiperspirants had the largest share of 61% in UAE exports of shaving and toilet preparations product group in 2018, according to FCSA data. Other exported products include pre-shaved and after shaved preparations, perfumed bath salts, shower preparations and other products.
- Although Iraq is the second largest export partner of UAE in this product, but there is still untapped potential of AED 275 million in this market. Furthermore, Libya, Singapore, Malaysia and Syria can be other potential markets for UAE exports of deodorants and antiperspirants, as stated by Export Potential Map.

UAE Exports of Shaving and Toilet Preparations n.e.s. (HS 3307) to the World (2012-2018) and Top 5 Export Partners (% share, 2018)

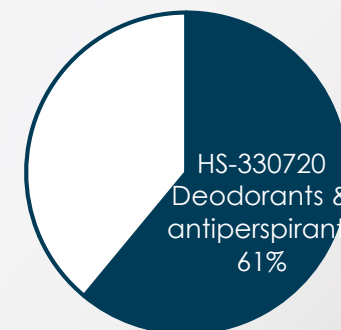


Source: FCSA

Note: *Share in UAE exports of HS3307 in 2018.

UAE's Largest Exported Shaving Preparations (% share, 2018) and Top 5 Potential Countries to Export This Product

Largest Exported Product*



Top 5 Potential Countries

Countries	Untapped potential, AED mn**
Iraq	275
Libya	225
Singapore	104
Malaysia	62
Syria	2

Note: *Share in UAE exports of HS3307 in 2018. **Untapped potential=Export potential – Actual Exports

Source: FCSA and Export Potential Map

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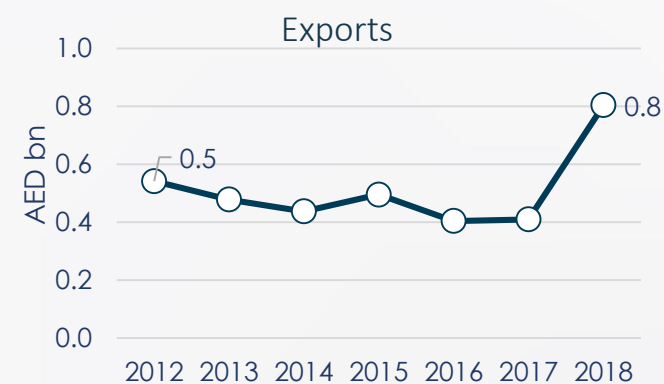
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OTHER CHEMICALS- SOAPS

- According to FCSA, UAE exports of soaps (HS 3401) increased from AED 0.4 billion in 2017 to AED 0.8 billion in 2018, a 96% annual growth. In addition, exports of this product from UAE to the world grew with CAGR of 6.8% between 2012 and 2018.
- In 2018, Saudi Arabia covered more than one fifth of UAE exports of soaps to the world, making it the largest partner in this product group. The other largest partners include Egypt (20%), UAE free zones (10%), Oman (9%), Kuwait (8%) and other destinations (31%).
- Soap for toilet use (HS 340111) was the largest product with the share of 85% in UAE exports of soaps to the world in 2018.
- The analysis of Export Potential Map shows that there is an untapped potential of AED 119 million in Iraq for UAE producers of soap for toilet use. In addition, Kuwait, Afghanistan, Oman and Saudi Arabia can be other attractive markets for UAE soap traders.

UAE Exports of Soaps (HS 3401) to the World (2012-2018) and Top 5 Export Partners (% share, 2018)



Source: FCSA

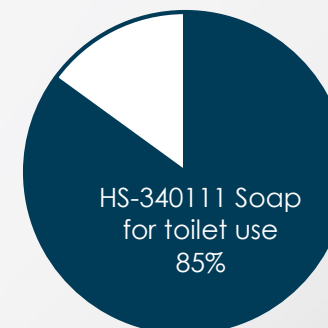
Top 5 Partners

Countries	Share*
Saudi Arabia	22%
Egypt	20%
UAE	10%
Oman	9%
Kuwait	8%
Others	31%

Note: *Share in UAE exports of HS3401 in 2018.

UAE's Largest Exported Soap Product (% share, 2018) and Top 5 Potential Countries to Export This Product

Largest Exported Product*



Top 5 Potential Countries

Countries	Untapped potential, AED mn**
Iraq	119
Kuwait	75
Afghanistan	72
Oman	28
Saudi Arabia	17

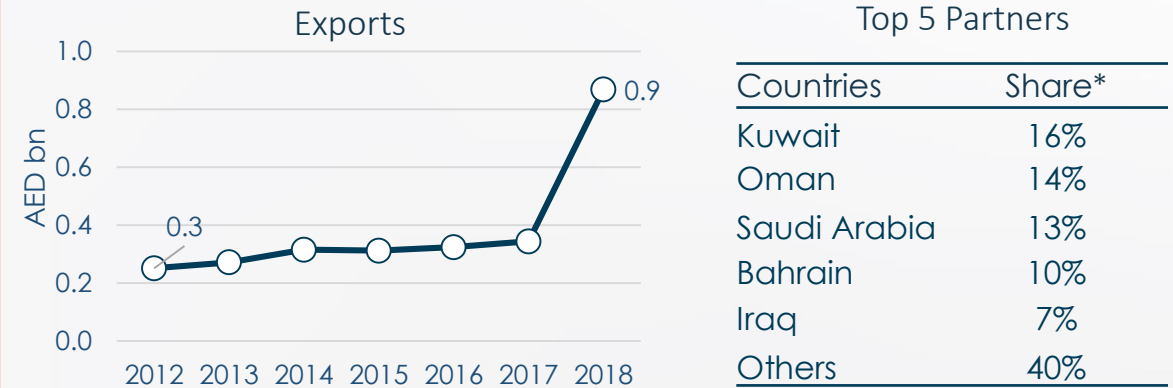
Note: *Share in UAE exports of HS3401 in 2018. **Untapped potential=Export potential – Actual Exports

Source: FCSA and Export Potential Map

OTHER CHEMICALS- POLYMER PAINTS

- According to FCSA, UAE exports of polymer based paints (HS 3208) to the world grew 2.5 times between 2017 and 2018, reaching AED 0.9 billion in 2018. In addition, between 2012 and 2018 UAE exports of these products to the world were more than tripled.
- Last year, Kuwait was the largest destination for UAE exporters of polymer based paints with a share of 16% in the Emirates exports of this product to the world. The other largest partners include Oman (14%), Saudi Arabia (13%), Bahrain (10%), Iraq (7%) and others (40%).
- FCSA data show that paint with polymers containing more than 50% solvent (HS 320890) was the largest product with the share of 88% in UAE exports of polymer based paints to the world in 2018.
- China has the largest potential for UAE exporters of HS 320890 with an untapped potential of AED 44 million. Other potential countries with the largest untapped potential include Turkmenistan (AED 33 mn), Afghanistan (AED 27 mn), India (AED 17 mn) and Thailand (AED 17 mn).

UAE Exports of Polymer Based Paints (HS 3208) to the World (2012-2018) and Top 5 Export Partners (% share, 2018)

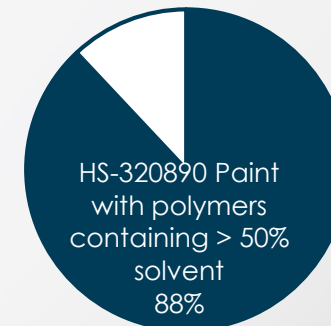


Source: FCSA

Note: *Share in UAE exports of HS3208 in 2018.

UAE's Largest Exported Soap Product (% share, 2018) and Top 5 Potential Countries to Export This Product

Largest Exported Product*



Top 5 Potential Countries

Countries	Untapped potential, AED mn**
China	44
Turkmenistan	33
Afghanistan	27
India	17
Thailand	17

Note: *Share in UAE exports of HS3208 in 2018. **Untapped potential=Export potential – Actual Exports

Source: FCSA and Export Potential Map

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- According to FCSA data, the share of chemical and petrochemical products in UAE exports was 13% in 2018, and the UAE exports of these products to the world grew by 29% between 2017 and 2018.
- Petrochemicals are significant part of the UAE's chemical industry and the large petrochemical companies are planning to increase the production capacity and produce new chemical products.
- UAE exported diversified chemical and petrochemical products to the world and the top 10 chemical product group took around 66% share in UAE exports of all chemical and petrochemical products to the world in 2018.
- The analysis shows that there are many large opportunities for UAE chemical companies to diversify their exports to other countries or increase the exports of their products to existing partners. For instance, the calculations of Export Potential Map show that there is still untapped potential of AED 840 mn in China for UAE exports of polyethylene. There is also high potential to increase UAE exports of other petrochemical products, cosmetics and perfumery, soaps and polymer paints to many countries in the world.
- According to McKinsey report on Chemicals, it is recommended for chemical companies to use digital and advanced analytics to increase productivity and reach a high level of capital productivity in large scale projects.
- Companies need also rediscover oil refining since the demand for gas-driven chemical production goes down. For sustainable growth plastic companies have to switch from linear production to circular economy.
- The UAE chemical companies should invest heavily in R&D to develop new chemical products and have product diversification in exports. The focus should be also in inventing new products which can substitute paper, wood, metal or any inter-material products.

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