KEEPING AN EYE ON THE **SUEZ CANAL** AS A PATH FOR HYDROCARBONS (2014-2018)

BY **AMINA HUSSEIN, REHAM GAMAL, AND TASNEEM MADI**

By possessing an exceptional geographic location, Egypt plays a major role in the international trade of Hydrocarbons . For instance, Liquefied Natural Gas (LNG) flowing through the Suez Canal reached 1.2 trillion cubic feet (tcf) in 2018, amounting 9% of total worldwide LNG trade, as explained in Alexandria Bank's 2018 Report "The Suez Canal after the expansion: Analysis of the traffic, competitiveness indicators, the challenges of the BRI and the role of the Free Zone." The African country has the potential to be an energy hub to the main markets in Europe through the operation of the Suez Canal and SUMED Pipeline. They both transport 98% of the Arab Gulf oil products exported to the European Union (EU) and the United States (US), according to published data by the Ministry of Petroleum and Mineral Resources (MoP). Moreover, the Suez Canal plays an important role in supporting the external position of Egypt, as between July and March 2018/19 the canal's receipts reached $4.3 billion pushing the service balance to record a surplus of $9.8 billion, according to the Central Bank of Egypt (CBE).

TOTAL HYDROCARBON FLOWS THROUGH THE SUEZ CANAL

The Suez Canal has two convoys: a northbound convoy that transports from the Persian Gulf to the EU and the US; and a southbound convoy that heads from North Africa & neighboring countries along the Mediterranean Sea to Asia, according to the Energy Information Administration (EIA)'s Country Analysis Brief: Egypt 2018.

To better facilitate the global connection, fast passage projects were implemented to execute the shipment process, connecting the EU with all overseas neighboring ports such as Alexandria and West Port Said Ports as well as other promising ports on the Red Sea including Ras Shukhair, Al Adabia, and El Sokhna Ports. Moreover, the country aims to increase storage capacity in these ports, by exploiting the infrastructure of the National Grids, to meet international and domestic needs, according to official statements by the MoP.

Over the period from 2014 to 2018, total hydrocarbon flows passing through the Suez Canal convoys saw an increasing trend, where the flows rose from 203.8 million tons (mmt) in 2014 reaching 261.61 mmt in 2018, according to the Suez Canal Authority (SCA)'s data.

1. TOTAL OIL AND PRODUCTS FLOWS

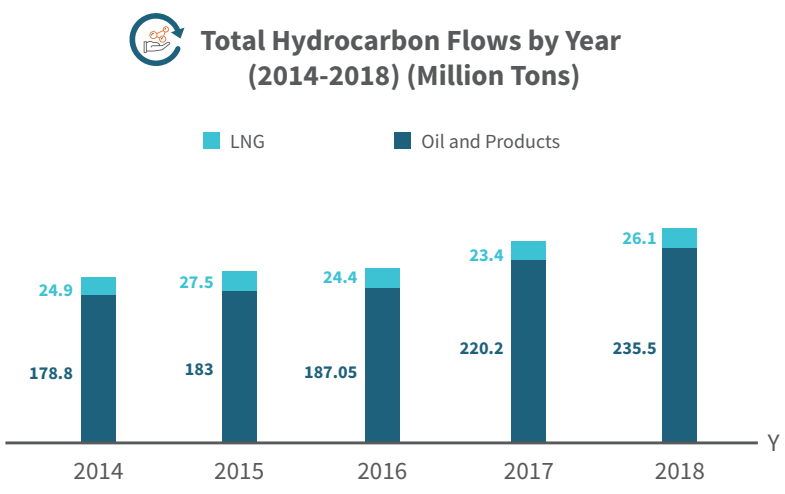
Over the comparison period, total oil and products flows through the canal witnessed an increasing trend where it raised from 178.9 mmt in 2014 reaching 235.5 mmt in 2018 with an overall growth of 31.6%, accordingly, 2018 represented the year with the largest transported quantities of oil and products. Totally, oil and products flows reached 1,004.6 mmt representing 89% of hydrocarbon shipments. It is noteworthy that transported crude oil recorded 480.4 mmt, representing 48% of the total transported oil and products, according to the SCA's data.

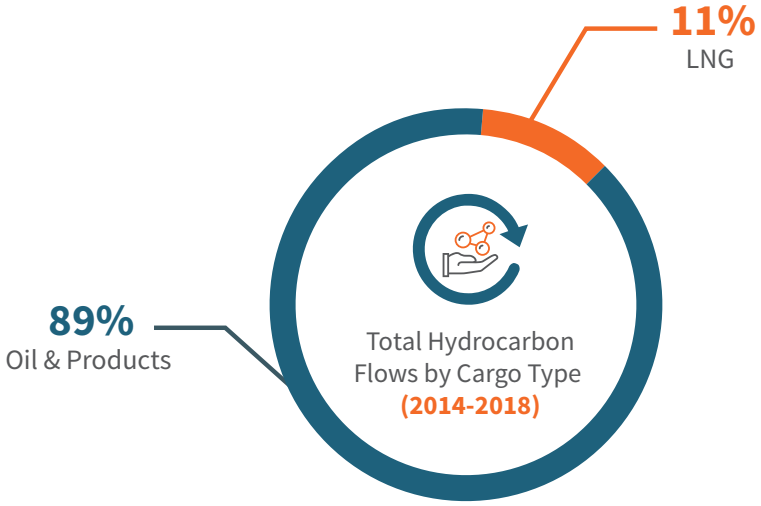
Crude oil is the **highest** transported hydrocarbon product through the southbound and northbound convoys between **(2014-2018)** by **28%** and **53%**, respectively.

2. TOTAL LIQUEFIED NATURAL GAS FLOWS

The Suez Canal has LNG flows in both directions as well. It is worth mentioning that northbound LNG flows come mostly from Qatar and is exported to European markets. On the other hand, southbound LNG primarily flows from Nigeria, France, Trinidad, and Tobago and is generally exported to Egypt, Jordan and Japan, stated by the EIA, Country Analysis Brief: Egypt 2018.

Over the comparison period, total LNG flows witnessed a fluctuating trend. The flows increased from 24.9 mmt in 2014 to 27.6 mmt in 2015, mainly due to the canal's expansion followed by successive declines to reach 23.4 mmt in 2017. Yet, they increased in 2018 reaching the maximum at an amount of 26.1 mmt. It is noteworthy that, over the comparison period, northbound and southbound LNG flows totaled 126.4 mmt, sharing by only 11% of hydrocarbon flows, explained by the SCA's data.

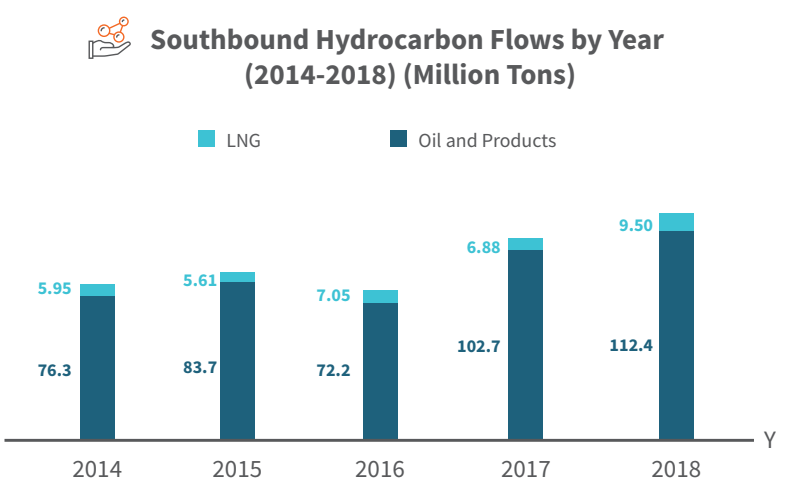




SOUTHBOUND HYDROCARBON FLOWS

From 2014 to 2018, southbound total hydrocarbon flows witnessed a fluctuating trend. The flows grew by 9% in 2015, and then declined by 11% in 2016, yet they increased in 2017 and 2018 by 38% and 11%, respectively. It is worth mentioning that 2018 remarked the highest year of transporting hydrocarbons through the southbound. In total, southbound hydrocarbon flows recorded 482.4 mmt of which oil and products represented 93%, while LNG represented the remaining 7%, explained by the SCA's data.

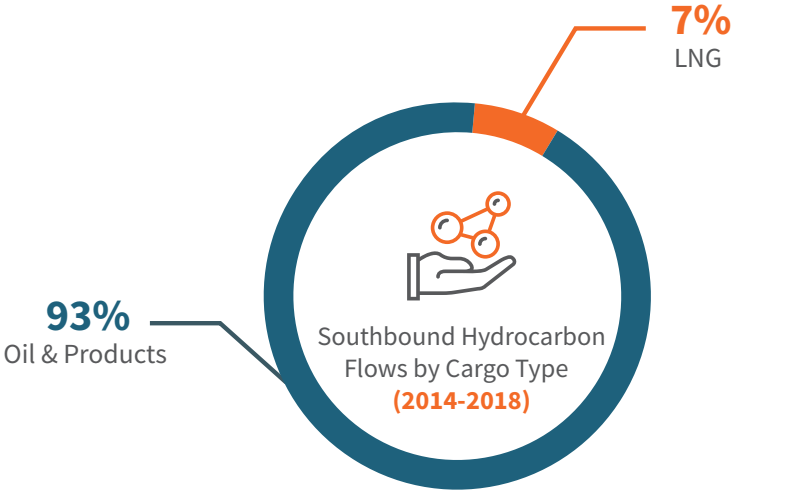
Between **(2014-2018)**, Southbound hydrocarbon flows recorded a total of **482.4 mmt**.



Over the comparison period, southbound oil and products flows saw a fluctuating trend as well. First, they rose by 10% in 2015, declined by 14% in 2016 and then remarkably increased in 2017 by 42% when Russia doubled its exports through southbound convoy and slightly increased in 2018 by 9%, the SCA reported.

On the other side, southbound LNG flows witnessed a fluctuating trend, yet, opposite to that of the oil and products flows'. The LNG flows slightly decreased by 6% in 2015, increased in 2016 by 26%, faintly declined by 2% in 2017 and noticeably increased by 38% in 2018, stated by the SCA's data.

Crude oil and fuel oils represented the highest two transported oil products southbound by about 28% each. On the contrary, Gas Oil & Diesel Oil and Liquified Petroleum Gas (LPG) represented the least transported oil products southbound by 2% and 2.5%, respectively, according to the SCA's data.



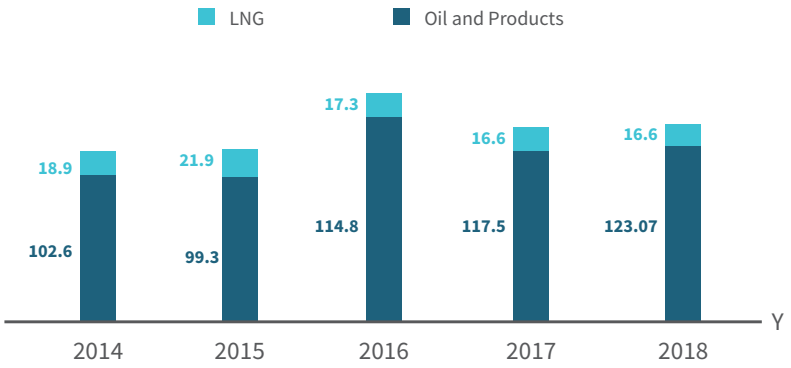
NORTHBOUND HYDROCARBON FLOWS

Over the period from 2014 to 2018, northbound hydrocarbon flows' overall trend slightly declined to 121.2 mmt in 2015 down from 121.5 mmt in 2014. Since 2015, the trend has taken an increasing direction for the transported hydrocarbons to reach 139.7 mmt in 2018, remarking the largest amount transported over the whole period, explained by the SCA.

The hydrocarbon flows through the northbound of the canal over the referred five years recorded a total of 648.6 mmt. Noticeably, the northbound oil and products represented 86% of the total hydrocarbon flows, while LNG represented the remaining 14%, the SCA stated. Noticeably, oil and products share is greater than LNG's as Saudi Arabia, Iraq, and Iran are the top countries exporting through the northbound.

Between **(2014-2018)**, Northbound hydrocarbon flows recorded a total of **648.64 mmt**.

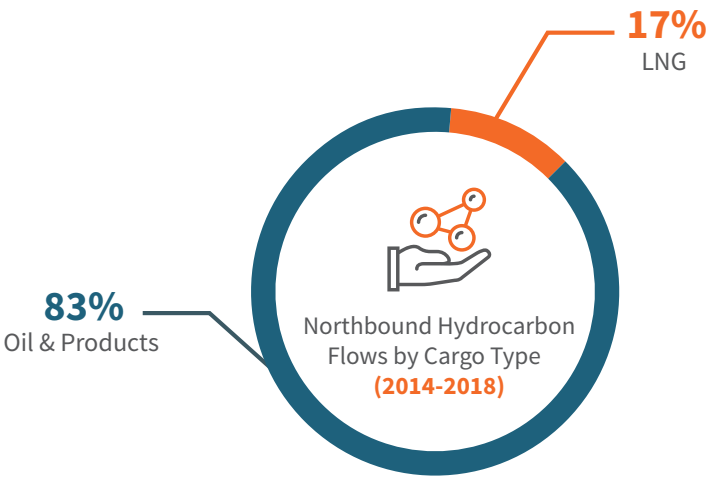
Northbound Hydrocarbon Flows by Year (2014-2018) (Million Tons)



Over the referred period, northbound oil and products flows witnessed an increasing trend. First, they declined by 3% in 2015, yet they steadily increased in 2016, 2017 and 2018 by 16%, 2% and 5%, respectively, as reported by the SCA.

On the contrary, northbound LNG flows witnessed a slightly fluctuating trend. They first rose by 16% in 2015, then remarkably decreased in 2016, 2017 by 21%, 5%, respectively and slightly rose in 2018 by 0.3%, according to the SCA.

Crude oil is considered the highest transported hydrocarbon product through the northbound at a major amount of 342.7 mmt, representing 53% of total transported hydrocarbons. On the other hand, Naphta has a minor share in the total hydrocarbon flows with only 0.11%, stated by the SCA.



MAIN EXPORTING AND IMPORTING DESTINATIONS

1. NORTHBOUND TOP EXPORTERS AND IMPORTERS

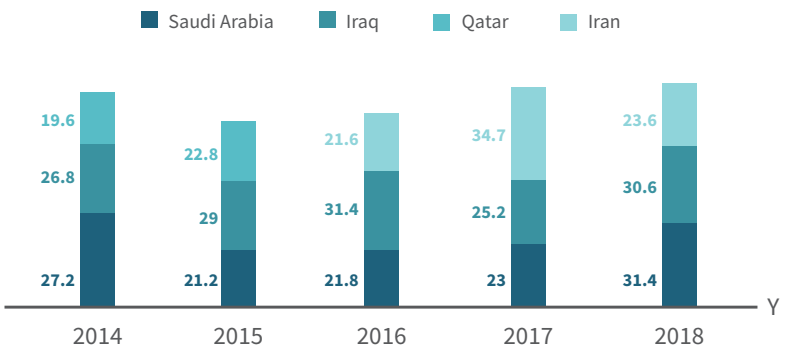
Over the comparison period, only four countries, dominated the crude oil, products, and LNG exports through northbound, namely: Saudi Arabia, Iraq, Iran, and Qatar, reported by the SCA.

According to the SCA's figures, in 2014, Saudi Arabia came first with 27.2 mmt of which all were oil and products. It was followed by Iraq, which exported 26.8 mmt. In addition, Qatar came in third place with 19.6 mmt. Within the next two years, Iraq took over the top, moving Saudi Arabia to the second place, by exporting approximately 29 mmt and 31.4 mmt, consecutively.

In 2017, Iran came first by exporting 34.7 mmt oil and products, which was the largest amount exported through northbound convoy between 2014 and 2018. While in 2018, Saudi Arabia came back to its position with 31.4 mmt of exported oil and products, stated by the SCA.

As for Qatar, it came in the third place twice. The first time was in 2014 with 19.6 mmt of which 90% were LNG. In 2015, Qatar's hydrocarbon exports through the Suez Canal reached 22.8 mmt where 93% of which is LNG, the SCA reported.

Northbound Hydrocarbon Flows by Exporting Countries (2014-2018) (Million Tons)



On the other hand, The US, Turkey, and the Netherlands along with Italy were the top importing oil, products and LNG countries through the Suez Canal northbound convoy, the SCA reported.

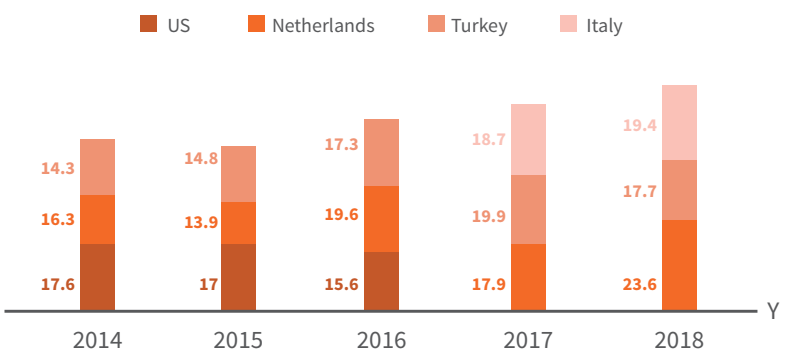
From 2014 to 2015, the US was on top of the importing countries from the northbound convoy with 17.6 mmt and 16.98 mmt, respectively. Observably, most of the US hydrocarbon imports are oil, products, as in 2014 it imported only 0.114 mmt of LNG, while in 2015, the amount of imported LNG was only 0.12 mmt, the SCA elaborated.

In 2016, the Netherlands dominated the hydrocarbon imports passing through northbound convoy with 19.6 mmt, of which 100% was oil and products. Besides, Turkey increased its imports, moving the Netherlands to rank the second and occupying the first place, in 2017 by importing 19.9 mmt, the SCA stated.

Finally, in 2018, the Netherlands was able to reclaim its position on the top of the importing countries by importing 23.4 mmt of oil and products and 0.278 mmt of LNG, totaling 23.6mmt, remarking the largest amount imported through northbound convoy over the comparison period, reported by the SCA.

Concerning the Italian participation, Italy entered this race in 2017 in the third place, with 18.7 mmt, and kept its position in 2018 by importing a total of 19.4 mmt, explained by the SCA.

Northbound Hydrocarbon Flows by Importing Countries(2014-2018) (Million Tons)



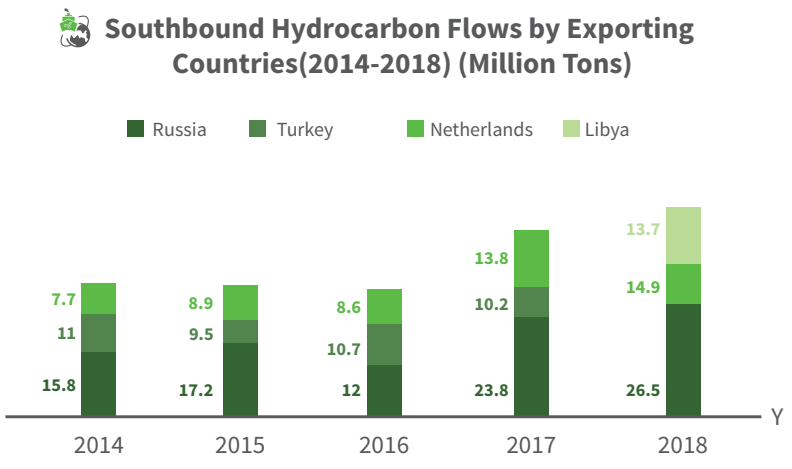
2. SOUTHBOUND TOP EXPORTERS AND IMPORTERS

As for the southbound, Russia, Turkey, and the Netherlands were the main hydrocarbon exporters over the referred period, the SCA reported.

Russia dominated the top over the referred five years, as in 2014 it exported 15.8 mmt through southbound convoy that increased by 68.8% over the whole period to reach 26.5 mmt, which remarked the largest amount of hydrocarbon exports passing through the Suez Canal southbound, the SCA stated.

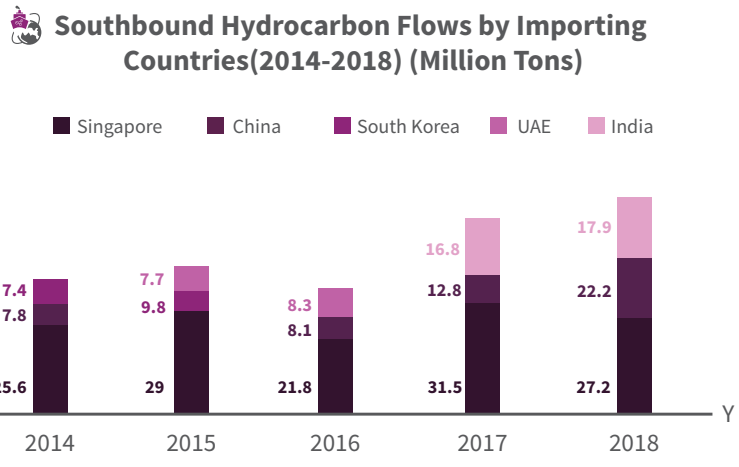
Generally, the rank of hydrocarbons exporting countries through southbound convoy was constant from 2014 to 2016, starting with Russia followed by Turkey and finally the Netherlands. However, in 2017, the Netherlands and Turkey exchanged positions. The Netherlands maintained a 93% increase in its exports through southbound convoy as it increased from 7.7 mmt in 2014 to 14.9 mmt in 2018, according to the SCA's annual reports, according to the SCA.

Over the comparison period, Turkey's hydrocarbon exports through southbound convoy decreased by 7% from 11.02 mmt in 2014 to 10.21 mmt in 2017. In 2018, Libya was able to take over Turkey's third place with 13.7 mmt, as referred by the SCA.



The list of main importing players through southbound convoy was more diversified. It contained five different countries that alternated their positions repeatedly, namely: Singapore, China, South Korea, the UAE, and India. However, Singapore remained on the top of these countries over the whole period. Singapore's hydrocarbon imports increased by 6.6% from 25.6 mmt in 2014 to record 27.2 mmt in 2018. Moreover, Singapore recorded 31.5 mmt in 2017, which is the largest amount of hydrocarbon imports passing through the southbound over the comparison period, the SCA stated.

India started to join the top importing countries in 2017, with a relatively significant amount of 16.8 mmt that made it in the second place. In 2018, the amount imported by India increased to 17.9 mmt, however, it was in the third place as China's imports recorded 22.2 mmt making it rank the second, the SCA reported.



The Suez Canal significantly participates in the growth of the Egyptian petroleum sector, by strengthening Egypt's global position and supporting the MoP's modernization project to convert Egypt to a regional energy hub. For instance, LNG flows through the Suez Canal in both directions represented 9% of the global LNG trade, according to the EIA.

Furthermore, the expansion of the canal in 2015 increased the canal's traffic in terms of number of ships and quantities of transported goods, which was reflected on the petroleum trade movements. Between 2015 and 2018, the total hydrocarbon flows increased by 19.5%. Moreover, in April 2019, oil tankers represented 26 % of the total passing ships in the Canal Suez, according to the Central Agency for Public Mobilization and Statistics (CAPMAS) figures.