

E-Book - Preview of the:  
ARA Tank Terminal Market Study  
Analysis and outlook

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international b.v.

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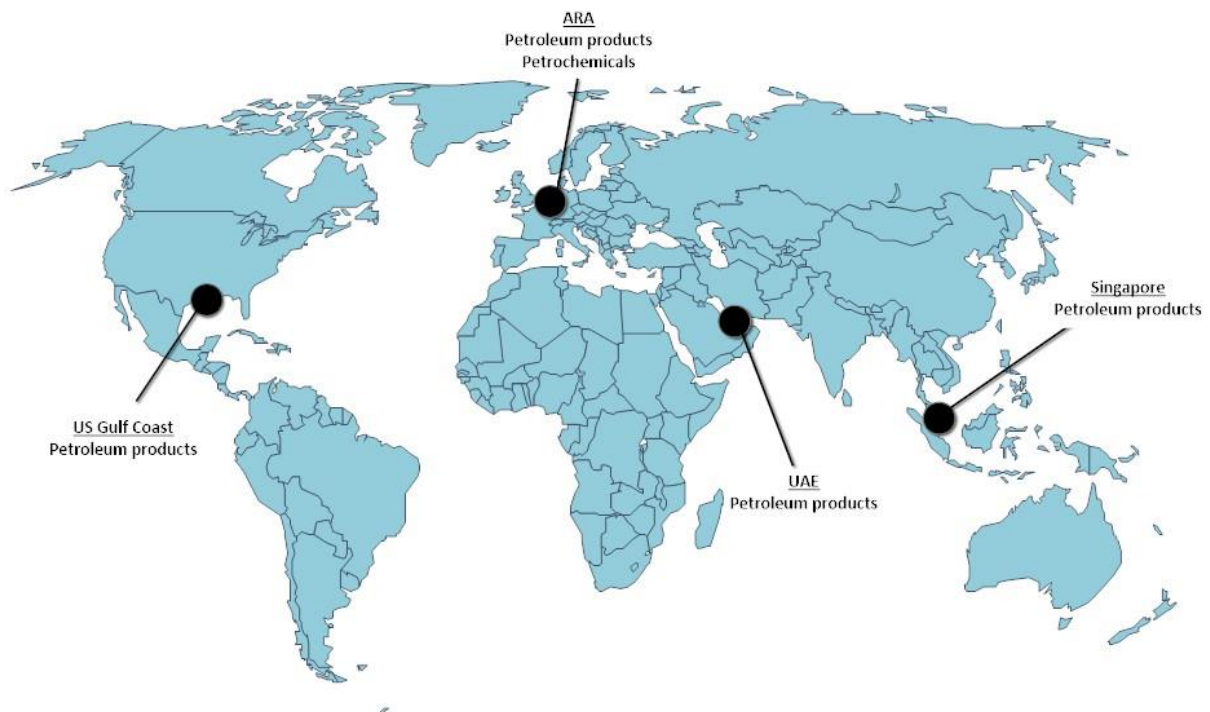
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## Preview of the report

Thank you for downloading the preview of our report. It covers the developments and outlook of the ARA tank terminal sector in the petroleum products market segment. It belongs to PJK's series of reports aimed at uncovering the long term outlook of global tank storage markets. Other reports look at petrochemicals market segment in ARA and at petroleum products storage markets in Singapore, AG and the US Gulf coast. The latter two reports are scheduled to be released in December 2018. Reports are updated periodically in order to capture new developments and signal changes in outlook. The contents hand out essential information needed for determining commercial strategies, capex programs and for getting an independent view on possible future states of the market.



Global oil markets are changing rapidly. Markets are specifically dynamic for European players where competitive pressures are highest. In what way will tank storage markets in the ARA-region be influenced and how profitability will be impacted for tank terminals operating in the oil product segments gasoline, middle distillates and fuel oil are subject of this article.

In the report the PJK's Tank Terminal commercial performance model is used to identify relevant market variables and to assess how these variables influence commercial circumstances. Additionally relevant themes that are likely to influence market variables are identified. The impact of each theme on market fundamentals and market dynamics is analysed in great detail.

There are six main themes that are likely to impact ARA oil markets in the medium term:

- Climate policy & renewables
- IMO marine fuel specification change
- The outlook of the European refining sector
- The US refinery and petrochemical renaissance: current status and outlook
- Changes in the Russian / Far-East fuel oil flow
- Oil futures forward curves: when will the contango switch to backwardation?
- Reverse dieselization of European passenger car sales.

All these themes have direct impact on the Tank storage supply chain, where the supply/demand dynamics could be anticipated through greater market knowledge. The ARA Tank Terminal Market Study will provide you with an extended analysis and outlook regarding the above mentioned subject, also you will be able to find a lot more market information. The ARA is a critical component of the European supply chain. It is challenging to find accurate and timely data to make crucial decisions for all the players involved. PJK analyses the developments and outlook in the ARA Tank Terminal Oil report, and provides the reader with essential information needed for determining commercial strategies.

The report will focus on TT market developments and outlook and tries to develop a reliable view on profitability of the ARA tank storage market in the medium term future: between now (2016) and 2020. Long term forecasts for oil products demand (till 2035) are provided in this report and these forecasts give an indication to possible future states of the tank terminal sector. In the next two pages you can find the contents of the report, for a complete and clear picture.

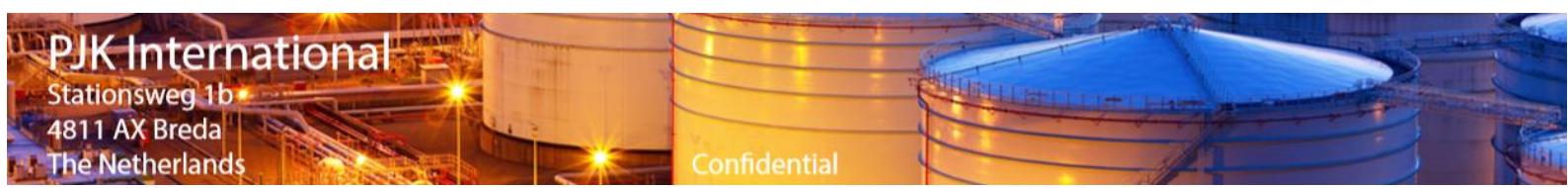


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## Snap report feature 1: Segments in the ARA oil tank storage.

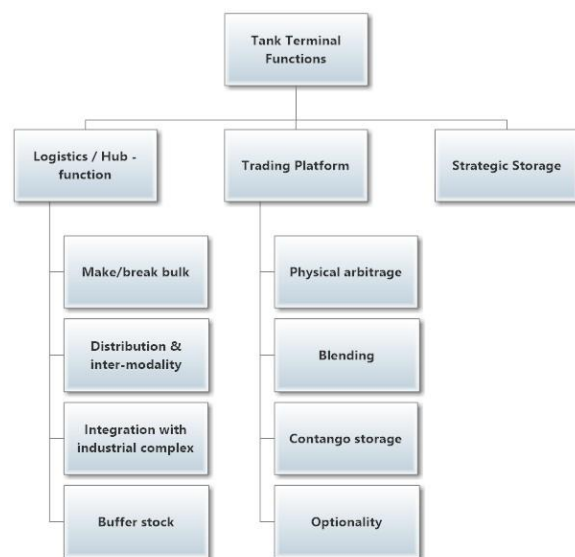
ARA oil tank storage markets can be divided into three segments: low-flashpoint products, middle distillates and fuel oil. Low-flashpoint products consist out of naphtha and gasoline. Naphtha is an intermediate and is used as a feedstock for petrochemical crackers and as a gasoline blend component. The port of Amsterdam plays a central role in the gasoline segment. Because Europe has a structural surplus of gasoline there is a continuous flow being exported out of Europe to gasoline outlets. Gasoline traders collect the abundant gasoline components, blend them together into finished product and ship it to export markets. These gasoline blenders are mostly located in the Port of Amsterdam where they rent tanks to blend and make bulk. Terminals geared to importing naphtha to feed the Petro-chemical crackers in ARA and West-Germany are mostly located in Rotterdam and the mouth of the Scheldt (Antwerp, Ghent, Terneuzen). From these terminals naphtha is transported by pipeline or barge to the olefin plants. European middle distillate markets are somewhat the opposite of the gasoline market. Europe has a structural deficit of diesel and jet-kerosene and needs to import large volumes of these products. Diesel is mostly imported from the USA, Middle East and Russia. Large volumes are discharged into tank terminals in ARA and distributed across Europe from these terminals. Jet-kerosene is imported from the Middle East and Far East.

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Fuel oil markets can be divided into two main businesses: (1) the marine bunker market and (2) the Russian / Far-East transit arbitrage business. The ARA-region is one of the busiest port areas in the world and has a large marine bunker market. Tank storage capacity is needed to supply fuel oil to ships. Another lucrative business is the facilitation of the Russia / Far-East fuel oil transit flow. Russia has a structural surplus and the Far East has a structural deficit of fuel oil. Fuel oil is currently shipped from the Baltic Sea via Rotterdam to Singapore. The stop in Rotterdam is needed because of draft limitations during the voyage from Baltic ports to the North Sea.

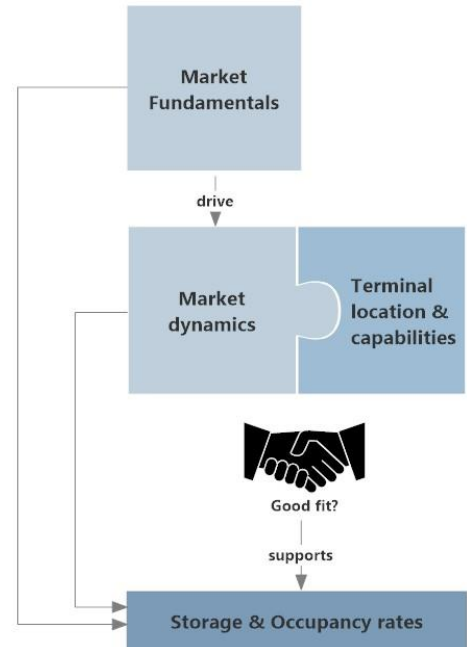
## Snap report feature 2 :PJK's Tank Terminal function model.

In the figure developed by PJK International you can see an overview of the main functions that a tank terminal can provide. A tank terminal can be needed for logistical purposes, as a trading platform and for strategic storage purposes. In ARA they are likely to have a combination of these functions.



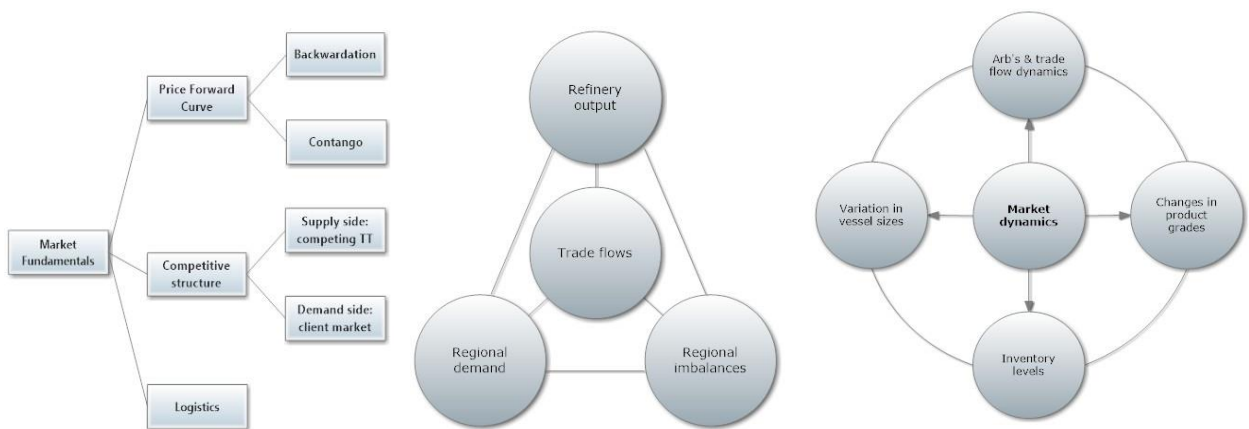
### Snap report feature 3 :PJK's Tank Terminal commercial performance model.

The model shows relations between market circumstances and commercial performance. In this model market fundamentals drive market dynamics. A terminal that has a good fit to these market dynamics will find that their storage rates are supported. Apart from this direct relation between tank terminal characteristics, market dynamics and storage rates there is also a relation between market fundamentals and storage rates.



### Snap report feature 4

The below figure shows the structure of both market fundamentals and market dynamics applicable to the tank terminal sector. The distinction between market fundamentals and market dynamics lies mostly in the difference in rate of change. Market fundamentals tend to be more stable compared to market dynamics.



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