

Oiltanking

connections





Innovation is Indispensable

Global competition, volatile market conditions, ever-shorter product lifecycles, and changing customer demands are just some of the many factors that necessitate flexibility, agility, and innovative solutions in business. Or, as Albert Einstein put it: “We cannot solve the problem with the same thinking we used when we created it.”

But what does it take to be an innovative entrepreneur? At Oiltanking, we have always been and still are continuously on the lookout to enter new markets or tap into the potential of new product or service segments. Our bold decision to enter the Indian market dates back 30 years, while our latest “new kid on the block” is Mexico. Oiltanking’s current venture to develop, build, own and operate a multifunctional LNG terminal via the German LNG Terminal GmbH is truly an innovative step for our company. The terminal could be the first of its kind in Germany.

Continuously improving our existing business by thinking out of the box to optimize our processes, systems, or usual way of getting things done is crucial to remaining relevant and improving the

service quality and experience that we offer our customers.

Read the “zoom in, zoom out” section of this issue to learn more about our innovation mission and how we are getting organized to execute the many brilliant ideas of our customers, partners, and colleagues in order to respond to and take advantage of the challenges and opportunities that result from the ever-changing world we operate in.

Oh – and did you know that reading (and writing) is positively and significantly correlated with creative thinking? So there’s no telling what innovative ideas you might come up with after reading this issue!

Happy reading!


Koen Verniers
Managing Director
Oiltanking East


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Cover: Gumshoeing into the Future: Sneakers with soles made from recycled chewing gum. Read more about the underlying concept on the back side.
Picture: © Publicis One



Helios' Innovative Metamorphosis

JOURNEY'S BEGINNING

The bullets are loaded in Batam, an Indonesian island about 30 km from Singapore

Thanks to an optimized use of available space, Oiltanking Helios excels at innovation and will soon morph into an industrial terminal for handling chemical products.

■ **When Oiltanking** purchased the Helios fuel oil bunkering terminal in 2012, who would have imagined that it would one day handle chemical products? Fast-forward just a few years and Oiltanking Helios (OTHS) is poised to become an integral part of Jurong Island's petrochemical feedstock supply grid: Come January 1, 2019, OTHS is scheduled to commence the storage and pipeline supply of propylene for two production plants.

For its transformation into an industrial terminal, OTHS is installing two 3,200-cbm pressurised tanks, known as 'bullets'. They will be equipped with an eight-inch jetty line for discharging vessels, and a 10 km long four-inch line that will feed a methionine



MORE INFORMATION

Please use the QR code to watch a video with details

plant and a vinyl acetate monomer (VAM) plant. The system will be capable of supplying the feedstock 24/7, year-round, effectively functioning as an extension of the plant's manufacturing process.

To make this project possible, the team had to find a creative solution to accommodate the bullets on OTHS' already well utilized premises. First, a group of containers was relocated to free up a small plot. An adjacent bund wall was then set back to make way for seven meters high rectangular concrete bunding to house the bullets. The area of the concrete bunding exceeds 1,700 square meters and its foundation is fortified by 321 piles.

This July, the bullets were delivered by barge from neighbouring Batam Island and installed using a 3,200-megaton heavy-lift

The bullets are each:

- Mounded
- 3,200 cbm in capacity
- 67 m long
- 8 m in diameter
- shell thickness 37 mm
- 600 MT in weight
- Designed to handle pressure of up to 19 bar
- Built in accordance with NFPA 58 & EMMUA 190 codes
- SIL (Safety Integrity Level) certified

marine crane. The placement of the two 600 MT bullets was an amazing sight, one that took a great deal of planning and precision. Seeing how close the bullets were positioned to the bund wall brought home how innovatively the land was optimized.

Another breakthrough is the establishment of a spider-web pipeline to supply the production plants, whereby the product is delivered 'en route' by a shared pipeline to both plants simultaneously. This eliminated the need for typical point-to-point supply models, which resulted in substantial savings on the pipeline's materials and installation. Having this spider web paves the way for OTHS to supply future off-takers and/or connect with other suppliers with relative ease.



The tank pit is currently being filled with about 10,500 cbm of sand and quarry dust to bury the tanks safely. OTHS looks forward to the safe completion and commissioning of the project, at which point it will embark on its journey into chemical terminaling.

JOURNEY'S END

The bullets are installed at the Helios terminal with the help of a heavy-lift marine crane



In July 2018, Oiltanking in Singapore became the sponsor of Claude, a male Aldabra giant tortoise (*Geochelone Gigantea*), who lives at the Singapore Zoo. The Aldabra giant tortoise is red-listed as a vulnerable species by the International Union for the Conservation of Nature (IUCN).*

■ **Meet Claude!** He weighs around 230 kg and, at over 60 years of age, is the third-oldest Aldabra giant tortoise (*Geochelone Gigantea*) living at the Singapore Zoo, one of the few places in the world where these reptiles, which are on the International Union for Conservation of Nature (IUCN) red list of vulnerable species, find shelter. When Oiltanking was approached earlier this year by the Wildlife Reserve Singapore – the organization that manages the zoo – about a sponsorship, the company was happy to commit to an adoption program, which is renewed yearly.

The sponsorship funds cover Claude's medical expenses as well as daily necessities such as food and maintenance. Any leftover monies are allocated to wildlife conservation research, both locally and globally. In the wild, this species is in rapid decline due to habitat loss and their young being hunted by predators. Moreover, in recent years several marine pollution incidents, amongst many other factors, have accelerated the decline. With the haunting images from a species of sperm

whale that washed up at their own terminal still in their minds, the Singapore Oiltankers are all the more committed to giving back to the environment, to conserving and protecting wildlife not only in their own backyards but around the world as well.

As a token of appreciation for their adoption of Claude, Wildlife Reserve Singapore has provided the colleagues at Oiltanking Singapore with yearly entry pass to Singapore's Mandai Zoo. This gives all the staff a chance to regularly visit Claude, as well as to spend quality time with their families while learning more about wildlife and habitat conservation. Aldabra giant tortoises, one of the world's largest species of tortoise, have a lifespan of between 80 and 120 years, although some individuals have been found to live for more than 250 years. Given this lifespan, this may well turn into a lasting friendship and commitment.

* The IUNC is an international organization that works in the field of nature conservation and sustainable use of natural resources

All set for **innovation** at Oiltanking!

The innovation process Oiltanking induced (see also page 38) is a long-term journey with several phases. How is it put into practice?

■ **The initial crucial** steps in Oiltanking's innovation journey were taken during a first cross-functional workshop in Hamburg in late January. The foundations of the innovation process were developed, led by Yvan Tavernier with the support of Tools of Innovators GmbH (TOI). With insights gained from in-house experience (Oiltanking Colombia), enhanced with input by external speakers from Olympus and Airbus, it became clear that there is room for innovation in Oiltanking's current organizational structure. An initial comprehensive innovation process combining top-down and bottom-up approaches was developed at this first workshop.



MUNICH STATE OF MIND One of the tasks at the Munich workshop was to define the mindset needed for innovation and how to instill it throughout the organization

The second meeting, which was held in Munich in May, was attended by 22 people – Oiltankers as well as colleagues from Marquard & Bahls with a keen interest in innovation and out-of-the-box thinking. Together, and with the assistance of four workstream leaders (Sjoerd Boer, Leddy Evangelista, Karl Dahl, Rajesh Ganesh), they built a detailed workbook covering the innovation process, the dedicated organization (including clearly defined roles) required to pursue it, as well as the mindset and skillset needed to promote innovation at Oiltanking. Based on this review, the recommendation was made to appoint an Innovation Director to lead this process and coordinate with the parent company, Marquard & Bahls.



INNOVATION BY THE BOOK 22 colleagues from around the world worked together to create an Innovation Process Workbook for Oiltanking

If the mindset of the colleagues within an organization is not primed for innovation, even the best process is doomed to fail. And so, to complement the desired behavior, an innovative mindset was defined, and a set of initiatives developed to instill it.

In the near future, Oiltanking will test its defined processes, organization, and mindset on real challenges in the company's ongoing improvement and business development, to confirm that they work. The testing will provide insight about how Oiltanking will need to shape its innovation journey in the next three to five years.

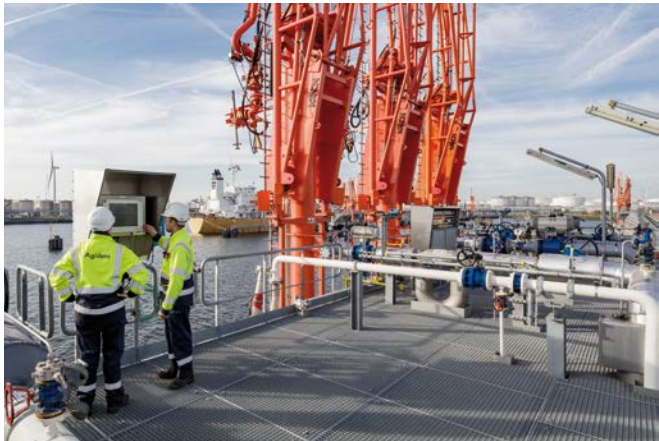


Terminal of the Future

An innovative terminal management software developed at Oiltanking Stolthaven Antwerp (OTSA) in 2017 - 2018 delivers optimized operations and efficiency, and is generally aimed at establishing OTSA as the “Terminal of the Future.”



COMPLEXITY It is quite common for the Oiltanking Stolthaven Antwerp terminal to handle large numbers of ships, barges, trucks and railcars



SOPHISTICATED The optimization engine AXCEL optimizes the terminal's scheduling based on real-time data about transport unit arrivals as well as asset and resource availability

■ **The terminal business** faces steadily increasing operational and regulatory complexity, customers’ expectations are on a constant rise, and competition is growing ever fiercer. It is therefore essential that terminals invest in future-proof solutions so as to differentiate themselves and gain a competitive edge. Which is why OTSA joined forces with its automation solutions partner, Agidens. After defining the necessary requirements to evolve the site into the “Terminal of the Future,” the two parties initiated a collaboration with the University of Leuven as an academic partner. The main objective of their joint research project EXperT (see also page 38) was to develop an automated, dynamic, real-time terminal optimization scheduling software to enhance the site’s safety and profitability as well as offering customers added value.

The research project was completed at the end of 2017 and resulted in a modular software product

called AXCEL. The slot-booking module optimizes scheduling in the near future, while the dispatcher function is efficient for planning in the present. The modular architecture of the system offers the option of developing additional modules, such as a simulation tool. “AXCEL reschedules the optimal solution in just a couple of seconds, taking real-time information and terminal assets into account,” says Marc Van de Merlen, General Manager Procurement & Project Management at Oiltanking GmbH, explaining the benefit. “The engine eliminates the need for Excel sheets, and our planners, customer service department, etc. can make better decisions, faster. This new way of working will result in improved business processes and customer service and thus also help us boost our HSSE performance and achieve our target KPIs more efficiently.” Proof-of-concept trials currently being conducted at OTSA by a project team of experts from Oiltanking and Agidens show a potential efficiency improvement of 20 to 30 percent in the turnaround of the various transport units.

Peter Boers, Managing Director at Oiltanking Stolthaven Antwerp, is convinced of AXCEL’s contribution to the

terminal’s future growth: “Because OTSA is a terminal with a high level of complexity due to the wide variety of products and transportation modes, a lot of variables need to be taken into account, and last-minute changes are inevitable. Implementing AXCEL will help us make timely decisions better and more easily, as the engine can handle even the most complex calculations, and provides insight in difficult, unexpected situations.” In addition, AXCEL is integrated into Oiltanking’s enterprise resource system (ERP), Oscar. This ensures an interactivity that distinguishes AXCEL from other, more basic schedulers. It will also be compatible with the new Newton ERP system.

Yvan Tavernier, Director Assets & Operations at Oiltanking GmbH, sees benefits for implementing AXCEL at several Oiltanking Group terminals that have a bottleneck in their infrastructure. “Investing in innovative automated solutions that offer greater customer service will help gain the Oiltanking Group a stronger, more competitive position.”

Synthetic Kerosene

Utopia or Future Reality?

TAKE-OFF Synthetic kerosene production could soon be a reality in the Netherlands

E-fuels, power-to-gas, power-to-liquid and synthetic fuels are terms we are hearing more and more lately, but what exactly do they mean and how do they relate to Oiltanking? Oiltanking Amsterdam recently joined a large group of stakeholders in a study on the use of synthetic fuels for the aviation industry.

■ **The aviation industry**, which is responsible for two to three percent of yearly worldwide CO₂ emissions, is expected to grow by four to five percent annually for years to come. Although international aviation is not regulated under the various sustainability policies, the industry (IATA) has committed itself to ambitious sustainability targets:

- 1 1.5 percent improvement in fuel efficiency by 2020
- 2 CO₂-neutral growth from 2020 onwards
- 3 50 percent reduction in CO₂ emissions in 2050 vs. 2005 levels.

While other transport modes can reduce their CO₂ emissions with electrification, e.g., options to decarbonize the aviation industry are still considered limited. Any reductions in CO₂ emissions would mostly come from sustainably produced jet fuel.

How to produce sustainable jet fuel?

In a nutshell, synthetic fuel is a liquid fuel obtained from syngas, a mixture of carbon monoxide and hydrogen, which in turn is derived from the gasification of solid feedstocks such as coal or biomass, or by reforming natural gas. Using a process called the “Fischer-Tropsch conversion,” the syngas molecules can be converted to “regular” hydrocarbons like diesel or kerosene. The process in itself is not new, but the methods for obtaining the carbon monoxide and/or hydrogen have been getting a lot of attention.

One could for instance convert renewably generated solar or wind power into hydrogen through electrolysis – a technique that uses a direct electric current to drive an otherwise non-spontaneous chemical reaction (in this case splitting water into oxygen and hydrogen). In combination with a carbon source, the hydrogen can be used to make syngas and eventually, via Fischer-Tropsch conversion, hydrocarbon molecules. Hence the process is referred to as “power-to-liquid.”

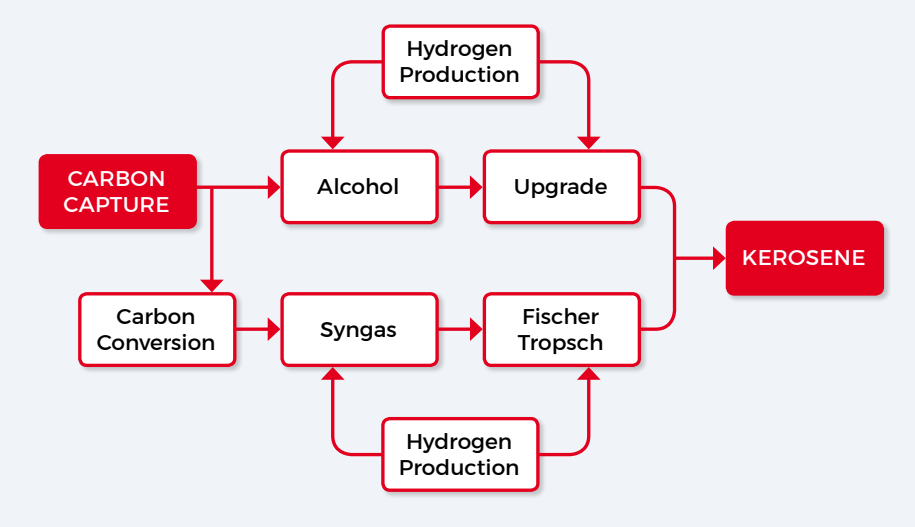
Sustainable jet fuel in practice

The above-mentioned multi-stakeholder study in which Oiltanking Amsterdam participated examined synthetic kerosene production based on the above process, using hydrogen produced with energy from North Sea wind farms, and carbon captured from waste gases in the industrial sector as well as directly from ambient air. The production plant could be built in the port of Amsterdam, and the jet

fuel could be piped from Oiltanking Amsterdam to KLM at Schiphol Airport.

One surprising finding from the study was that, given the expected technological improvements, it will not require extreme CO₂, oil and electricity prices for synthetic jet to be competitive with its fossil fuel counterpart. These are exciting developments which may offer a glimpse into the services Oiltanking will be providing in the future!

THE PROCESS To produce kerosene, which is a mixture of hydrocarbon fractions (C_xH_y), one needs two building blocks: a source of carbon and a source of hydrogen



WE CAN, WE CARE ...



ALL GOOD THINGS COME
IN THREE (from left)
Joanna Abram, Stefan
Broeckx and Mariya
Schroer

Meet Oiltanking’s
Business Systems
Department

“There is always room for improvement.” This motto inspires and drives the daily work of “Oiltankers” in general, and of the three who comprise Oiltanking’s Business Systems Department in Hamburg in particular: Joanna Abram, IT Business Partner and Manager, Stefan Broeckx, Business Process Coordinator, and Mariya Schroer, Business Analyst.

■ On one side there are the many Oiltanking terminals around the world, with their various specific, local approaches and requirements – and on the other side there is the Central IT department in Hamburg, with its focus on standardization and consistency. The Business Systems Department in

Hamburg was set up in 2016 to link the two. Their remit consisted of two important, complex goals.

The first goal: to deliver top-quality service to the regions and terminals in matters of process management, integration, and innovation. By doing

this, the Business Systems team helps terminals lower costs, improve efficiency, and increase their capacity for serving customers.

The second goal: to optimize collaboration between the Oiltanking terminals and the Central IT department. Business Systems helps by “translating” the needs and requirements of Oiltanking terminals into “IT language,” and supports IT in their quest for harmonization and standardization. Essentially, the Business Systems Department supports and promotes the digitalization of Oiltanking’s business by seeking, deploying, and integrating innovative, fit-for-purpose processes and systems.

To understand the importance of the Business Systems Department’s remit, it helps to visualize the many complex processes that operating a terminal involves: planning, maintenance, operations, order and inventory management, asset management, procurement, etc. To manage and handle all these processes, terminals have to implement and work with many systems, e.g. field automation, supervisory control and data acquisition (SCADA), order management etc. A

“If you want to go fast, go alone. If you want to go far, go together.”

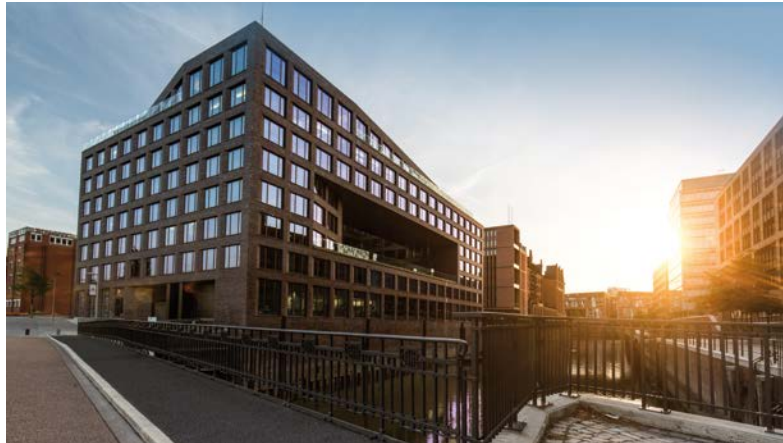
African proverb

sophisticated system landscape is needed to cope with this complexity. To date, many terminals lack such a landscape, and use heterogeneous and/or outdated systems to boost their efficiency – in terms of both finances and productivity. To help a terminal make the most of its potential, Business Systems often provides the following forms of support:

- thorough evaluation of existing processes and systems
- specification of the terminal’s demands and requirements
- delivery of timely and best fit-for-purpose solutions

As the best approach and suggested solutions can vary greatly from case to case, the Business Systems team may support a terminal in improving its processes and systems by helping to install/ implement one of Oiltanking’s core systems such as NEWTON or INFOR, or by proposing another, more promising course of action for the terminal.

Ideally, the concerted efforts of the Business Systems Department, the terminals, and Central IT serve to achieve a harmonized, integrated systems landscape, process efficiency, and reduced costs, ultimately leading to increased innovation and the digitalization of Oiltanking’s business.



GATEWAY TO THE WORLD Colleagues around the globe foster connections through diverse activities at the head office in Hamburg

The 'Three Clicks' Principle



Earlier this year, Oiltanking Amsterdam introduced the 'Three Clicks' principle to increase overall efficiency when searching for key business information in this age of digitalization.

Recent years have seen a rapid evolution in technology and a data-driven digital transformation across just about every area. Digitalization is a very important topic at Oiltanking Amsterdam as at all other Oiltanking terminals. Over time, the existing programs have been upgraded or replaced, and new IT systems like INFOR* have been introduced.

Throughout the digitalization process, it is important to bear in mind that the goal is to increase overall efficiency, to create more transparency, and to provide better insight and intelligence. To ensure that new initiatives meet these criteria, our Dutch IT colleagues have introduced an important guideline: the "Three Clicks" principle. It stipulates that every stakeholder (i.e. employee, customer) should be able to access the most important information – relevant to her/him and depending on the context – within a maximum of three mouse clicks. The context is important, because different information is relevant in different situations.

To make the Three Clicks principle work at Oiltanking Amsterdam, everyone involved with introducing a new IT system needs to know about the principle and adhere

to it – not only the IT department staff, but all the other departments as well.

Initial results have already been achieved since the principle was first introduced seven months ago. Most notable among them are the real-time operations dashboard, which shows the current status of orders and operations by vessel, and the UAB, an online platform where Oiltanking Amsterdam (and other terminals) exchange information with barges. Also, a timesheet system that combines logbook and order information into a single overview has been introduced. As the Three Clicks principle is an innovation that can readily be adopted at other Oiltanking terminals as well, it is probably just "three clicks away" from being implemented elsewhere soon ...

* INFOR: A maintenance management system

QUICK ACCESS The UAB online service is a digital notification system for inland barges calling on Oiltanking



Digitalization in practice

Customer Service colleagues and customers no longer need to make phone calls to find out the status or flow rate of a given vessel discharge. Just three clicks on the computer, and they have the required information.

A boardroom operator who accesses the operational order list can find out all about order instructions, status, timesheet, and lineup administration etc. with just three clicks.

DASH-BOARD

Dashboard is a household word in our daily lives. It refers to the control panel of a vehicle, which displays information that the driver uses to control his operation of the car. In a business context, the same term is increasingly applied to a graphical user interface that gives an overview of business-related indicators needed to manage and control a business or business area.

In April 2018, the HSSE Dashboard for Oiltanking was launched based on the Business Intelligence tool QlikView. As a continually evolving tool, it is constantly updated and enhanced by Marquard & Bahls' HSSE Department. The application pulls real-time data from multiple sources (e.g. the Incident Database, the Annual Reporting Database) and consolidates this data to display various HSSE-relevant metrics and Key Performance Indicators (KPIs). The main KPIs are

arranged on a single screen, presenting an overview of the HSSE performance over time. By selecting filters, the user is able to further tailor the information displayed – e.g. the KPIs for a single region, a single terminal, or a specific time period. The Dashboard overview provides a starting point from which the user can identify trends before looking at the data in more detail.

Each KPI can be further analyzed within the Dashboard application with the additional charts and tables provided; filters can be used to dynamically adjust the data selection. This empowers users to focus more on identified topics of concern, and to establish appropriate measures for addressing trends. Data from each of the

charts can be exported to Excel with a single click, e.g. if the user requires only plain figures or needs to further process the data. In addition to regular charts, the application also includes a geographic display of the main HSSE KPIs on a world map, facilitating an easy comparison between the performance of various regions or countries.

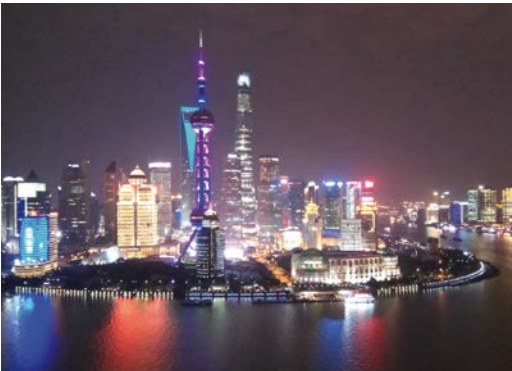
In the past, statistics were provided on a monthly to quarterly basis, and often lacked transparency for the reader. This frequently raised questions as to which incidents actually impacted the KPIs. With Dashboard, users can drill down to a single incident or easily check which incidents affect the KPI. Dashboard is an interactive data visualization tool, so the need for "static" reporting still remains. Based on the data consolidated for the Dashboard application, a variety of reports is generated for regions, networks, and profit centers. Reports are frequently and automatically sent out by email, and are also available for download (by authorized users) from an online platform.

DASHBOARD At-a-glance views of HSSE-relevant metrics and KPIs



THE RIGHT PICK The Chinese economic powerhouse and cultural epicenter? Welcome to Shanghai!

In October 2016, Emiel Langenhuizen left his native Netherlands to take up a new position within Oiltanking as Corporate Finance & Business Development Manager in Shanghai. He takes us on an interesting tour of a city where East meets West and the past mingles happily with the future.



COMPELLING COMPLEXITY The new skyline, across the river from old town Shanghai

■ **Having lived in Beijing** for a few months in 2010, I thought (!) I knew what to expect when the opportunity to move to Shanghai for Oiltanking came by in 2016. The city, nicknamed "Paris of the East" has a very European appearance due to its 19th century history in which merchants from France, United Kingdom, Germany and the U.S. carved out sovereign "concessions." Like the streets in Amsterdam, the tree-shaded avenues in Shanghai's historical center are very bicycle-friendly. And yet, at the same time as having this cozy, historical character, Shanghai is a stunningly modern, fast-paced city with the most impressive skyline I have ever seen.

Living in a city whose population exceeds 25 million is an intense experience: the activity never stops. Like the many retailers and

THE RIGHT PLACE Emiel, his wife Iris and little Lou have settled in well and feel comfortable in their new surroundings



CULTURAL HUB Just 200 meters from Oiltanking's office stands one of Shanghai's most famous temples, surrounded by modern high-rises



IN HIGH DEMAND Like in Amsterdam, bicycles are very popular in Shanghai and sometimes give rise to creative parking solutions

restaurants that are open 24/7, construction projects run night and day. The world's largest metro and high-speed rail network provides links to virtually any place in the country. Mobile phones play a huge role in people's everyday lives: shopping and payments are almost exclusively done on smartphones and the number of apps available for consumers is overwhelming.

Despite the massive technological progress of the city, Shanghai still manages to keep its traditional Chinese side intact. You see vendors cooking Shanghainese street food on the back of their tricycles and selling it along traditional lanes. Next to those lanes, the world's most expensive cars fill the parking lots of enormous skyscrapers. But the diversity and the energy of this city suit my family and me well.

Local food, including table manners, is as crucial a part of integration as language. I have to admit that the food part is going much more smoothly for me than the language. Relationships are key in China and once those are established, people are very loyal and compassionate. The business culture too, is very different from Northern Europe: an enormously ambitious, entrepreneurial can-do spirit, and a bit hectic at times.

There is a big expat community in Shanghai and we have a great group of Dutch and international friends. We receive guests from the Netherlands every other week, so we are becoming pretty seasoned city guides ourselves. The flow of visitors has only increased since our first child, our daughter Lou, was born in March.

Thanks to Oiltanking, I get to travel enough in China to learn that Shanghai is not representative of China as a whole. It is on those trips that the "cultural experience" is often maximized: significant language barriers; locals taking pictures of that tall dude with funny hair; mysterious food and a unique aesthetic approach to building gigantic cities.

Living in Shanghai is very different than we expected when we embarked on this adventure and the city keeps surprising us – in positive ways!



PORTRAIT Emiel Langenhuizen joined Oiltanking Europe as a Management Trainee in January 2013. After stints at Oiltanking Amsterdam, Oiltanking Europe and Oiltanking GmbH, he started as a Financial Controller at Oiltanking Amsterdam in 2014. In October 2016, Emiel moved to Shanghai for his new role as Corporate Finance & Business Development Manager.

An Innovative Solution

Oil spills are not only dangerous from a safety perspective, but also have a lasting impact on the environment. IOT's Navghar Terminal has been testing a new enzyme that breaks down oil biologically since 2017. Here's a look at their findings.

■ **Preventing oil spills** is a priority for any company that handles petroleum products – and Oiltanking is no exception. Numerous precautions are in place throughout the group, but just in case an oil spill should happen nevertheless, scenario-specific contingency plans have been developed for all sites, and practical training and drills are carried out regularly. In addition, Oiltanking's parent company Marquard & Bahls is a shareholder in Oil Spill Response Limited, the world's largest oil-spill response company, which ensures professional support in the event of major oil spills. In 2017, the IOT terminal in Navghar began testing a method for speeding up the biological breakdown of oil.

When IOT learned of an enzyme that "bio-remedies" spilt oil, the decision was made to test a batch in the terminal's oil-water-separation system. One liter of the enzyme, mixed with 50 liters of water, is used

per 5,000 cbm of oil-contaminated water: it works by breaking down the molecular structure of the oil to change the chemical and physical properties of the oil slick. Oil treated in this way floats more easily and allows for oxygen supply to the water. The treated oil becomes food for aquatic bacteria. And because the treatment causes the oil to lose its adhesive properties, it no longer sticks to any surfaces or man-made structures. What is described in complex scientific jargon as the breaking of covalent and ionic bonds simply means that oil is broken down into carbon dioxide and water! Or put another way, the oil is converted from a flammable cocktail of hydrocarbons into two substances that douse flames. The enzyme is reported to be non-toxic to living beings, does not corrode surfaces, and requires no additional protective clothing for handling. As for versatility, it can be used to treat a whole range of substances including crude oil,

furnace oil, diesel, lubricants, and other compounds.

A test batch of oily water was treated over 78 days, with the following results: Total suspended solids fell from 4240 mg/l to 18 mg/l. Prior to treatment, the water contained zero dissolved oxygen. By the end of the test, the dissolved oxygen concentration had risen to 0.5 mg/l. The heavy sludge at the bottom of the sample slick initially contained 76.3 percent hexane extractable material (oil and grease and other HEM); on the last day of the test, the HEM concentration stood at 2.4 percent.

Given that protecting the environment is a cornerstone of our sustainability initiatives, we of course strive to prevent spills through a strong HSSE awareness at our terminals.

SITE OF THE SOLUTION
IOT's flagship Navghar Terminal, where the bioremediation experiment was carried out



Divine Intervention



When it comes to achieving road safety, some believe in discipline, and others feel that prayer works, too. A temple near IOT's Paradip terminal marries discipline with prayers to the divine.

■ **The Indian working class** is witnessing a number of lifestyle changes. Long commutes and overburdened public transportation systems mean that owning a vehicle, once a luxury, is now becoming a necessity. And with more and more new vehicles on the streets, road safety is a major challenge in India. Statistically speaking, 16 lives in India are lost in road accidents, every hour (!).

The district authorities in Paradip, home to the refinery terminal built and operated by IOT, have invoked a kind of divine intervention to improve road safety. How? By getting temples in the district so support the cause. Traditionally, people take their newly bought vehicles to a temple for a blessing service. Paradip's thousand-year-old temple of Goddess Sarala is one popular temple for this. But the priests at the Sarala temple no longer perform blessing services for two-wheelers unless the riders are equipped with helmets. The temple's management is acting on the local police's instructions to implement a "no helmet, no blessing" policy.

Faith is manifested in interesting ways on India's roads. Some drivers swear by talismans made of lemon and chilies for safe travels. Others paint phrases and blessings on their rear bumpers. However, this temple's uniquely practical approach to faith sends a strong and effective message. The UN

Motorcycle Helmet Study found that motorcyclists are 26 times more likely to die in a road accident than drivers of passenger cars. Wearing an appropriate helmet improves their chances of survival by 42 percent and helps avoid 69 percent of injuries to riders.

The campaign seems to have worked: road accidents in the district fell by 14 percent in 2016-2017 as compared to the previous year. For some, faith moves mountains. For others, faith encourages helmets!



DIVINE MESSAGE
"No helmet, no blessing!"



With a workforce of nearly 3,500 colleagues at 76 terminals around the world facing constantly changing market conditions, new challenges and ideas, Oiltanking has to deal with many external innovations – as well as plenty of internal ones.

A Melodious Address

■ **The works** of the Russian-born composer, pianist and conductor Igor Fyodorovich Stravinsky (1882-1971) are well known in the world of classical music. And his name adds a musical note to Oiltanking Finance’s new address in Amsterdam: Strawinskylaan 843. Founded in 2008, the company serves as a “bank” for Oiltanking subsidiaries, monitoring their bank accounts as well as

raising and granting long-term loans. In July 2017, the six colleagues who work at Oiltanking Finance gave up their separate office in Amsterdam and moved in with their eleven colleagues who work for Oiltanking Europe – a new composition that creates a win-win-situation for all!



THE FULL ORCHESTRA Colleagues from Oiltanking Europe and Oiltanking Finance share the same office on Strawinskylaan in Amsterdam



3 -2- 1 for Finland

■ **Oiltanking Finland** can pride itself on having three tank terminals in Kotka and one in Hamina. The takeover of two terminals from Vopak three years ago included two administration buildings and several control rooms. To better integrate these and establish smoother processes, Oiltanking decided to build a new organizational center. In autumn 2018, the new building in Kotka, with a total floorspace of 1,195 square meters, was ready for the 80 employees who work there to move in.

O Wishmas Tree, O Wishmas Tree...

■ **Christmas trees** at Christmas are a time-honored tradition, and today usually come with gifts arranged underneath them. Last year, colleagues from Marquard & Bahls and its subsidiaries at the Hamburg headquarters gave the festive season a new twist. The Christmas tree in the lobby of the office building was decorated in a new and slightly different way: Alongside the usual baubles, the tree sported 24 packages, each containing a Christmas wish by

people in need in Hamburg. Thanks to the 5,000 euros raised for the occasion and the efforts of 146 colleagues who volunteered to buy and wrap them, these wishes came true in the form of gifts. Due to its great success and by popular demand, the Wishmas Tree campaign is back this year and is already in full swing.

A SOCIALLY AWARE ADVENT CALENDAR Employees give joy to local children, refugees and homeless people in need



Conceptualizing Best Practices

■ **In June 2018**, IOT introduced a very innovative way of communicating "Integrity" – it used a classic board game played the world over. "Snakes & Ladders" is an ancient, originally Indian, board game that is played with (analog) dice, but is still popular even in this age of video games. IOT colleagues Yogesh Damle, Communications, and Melwyn Fernandes, Internal Audit, are behind the creative realization of a tool that gets the message of integrity across thanks to its fantastic recall value for the employees. Let’s play – for the sake of integrity!



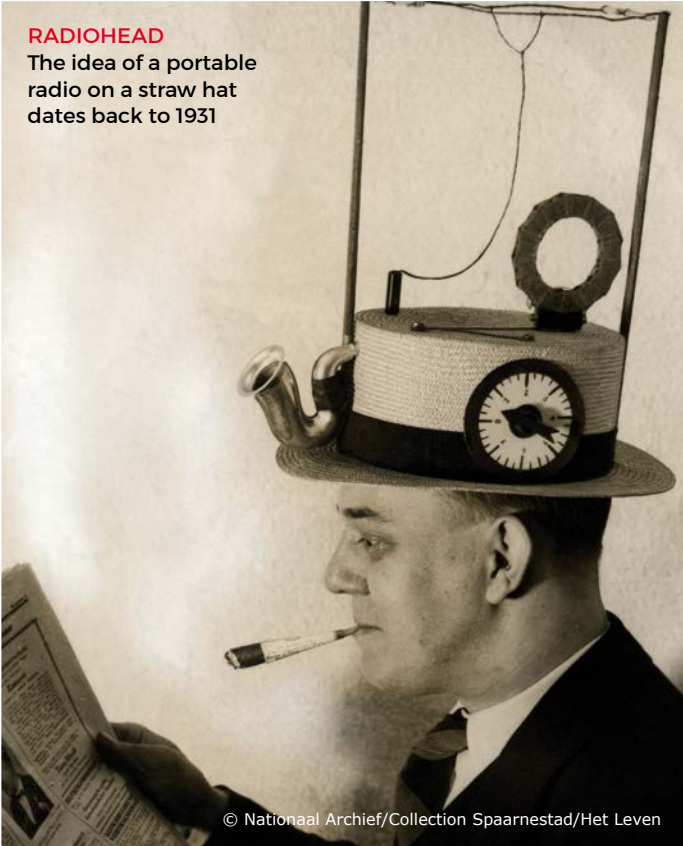
PROTECTIVE POINTERS Blizzard cones to shield the wearer against stormy winter days (1939)

especially in the business world, and a synonym for success.

While some inventions are the result of a long drawn-out research process, we owe others to a lucky coincidence – the antibiotic Penicillin and the microwave oven are just two of the latter. Other inventions had potential but didn’t break through to broader use or were shelved for various reasons. One of them is an utterly fabulous invention called the “blizzard cone.” A beak-shaped mask to shield the wearer’s face against ice and snow. It was invented in 1939 in Montreal, Canada, where temperatures can dip to minus 30° C and lower. Hat’s off also to the ingenious “portable radio straw hat” invented by an American visionary who embraced multi-tasking as long ago as 1931.

Innovative Inventions

■ **When you talk** about innovation, the conversation almost inevitably turns to inventions, as the two often have a symbiotic relationship. But while invention involves creating something new and original, innovation is the act of changing something that already exists – like a product or process – by introducing new ways or ideas for making use of it. Especially in the last decade, “innovation” has become a bit of a buzzword – some might say overused –



RADIOHEAD
The idea of a portable radio on a straw hat dates back to 1931

© Nationaal Archief/Collection Spaarnestad/Het Leven



Innovations in its DNA

In 2014, Oiltanking Colombia launched its Innotanking program to tap colleagues’ creativity for innovative ideas to meet various business challenges. Recent tweaks to the program made it become ever more prolific.

■ **They say change** is the only constant, and companies that don’t embrace this reality run the risk of falling behind their competitors. For several years, Colombia has promoted innovation as part of its company culture. In 2013, Medellin in Colombia emerged as the most innovative city in the world in a competition organized by the non-profit Urban Land Institute*. It prevailed over New York in the United States, and Israel’s Tel Aviv. So Colombians are clearly no strangers to innovation.

With this in mind, Oiltanking Colombia (OTCOL) initiated an innovation program called Innotanking. Under the heading “Your ideas, our future,” a small group of colleagues led by Leddy Evangelista (Managing Director at the time of Oiltanking Colombia) got things started in 2014. For inspiration, they turned first to the Innovation Club of Bogota, a hub for corporate innovation in Latin America that unites companies across multiple sectors. Here the group completed some training and studied how others were going about mainstreaming innovation. What they learned here helped them determine the three key elements of Innotanking: creativity, knowledge and structure. In its first year of promoting creativity among the workforce, OTCOL received more than a thousand ideas for how to meet the defined challenges: cost reduction and operational excellence.

In 2017, OTCOL approached the University of Cartagena for support in developing its ideas and modifying the structure of the program. This led to OTCOL setting up

three Innovation Committees, each with their own functions. This allowed for a better distribution of the workload and avoided the need to allocate additional resources. The Operating Committee (COI) is responsible for promoting the challenges and for reviewing the submitted ideas. The ones that pass this initial review are then forwarded to the Technical Committee (CTI), which evaluates the ideas for aspects including associated risks, cost-benefit ratio, feasibility etc. The Management Committee (CGI) looks at the highest-scoring ideas and selects a winning INNOVADORA IDEA for each terminal. The remaining ideas are “parked” for future reference or are classified as improvements and sent to terminal managers for inclusion in their work plans.

By participating in the program, employees can earn INNOPOINTS for their ideas. Those with the ten highest scores receive prizes at the year-end celebration – usually household appliances, vouchers from stores, travel & tour packages, or family dinners. An Innotanking app developed in 2017 has made it even easier for employees to participate. Employees can upload their ideas online to have them reviewed. The innovation program currently features a new challenge every two months that is promoted to employees.



* sponsored by the Wall Street Journal and the Citi banking group

Questionnaire



We always strive to inform our readers promptly about the latest projects and proceedings within Oiltanking while also attempting to entertain them with interesting news on all aspects of life.

In order to make connections even more attractive in the future and to incorporate your interests we would like to ask you to take a few minutes to fill out our questionnaire. In order to do so you can either use this hard copy, take a picture, scan your answers and send them to:



Oiltanking GmbH, connections Team,
Koreastrasse 7, 20457 Hamburg,
Germany

or by fax: +49 40 370 99-7499
or per E-mail to: connections@oiltanking.com
by February 19, 2019.

DISTRIBUTION

1. How did you receive this issue of *connections* magazine:
- ☐ By mail (printed edition)
 - ☐ It was handed to me personally (printed edition)
 - ☐ I just saw it lying around (printed edition)
 - ☐ Online (emailed directly to me)
 - ☐ Online (while browsing the intranet)
 - ☐ Other:
-
2. Do you receive every issue of *connections*? (three per year; two per year as of 2018)
- ☐ Yes
 - ☐ No
 - ☐ Comments:
-

CONTENTS

3. Do you read *connections* regularly?
- ☐ Yes
 - ☐ No
 - ☐ Comments:
-
4. Where do you read *connections*?
- ☐ At home
 - ☐ At the office
 - ☐ Other:
-
5. How many other people in your household also read *connections*?
-

6. How much time do you spend reading *connections*?

- ☐ Less than 10 minutes
 - ☐ 10 to 30 minutes
 - ☐ More than 30 minutes
-

7. How would you rate the content of *connections*? (10 = very good)

1

2

3

4

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6

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8

9

10

8. How would you rate the graphic design of *connections*?

1

2

3

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10

9. How important is the *connections* magazine for your general information about Oiltanking?

1

2

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10

10. Does *connections* magazine fulfill your expectations?

1

2

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10

11. I read *connections* magazine because:

- ☐ It contains important information for my work
 - ☐ It gives me a good overview of what is happening across Oiltanking
 - ☐ I like the mix of business and entertainment
 - ☐ It gives me insights into new topics (e.g. Numbers, Lexicon).
-

12. What do you find most interesting about *connections*?

13. Please indicate how strongly you feel a statement applies to *connections*:

	Does not apply at all	applies to a certain degree	applies
Style is young/fresh:	☐	☐	☐
Informative about Oiltanking topics:	☐	☐	☐
Well researched:	☐	☐	☐
Easy to understand:	☐	☐	☐
Nice layout:	☐	☐	☐
Too much content:	☐	☐	☐
Could be more comprehensive:	☐	☐	☐

14. Which of the following sections are important to you: (on a scale from 0-10)

- ☐ Editorial
- ☐ News from the Region
- ☐ Numbers
- ☐ Lexicon
- ☐ Zooming in, Zooming out
- ☐ Last but not least
- ☐ I do's & GooGoos
- ☐ We Can, We Care ...
- ☐ Readers corner
- ☐ Entertainment

15. What kind of articles/information would you like to see, or see more of in the future? Any other ideas for improvement?

Privacy / Data Protection
Oiltanking GmbH is responsible for the survey. In principle, it is possible to participate in the survey anonymously, but then of course it won't be possible to send any prizes. If you do provide your contact data, this information will be used to send the reward and will subsequently be stored for two weeks for the purpose of tracking in the event of non-delivery. Afterwards the personal information will be deleted. The data is processed pursuant to Art. 6 Para. 1 S.1 lit. f GDPR. The results of the survey are anonymized for evaluation. If you participate in the survey using the online form, your data will also be processed by SurveyMonkey Europe UC, Dublin 4, Ireland. We have concluded a contract with this company for third-party processing in accordance with Art. 28 GDPR. This processing involves the transfer of data to the U.S. An adequate level of data protection was ensured with the inclusion of standard EU contractual clauses. For further information on data processing by SurveyMonkey, please see <https://www.surveymonkey.com/mp/legal/privacy-policy/>
For further information on our privacy policy, in particular your rights, please visit our website: <https://www.oiltanking.com/en/data-protection.html>.

No Time for **Siesta**

In its second attempt at establishing a footprint in Mexico, Oiltanking has already inked crucial contracts. The first project is scheduled for 2019.

■ **Mexico started** taking first steps to implement its major Energy Reform in 2014 and 2015. In April 2017, after close monitoring of the situation and regular trips for purposes of business development, Oiltanking decided to (re)open a new branch in Mexico City. The company had already opened a small representation in Mexico in 2003, but in those days, it was a difficult market for private international investors to enter, and Oiltanking decided to close its doors in 2010. Seven years later, in April 2017, two Oiltanking colleagues arrived in Mexico City to start it up all over again: Guillermo Blanco in his function as Managing Director, and Ricardo Diogo as Director Business Development.



IT'S OFFICIAL! Guillermo Blanco (left) and Ricardo Diogo at the inauguration of the new office in Mexico City in March 2018



DIRECTORS' CUT Holger Donath (left) and Daan Vos during the opening ceremony

From May 2017, things started happening thick and fast, recalls Ricardo Diogo – on the business front, but also on a private level. “After several months of intense negotiations with our current client, in May 2017 we secured a Memorandum of Understanding (MoU) for an Engineering, Procurement, Construction and Management (EPCM) contract and an Operations & Maintenance (O&M) contract to build and operate Mexico’s main system for importing refined products. By the end of June 2017, this MoU had solidified into a firm signed EPCM contract, and a future O&M contract to be signed before start of operations, which is scheduled for 2019.” The project involves the construction of two tank terminals – one in Tuxpan, Gulf Coast, and another in Tula, Mexico City valley – to be built in phases and with a combined maximum capacity of 400,000 cbm. They will be connected by a future 265 kilometers multi-product pipeline. “Projects are always subject to delays, especially in a country where so much of what is happening is new, but we are quite satisfied with the progress so far, and are of course eager to see our first project come to fruition,” comments Blanco.

SEVEN NATIONALITIES, ONE GOAL The Oiltanking team in Mexico is fully dedicated to securing the terminals' success



METROPOLITAN CATHEDRAL Located in the Historic Center of Mexico City, this building is one of the most impressive archaeological structures in the Western Hemisphere



Getting started also meant managing all sorts of bureaucracy, finding a new office, choosing the office furniture and equipment and, of course, hiring new employees. Guillermo Blanco and Ricardo Diogo managed to bring a freelance, who has worked for Oiltanking Mexico as an accountant for years, back on board. José Portillo became the first employee of Oiltanking Mexico in this new phase. By September 2017, Oiltanking Mexico had already six colleagues and by June 2018 nearly 30 colleagues, representing seven nationalities. So the refurbished office that seemed rather spacious when the first members of the team settled, in

November 2017, has now become quite full, with the EPCM contract requiring the support of several engineering professionals.

Meanwhile, on the personal front, some of the colleagues’ family members had to move to Mexico, new homes needed to be found, and the new environment required some adjustment as well. And, as Oiltanking’s projects in Mexico grow, the Oiltanking family grows along with it: On July 5, 2017 Ricardo Diogo’s second daughter, Madalena SK Diogo, was born. Auspicious beginnings all ‘round!

Mexico

OFFICIAL NAME:	United Mexican States
FORM OF GOVERNMENT:	Republic of federated states
CAPITAL:	Mexico City
POPULATION:	124.6 millions (July 2017 est.)
OFFICIAL LANGUAGE:	Spanish
CURRENCY:	Peso
AREA:	1,964,375 square kilometres
GDP:	\$2.406 trillion (2017 est.)
MAJOR MOUNTAIN RANGES:	Sierra Madre
MAJOR RIVERS:	Rio Grande, Yaqui
INDUSTRIES:	food and beverages, tobacco, chemicals, iron and steel, petroleum, mining, textiles, clothing, motor vehicles, consumer durables, tourism



Successful

First VLCC Transshipment

THINKING BIG
The VLCC DHT
Redwood with a length
of 333 meters and
breadth of 60 meters
carried two million
barrels of crude oil



Oiltanking Açú Serviços* reached an important milestone with the successful completion of its first Very Large Crude Carrier VLCC transshipment operation on June 15, 2018 at the T-Oil terminal in the Port of Açú, Brazil.

■ **Very Large Crude Carriers (VLCC)** are among the largest operating cargo vessels in the world with a storage capacity of up to two million barrels of crude oil. Following investments of over 100 million US \$ in 2017, on dredging works that increased the terminal's nominal depth from 20.5 meters to 25 meters, the terminal also has the capacity to receive VLCCs.

On June 15, 2018, the terminal put its new feature to the test and successfully completed its first VLCC transshipment operation, a significant achievement for the facility, Oiltanking Açú Serviços, and Brazil. VLCC DHT Redwood was commissioned by the

Portuguese company Petrogal to export two million barrels of crude oil. Due to logistical client-side particularities at the floating production storage and offloading (FPSO) platform, it took a total of three dynamic positioning shuttle tanker (DPST) transshipment operations to load the VLCC to capacity. Future operations are expected to require only two DPST

“Port of Açú – the largest port in the Americas, with 17 kilometers of quay”

transshipment transfers. Such operations are executed with one ship docked while the other is moored alongside; both are surrounded by contention barriers to contain any potential spillages at sea.

Transshipment operations are carried out in a port area sheltered by a breakwater, enabling safe and quick operations during all seasons of the year. The efficiency and cost savings for customers boost the competitiveness of Brazilian crude. The terminal is authorized to handle up to 1.2 million barrels per day and includes an area that is licensed for future investments in crude oil storage. In the future, Port of Açú will offer a variety of traditional land-based services such as blending, oil treatment, and trading activities that will serve to attract other customers interested in consolidating their products before exporting.

Port of Açú is the largest port in the Americas, with 17 kilometers of quay (three kilometers already under operation), over 90 square kilometers of land, and a channel depth of 25 meters. Its strategic location in proximity to the Campos and Santos Basins, which account for more than 80 percent of Brazilian oil production, makes the port ideal for servicing the oil and gas industry.

* Oiltanking Açú Serviços is an Oiltanking GmbH subsidiary acting as the Operations & Maintenance Operator in the Port of Açú for Açú Petróleo – a joint venture between Oiltanking GmbH (20 percent) and Prumo Logística S.A (80 percent)



SUCCESSFUL OPERATION The VLCC DHT Redwood transshipment operation at the T-Oil Terminal

Innovative Concepts

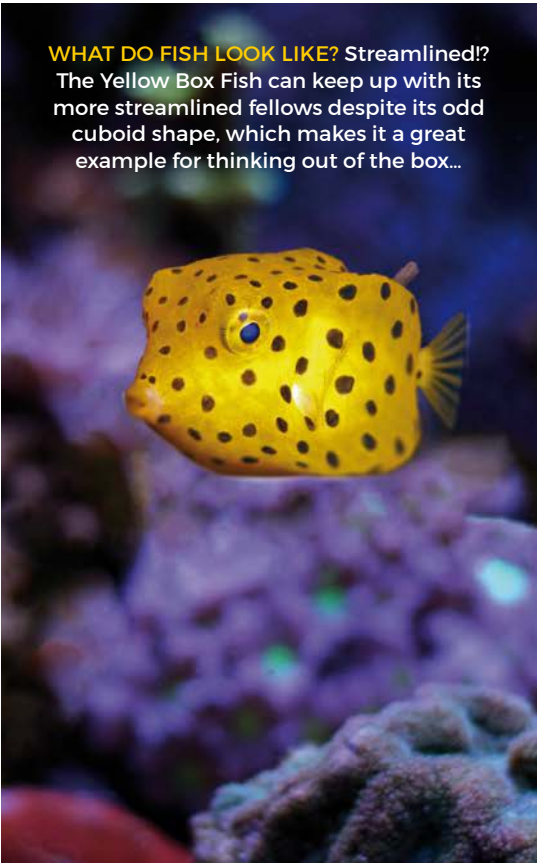


It seems the word innovation is on everybody’s lips these days – and in connection with every aspect of business and life. Read on for some ideas we thought were pretty innovative and worth keeping track of. Perhaps they’ll even inspire you to come up with an innovation of your own?

A Different Approach

You’re stuck with a problem and there’s no solution in sight? Try approaching the issue in a new, innovative way, conceptualizing it differently and/or taking a position in relation to this particular situation in a way you never thought of before. In other words: think out of the box. Here are ten suggestions to help you beef up your out-of-the-box skills:

- **Take a class** learn a new subject to broaden your mind
- **Read a novel** of a genre you don’t usually read to get new impulses
- **Draw a picture** to stimulate the right half of your brain for a creative boost
- **Go for a walk** Steve Jobs allegedly held walking meetings to brainstorm ideas
- **Change** your daily routine
- **Get out** of your comfort zone
- **Be spontaneous**, as this will force you to adapt to the moment
- **Allow yourself** to daydream and give yourself enough time for brainstorming
- **Work backwards**. Sometimes what you need is to focus on the solution first, and build backwards from that solution
- **Consider** the worst-case scenario. Fear is what holds back creativity. Once you identify the fear, you can plan for it



WHAT DO FISH LOOK LIKE? Streamlined!? The Yellow Box Fish can keep up with its more streamlined fellows despite its odd cuboid shape, which makes it a great example for thinking out of the box...

Tire Talk

Flat (bicycle) tires could soon be a thing of the past thanks to a new technology developed by Bridgestone. The company’s “Air Free Concept” eliminates the need for tires to be inflated with air to support the weight, instead using a unique structure of spokes stretching along the inner sides of tires. In addition, the resins that are used in the spokes and rubber help realize a more efficient use of resources. The company plans to adapt the technology for use in various types of tires.



Non pneumatic tire Bridgestone’s futuristic bicycle tire design is expected to be introduced in Europe in 2019



Reinventing the wheel The innovative idea of airless tires can be extended to cars as well

A New, Milky Way



Got milk? Anke Domaske has developed a technique for creating milk fibers using waste products from dairies



An estimated two million tons of milk are disposed of in Germany each year because it can no longer be sold or consumed as food under the law. Now a German microbiologist and fashion designer – the founder of QMILK – has found a way to use this raw milk to create a protein fiber that can be spun and woven to make clothing or other textiles. There is a precedent to her invention: In the 1930s, milk proteins were processed into textiles as substitute for wool. However, this involved treating them with various chemicals. QMILK uses only milk and other natural products. The resultant fiber, which feels like silk or cashmere, can be washed at 60° C and is also antibacterial, flame retardant and temperature regulating. Approximately six T-shirts can be made from one kilogram of milk fiber (and roughly 30 liters of milk are needed to obtain this one kilo of protein).

Plastic, Plastic Everywhere!



■ **Each year**, about eight million metric tons of plastic rubbish ends up in the ocean, with the result that by 2050 there will be more plastic in the water than fish (by weight). One way to help reduce this “plastic soup” is to simply reduce or renounce the use of plastic. Making plastic bags subject to a charge has shown some success in places like Germany, where customers have had to pay for shopping bags since July 2016. A truly new shopping experience awaits customers in Amsterdam, the Netherlands. In Europe’s first plastic-free supermarket they can choose from more than 700 plastic-free products such as meat, rice, yoghurt etc. – all available in one aisle. The packaging (that looks like regular

plastic) is either organically based and will decompose in 12 weeks, or made of material that is easily recyclable like glass or aluminum.

The PlasticRoad concept is another innovative approach to tackling the problem of plastic. This new kind of road is a completely circular product made from recycled plastic. A hollow space inside allows for temporarily storing water and channeling the runoff during heavy rainfalls, thereby helping to prevent flooding. The lightweight, modular design of the PlasticRoad makes for faster, simpler, and more efficient construction and maintenance compared to traditional road structures, and also creates a significantly smaller carbon footprint. The goal is to use recycled plastic wherever possible. PlasticRoad is more efficient than conventional asphalt roads in every way: faster to build, easier to maintain, and with a longer life-span. By the way, the first PlastikRoad bike path in the world was opened on September 11 in Zwolle, the Netherlands.

THE ROAD LESS TRAVELLED
The PlasticRoad concept is an alternative to traditional asphalt roads



In a Nutshell



Belgium Belgians love to cycle – and so do many of our colleagues at Oiltanking Stolthaven Antwerp. More and more of them are biking to work, and also enjoy cycling in their free time. Recently, some particularly creative colleagues came up with the idea of revamping and replacing their old Oiltanking cycling outfits. From various design ideas, the fluorescent one was chosen for the new gear, as it best highlights the importance of safety on the road. While they were at it, the colleagues had another bright idea, namely to combine the funding of the new gear with support for a charitable organization. “Kom op Tegen Kanker” (“Come up against cancer”) was chosen, and every employee who wanted a cycling outfit was requested to donate 40 euros to this charity, which works to fight cancer and promote healing and a better quality of life for people with cancer, cancer survivors, and their family and friends. In the end, a total of 71 cycling outfits were ordered – a nice way to enhance the company’s branding, do something for the employees, and support a worthy charity!



A BRIGHT IDEA The vibrant new cycling outfits are clearly visible from a distance, be it early morning or late in the evening

Heads up! At the end of September 2018, our intrepid colleague Stefan Libudda from Oiltanking Germany and his wife Claudia set off in their red speedster to take part in a very special rally: they competed as “Team Chill’n Grill” in the “Off the Beaten Track” rally from Munich to Barcelona. To mark the tenth anniversary of the rally, this year 's route was extended by a considerable distance, all the way to Marrakech. Read more about the team's experiences during this 11-day and more than 5,000-km long race in our next issue!

CONDITIONS FOR PARTICIPATION A lot of adventurousness and skill, and a racing car that cost no more than 1,000 euros





In February 2018, Oiltanking introduced the Document Repository Information System, nicknamed DoRIS in Peru. The modern tool provides solutions for process issues, and a structure for storing, modifying, approving and distributing documents.

■ In February of this year, Oiltanking Perú, Oiltanking Andina Services, and Logística de Químicos del Sur finished the process of migrating their documents from the OTIMS system (Oiltanking Integrated Management System) to the recently created DoRIS (Document Repository Information System). This application is used to manage documents from a process standpoint, and was jointly developed at the Hamburg headquarters by the IT Department together with Oiltanking’s Assets & Operations team.

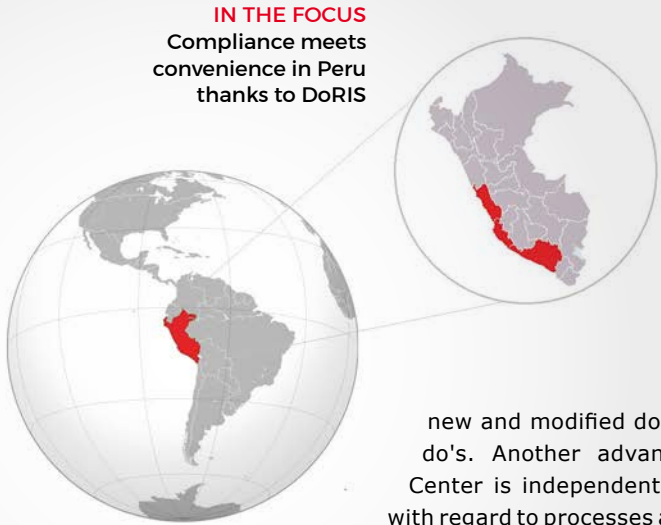
The Oiltanking Peru team led by Geraldine Diaz worked with the IT colleagues to successfully complete the process of setting up the platform for three companies with more than 50 users, and migrating the documents. This process involved:

- The configuration of DoRIS, validation of work processes and workstreams, and appointment of responsible people

- The mapping and correlation of processes in OTIMS versus DoRIS
- The migration and tests of edition cycles, notifications and document approvals, in their last approved versions
- Training of users: editors and final users
- Document approval processes for each process responsible
- Test of acknowledgement/confirmation feature for released documents and new versions

Advantages of DoRIS

Document management systems must ensure the availability of updated, relevant information at all times. Both Oiltanking Andina Services and Logística de Químicos del Sur have their operations certified according to



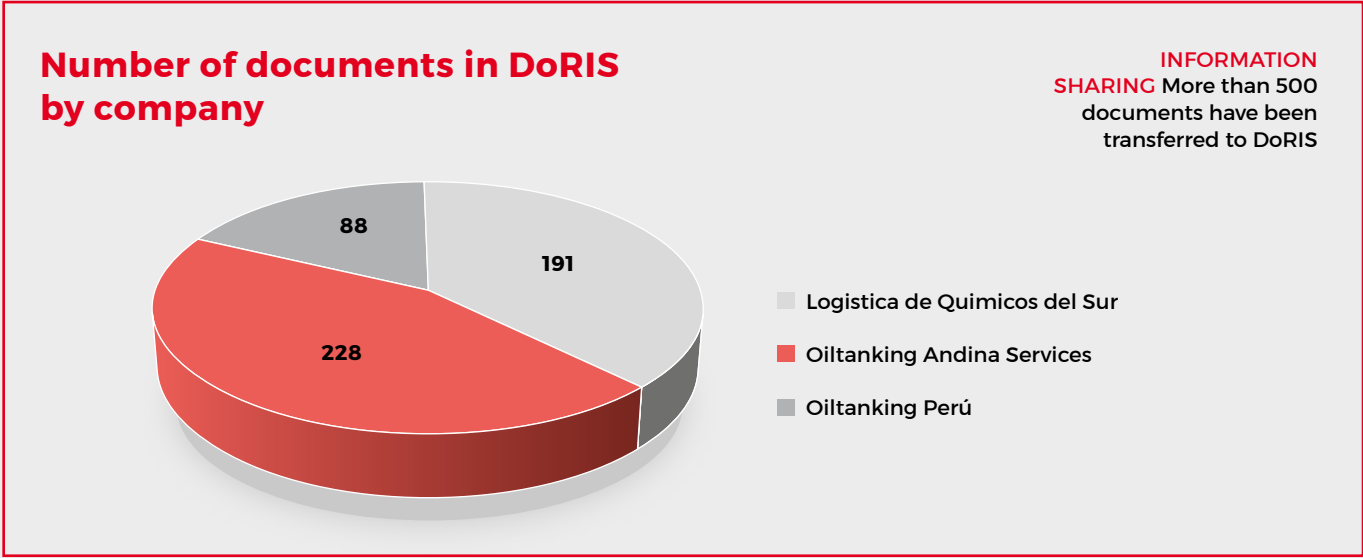
international standards: Quality Management System (ISO 9001:2015), Environmental Quality System (ISO 14001:2015) and Occupational Health and Safety Management System (ISO/IEC 18001:2007); these standards include the quality improvement model known as the Deming Cycle or PDCA: plan-do-check-act.

Oiltanking believes that using DoRIS offers several benefits. It allows for better retrieving, storing and managing documents and information thanks to proper search tools. This improved records-keeping and archiving helps to better preserve the company’s knowledge and expertise. The system’s review processes facilitate the interaction between position holders, as well as the confirmation from target readers for each new release.

The new system also makes it possible to automatically generate two types of newsletters/notifications: one for

new and modified documents, the other for to-do’s. Another advantage is that each Profit Center is independent to update their database with regard to processes and activities, translations, and adding and deleting users. This means that they no longer have to wait for the Group’s Central IT department to do so, as was the case in the past.

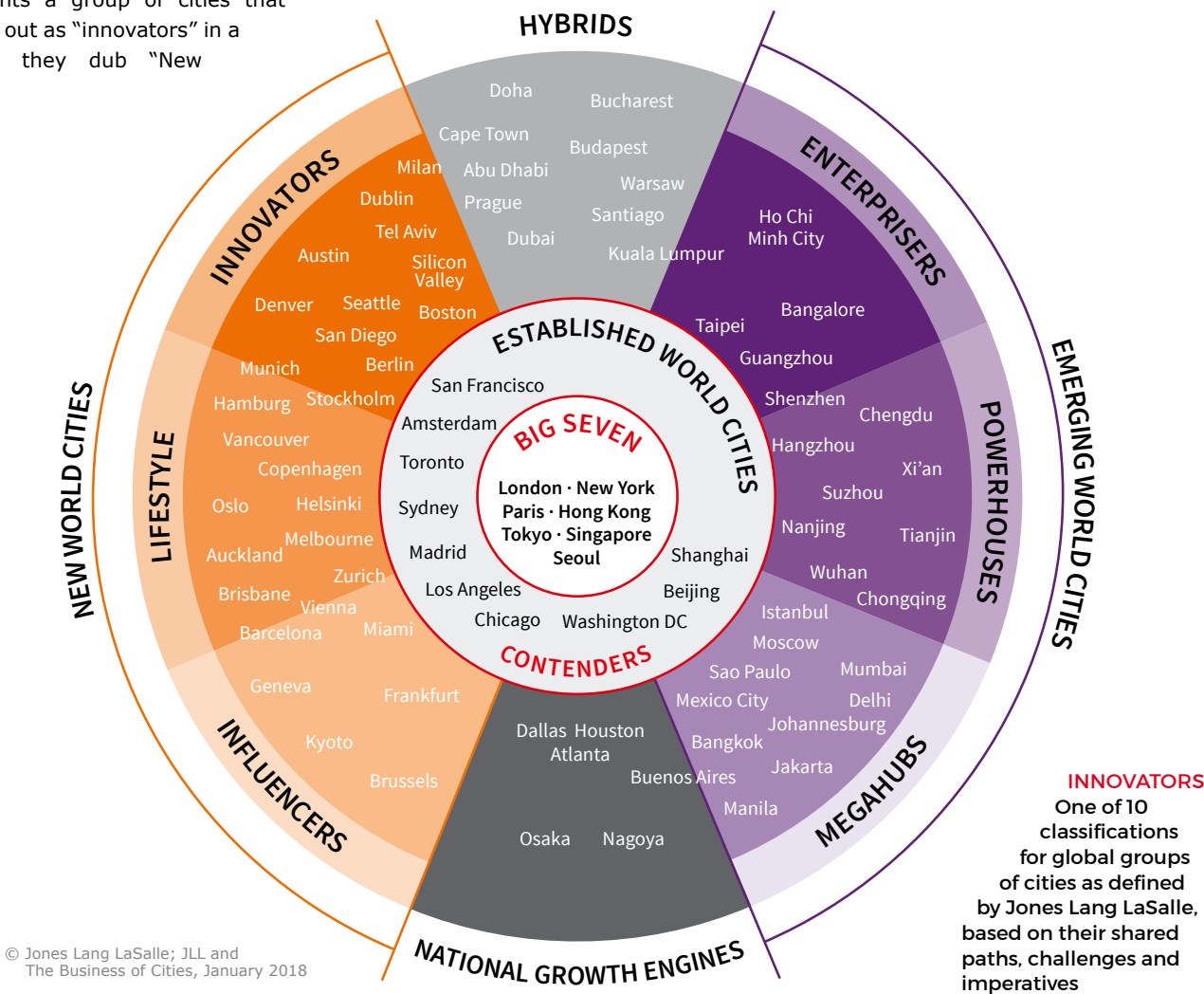
So far, DoRIS has been a fruitful experience for Oiltanking in Peru. However, the roll-out doesn’t end with the go-live of the application: follow-ups and field audits are important to make sure the systems are working in the best possible way and providing the expected benefits. “I’m happy to see that we are capitalizing on the experience we have amassed over the years to implement a tool with many improvements; it is quickly going to help us considerably improve traceability and compliance,” concludes Dario Di Luca, Managing Director Oiltanking Peru.



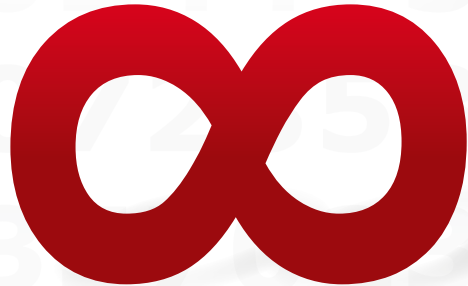
Cutting-edge Cities

■ **Rankings exist** for just about everything and in all fields. One that generally engenders a lot of interest is the list of which cities around the world are the most expensive ones to live in. But what about the world's most innovative cities – the ones that act as global catalysts for change? A recent Jones Lang LaSalle (JLL) study highlights a group of cities that stands out as “innovators” in a cluster they dub “New

World Cities.” These innovator cities include Austin, Berlin, Boston, Denver, Dublin, Milan, Munich, San Diego, Seattle, Silicon Valley, Stockholm, and Tel Aviv and are outstanding for their world-class science and technology capabilities and business climates that foster innovation and entrepreneurship.



NUMBER



■ **In mathematics**, the symbol that looks like a number eight lying on its side symbolizes infinity. It was introduced in 1655 by the English mathematician John Wallis. At Oiltanking, it is used to express the fact that the company has infinite regard for the creativity and innovative spirit of its employees, and always encourages them to submit their suggestions for improvement and innovation. For a modern and innovative company that is constantly striving for progress, these fresh ideas provide important new input and impetus from within.

Over the years, colleagues from the worldwide Oiltanking network have come up with all kinds of ideas reflecting their forward-thinking mindset, sense of responsibility, and entrepreneurial and/or environmentally sensitive insights. After a thorough review of each suggestion, quite a few were put into action and now enhance the wellbeing and working circumstances of colleagues and/or clients as well as benefitting the environment. Often, these innovations also save time and money.

We'd like to take this opportunity to highlight one measure recently implemented at the terminal in Hamburg as an exemplary representative of the many ideas that have been put into practice over the years: the level measurement as a flood warning. Hamburg is frequently subject to flooding, due to its location on the banks of the Elbe River. The water here rises much faster than at the Oiltanking sites located on the Rhine and Danube. The idea to install a permanent gauge measuring the level of the Elbe (similar to the level gauge in a tank) and to display it on the screen has considerably improved the situation on site. Colleagues are aware of the river's water level at all times and can perform the flood measures in a timely manner. Another aspect that makes this an exemplary innovation is that it can be applied accordingly at other Oiltanking terminals.

An Itinerary for Innovation

Oiltanking has embarked on a journey to embed Innovation as a cornerstone of its strategy for the years to come.

■ **By continuously** focusing on challenging the status quo, Oiltanking has been looking ahead at developments in the industry beyond 2020, with a view to understanding the implications of the rapid change around us and making sure we are prepared to take on the challenges and benefit from the opportunities arising from those changes.

We see four main trends emerging:

- Quickly evolving environment (e.g. energy sector transformation)
- Constant introduction of disruptive technology
- Growing volume of data and democratization of information
- The new war for talent

These trends are dramatically changing how organizations and employees work. One way to manage these changes and challenges is to adopt new ways of doing the same thing, or to try entirely new and different things – a process commonly known as innovation.

Oiltanking and its mother company Marquard & Bahls are pursuing innovation from the following three angles:

The process aimed at surfacing innovative opportunities consists of the following four phases:

- Explore:** Keeping the company’s overall strategy in mind, define and analyze search areas based on research, networking, and collaboration (internal and external)
- Ideate:** Translate these (generic) search areas into specific challenges that address certain needs within

(1) **Continuously improve** existing core processes in areas like Assets & Operations, which mostly involves finding smarter ways to do things in the future. One good example of this is the EXperT Project at Oiltanking Stolthaven Antwerp (see also page 7).

(2) **Differentiate and diversify**, which means growing the business in and around the core activities by investing in so called ‘adjacencies’, i.e. business opportunities that are somewhat outside of what we typically do but still have certain common features with our core expertise. Oiltanking Copenhagen’s pursuit of adjacent businesses like the Port Agency business is a case in point.

(3) **Explore new businesses**, which would involve venturing beyond what Oiltanking does today, e.g. into solar or wind power. The overall goal is to embed innovation as an integral part of Oiltanking’s culture, with a view to increasing our clients’ competitiveness, growing our business, preserving our planet, and fostering the leadership skills of our employees.

- the organization. Use different formats to develop, select and present ideas with a view to obtaining approval to move on to the next phase
- Experiment:** Test the validity of an idea and improve the idea itself with a variety of experiments.
- Deliver:** Decide whether the idea will first be piloted or rolled-out directly.



... and Action!

Try to solve our riddle and don't miss out on the chance to win! Please send your entries to: connections@oiltanking.com, or contact us by post: Oiltanking GmbH, connections Team, Koreastrasse 7, 20457 Hamburg, Germany, or by fax: +49 40 370 99-7499.

CONGRATULATIONS

Quiz Solution

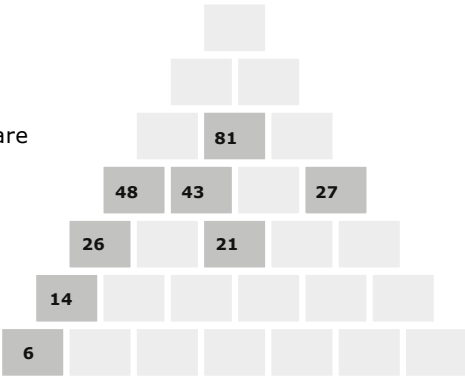
This time our congratulations go to the following winners: *Abu Chafidy Rochman, Alwi Munandir, Anggie Alliyasa, Deswanda Yaumil, Hepri Yanti, Nanang Kosim, Rowzeveld Takaya (Andy), Saktia Yuhendra, Salwa, Samsul Bahri, Syafrizal, Taufik Hidayat, Yarmas Ardi, Yuhendri Saputra, Yunar Wahyudi, Yusri/PT Oiltanking Karimun, Sneha Kundu/ IOT Infrastructure & Energy Services Ltd, Gunnar Oehnhhausen/OIL! Tankstellen GmbH & Co. KG, Wolfgang Schüttler/Oiltanking Deutschland GmbH & Co. KG - Tanklager Hamburg, Ekaterina Korobova/Marquard & Bahls AG, Roland Terrasas/Oiltanking Texas City, L.P., Wendy Van Poucke/Oiltanking Ghent nv, Romel Perez Huerta, Yesenia N. Idrogo Cabezas/Terminales del Perú, Ramon Guerra/Oiltanking COASSA S.A..* They receive a well-earned surprise gift for knowing exactly the items that didn’t match the other words on the same line – or for sending us a convincing and correct solution that differed from the one we had in mind.

- Answers:**
- 1. Green.** Yellow, red and blue are primary colors, green isn’t.
 - 2. December.** The three other months have 30 days.
 - 3. Cabbage.** The three other vegetables grow underground.
 - 4. Shovel.** The others have prongs.
 - 5. The letter L.** It has no curve.
 - 6. The number 42.** Unlike the digits in the other numbers, 4 and 2 do not add up to ten.
 - 7. Carbon.** The other three are noble gases.
 - 8. Rome.** The word contains only four letters, all the others contain five.
 - 9. Sugar** is the only non-beverage.
 - 10. Cacao** isn’t white.

NEW QUIZ

Top notch construction

The Pyramids at Giza, constructed roughly between 2550 and 2490 B.C., are one of the most daring and innovative engineering projects in human history. Though scientists have different hypotheses about how they were built, in the case of our mathematical pyramid, there is fortunately only one correct way to find the missing numbers: each field contains the sum of the two fields immediately below it. Please make sure we receive your finished construction by **February 9, 2019**. Good luck!



Innovative Images

While the means by which a marriage is sealed is usually still a ring, nowadays people often are quite innovative about how and where they propose. And if and when a baby arrives, there’s no end to the innovation that enters your life – beyond disposable diapers, video baby monitors, spill-proof cups and the like... If you have some “innovative lifestyle moments” from 2018 to share, please send us pictures (e.g.of your wedding and/or newborn) by **January 24, 2019**.

LAST BUT NOT LEAST

Picture: © Publicis One



By Gum!

Greyish-white spots resulting from chewing gum residue are a widespread nuisance on city sidewalks. The London-based company Gumdrop Ltd. has a unique solution to this sticky problem. They are the first in the world to have developed a process for recycling chewing gum into a range of new products that can be used in the rubber and plastics industry. To collect their "feedstock," they have come up with bright pink bubble-shaped bins designed specifically for the disposal of chewing gum. Once full, the "Gumdrop" is returned to Gumdrop Ltd. where its contents are recycled. The reprocessed chewing gum can be turned into a vast number of things from mobile phone covers, to combs, stationery, and even shoe soles! Gumshoe is a project the company recently realized in collaboration with the advertising agency Publicis One and the City of Amsterdam, where roughly 1.5 million kg of chewing gum end up on the streets each year. While the shoe's upper is made of leather, the sole is made of a compound called Gum-Tec which contains a minimum of 20 percent recycled gum. Approximately 250 g of scrap chewing gum is needed for one pair of Gumshoes. On sale since June 2018 for about 190 euros/pair, they even smell like bubble gum when you first slip them on!