

# EXECUTIVE INSIGHT

ISSUE #43

## MAGAZINE



**DIAVIK  
DIAMOND  
MINE**

PAGES 42 - 49



# A new road in northern Canada.

## A massive opportunity.



### The proposed Grays Bay Road and Port is an Inuit-led project on Inuit-owned land in western Nunavut.

It will give mining companies lower cost access to a mineral-rich region via a 230 km all-weather road and deep water port on the Northwest Passage. The known geology of the area is much like Canada's mineral-rich Abitibi region (Timmins, Val d'Or and Rouyn Noranda)—when it opened up 100 years ago. This represents a significant opportunity for the people of Nunavut and the mining industry to work together.

All enquiries welcome.  
Please email [info@gbrp.ca](mailto:info@gbrp.ca)



Find out more about the Grays Bay Road and Port.  
It's Nunavut's road to a sustainable future.

[gbrp.ca](http://gbrp.ca)

# EXECUTIVE INSIGHT MAGAZINE

## EDITOR'S MESSAGE

Dear Valued Readers,

It's my utmost pleasure to introduce issue 43 of Executive Insight Magazine.

In this edition, we cover a wide host of important international projects. Personally the Ocean Cleanup project wins it for me. The profound impact similar projects could have all over the world is undeniably important for the future of our environment and planet.

At the same time, we're looking at a wide range of 21<sup>st</sup> Century Mega Projects which are developing new technologies and methods to reduce their Carbon Footprint. These will therefore fall in line with international environment policies and achieve perfect accreditations. It's unavoidable that as the world grows, infrastructure and futurism will do too and it's our duty to maintain that we do it in the correct way.

We are also covering the Caminex Expo 2019 which is a fundamental annual exhibition concentrating on continued investment awareness across several key Zambian industries. Sydney Build Expo which is Australia's leading Construction, Architecture, Build & Design exhibition. The African Mining sector, renowned for their mining operations and quite frankly an abundance of future potential and untapped resources.

Our main interviews in the edition are with, Mr. Patrick Boitumelo, President and COO, Diavik Diamond Mine, a Rio Tinto JV company. Mr. Mahmoud Torky, Managing Director, Viva Group. Mr. Tewolde Gebre Mariam, Group CEO, Ethiopian Airlines & Mr. Pasi Sutinen, Head of Telia Finland, Data Centre operations.

As we continue to grow as a world leading Business to Business digital publication, you're welcome to contact me to discuss how you feel the business would benefit by appearing within Executive Insight Magazine via. [editor@jsinternationalmedia.com](mailto:editor@jsinternationalmedia.com) I can then have one of our experienced editorial managers contact you to discuss the proposal further.

Thank you kindly for your time and I look forward to presenting issue 44 to you next month.

Sincere regards & best wishes,

**Jay Benmehidi**

Chief Editor

Executive Insight Magazine





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# GO BIG OR GO HOME: THE GREATEST MEGAPROJECTS IN THE WORLD TODAY...

**Megaprojects are exactly what the moniker implies - they are not merely big, but BIG.**

Held in awe for their unprecedented scale and complexity, not to mention price tag, these gigantic construction projects are understandably a source of great pride and prestige for the countries that succeed in building them.

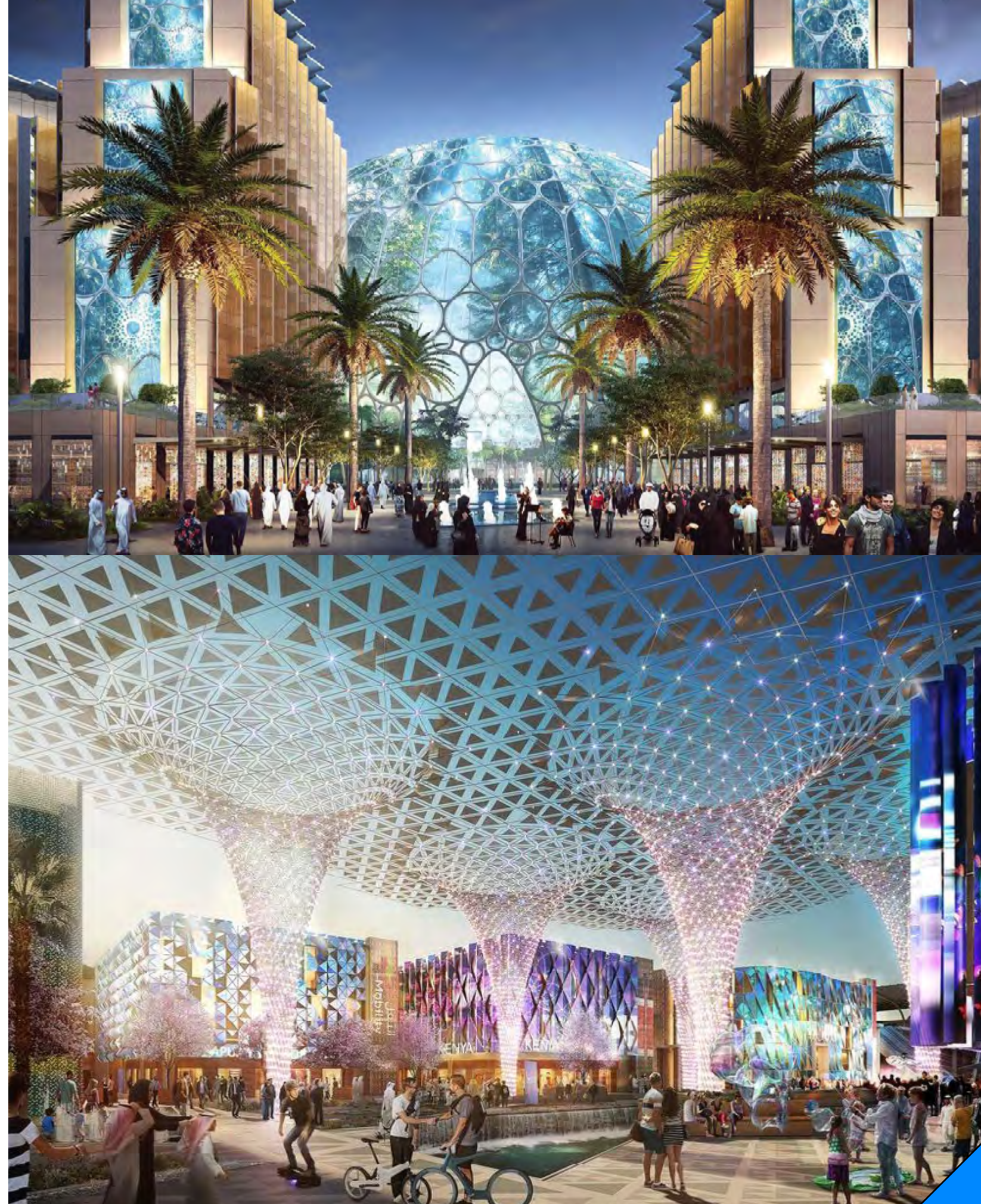
Upon their completion, they are viewed as pinnacles of human achievement, and in some cases, like that of the International Space Station, can even change the world. There is no blueprint for building one, and nor can any shut cuts be taken when it comes to construction work. Each project is unique, and therefore poses its own unique obstacles and challenges that must be overcome over the course of the build.

Once a megaproject has been given the nod, they must be designed and built from scratch; they must overcome significant amounts of red tape, and more often than not face

strong criticism from many quarters due to the amount of resources they consume and the environmental costs that are incurred. As an example of this, the Three Gorges Dam could certainly be called a superhuman feat of civil engineering capable of supplying vast amounts of electrical power to what is an emerging superpower, and yet it displaced millions of Chinese and rendered thousands of acres of land uninhabitable.

To take on such a challenge, all personnel involved in turning a grand design to reality must not merely face but embrace the unknown. Great risk comes as standard, as do huge cost overruns, but the rewards and glory that come once the project is all wrapped up far outweigh them.

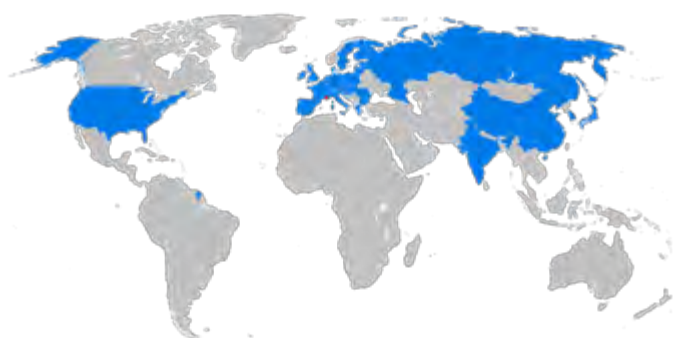
Today, governments and private sector actors are leading some of the most ambitious and transformative megaprojects the world has ever seen. From new city projects to mind-boggling infrastructure builds, here are some of the most impressive megaprojects that are underway today.





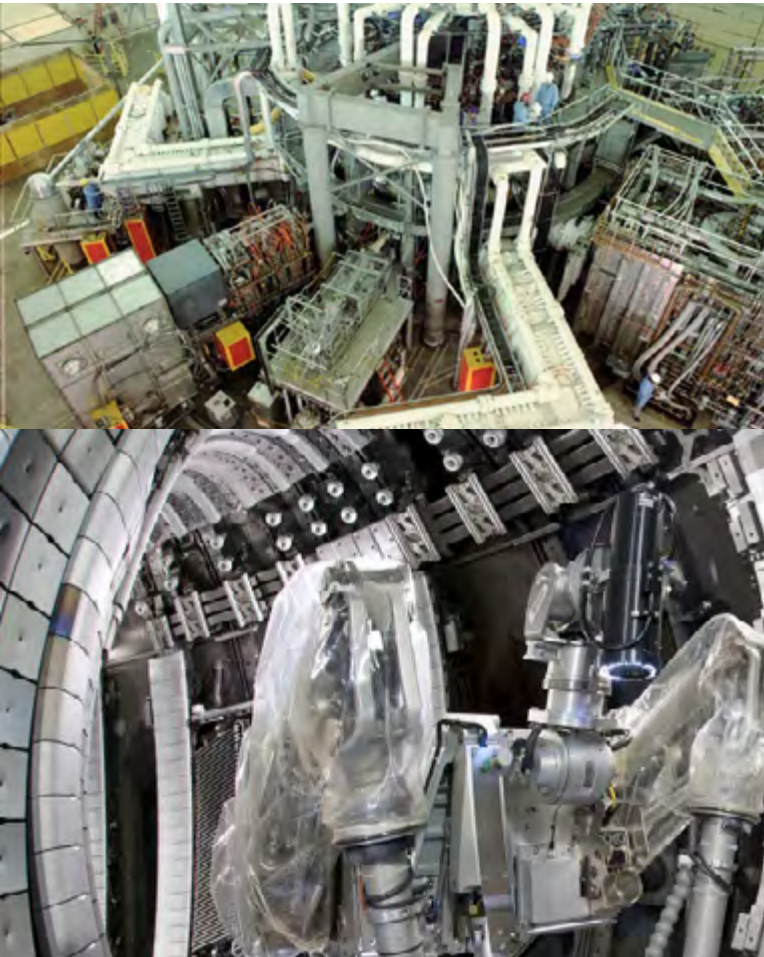
# International Thermonuclear Experimental Reactor (ITER)

The International Thermonuclear Experimental Reactor (ITER), based in the south of France, is quite simply described by those working on it as “the most complex science project in human history.”



ITER launched 10 years ago by seven partners: the European Union, the United States, China, India, Japan, Russia and South Korea

According to the World Nuclear Association, fusion power “offers the prospect of an almost inexhaustible source of energy for future generations.” The team believes that fusion energy is carbon free, environmentally sustainable and more powerful than fossil fuels. If successful, a future where energy is all-but limitless and all-but free is not far away. The cost of this experimental project, which it’s partners hope will reach its first full-power fusion by 2035 is US\$21-26 billion. The key partner in the project, the US has given in the region of US\$1 billion to ITER so far, and had been planning to contribute an additional US\$500 million through 2025. However, the firebrand US President, Donald Trump, has proposed budget cuts which will see Washington’s contribution for 2019 would drop to US\$75 million from US\$165 million.



# London Crossrail

As the world’s first underground railway, London Underground provided a blueprint for urban transport that the world’s greatest cities have all since emulated. Since it opened it’s doors to commuters in 1863, with the opening of the Paddington to Farringdon line, it has continued to grow and improve to the extent that, even today, it remains the busiest and most extensive underground rail system in the world.

London Crossrail is an ambitious project that will greatly expand and upgrade the world’s first metro system, that even now continues to grow. Completion of the project will add 26 miles of tunnel and connect 40 stations, at an estimated cost of construction is US\$23 billion – a pricetag that will almost certainly overrun. The project is scheduled for completion in phases, with the first new track going into service in 2019 and all remaining tracks in service by 2020.

In terms of scale and cost, Crossrail is the largest infrastructure project underway in Europe today by some distance. Nearly 10-years on since work first began on the project in 2009, the first phase of project should be completed by early next year. Completion of each stage of the Crossrail Project will result in roll-out of a new high-speed railway, dubbed the Elizabeth Line in honour of the Queen, below the bustling streets of the British capital.

Upon completion, the Elizabeth Line will stretch for 118km from Reading and Heathrow at it’s western-most point through to Shenfield and Abbey Wood in the east. For the millions of commuters and tourists who rely on the underground to get across London for work and play, the impact of Crossrail will be transformative. Crossrail will streamline travel through and into central London, resulting in faster commute times and a less congested travel experience – something that will bring about a sigh of relief for anybody in London who uses the tube to get into the office each morning!



“The Elizabeth Line will stretch for 118km from Reading and Heathrow”





# International Space Station

A project of the greatest ambition and one which is quite literally out of this world, the International Space Station is undoubtedly one of humanity's crowning achievements. What is there to say? The world's most famous megaproject is that rarest of things, a product of true global collaboration, and a rare example of what can be achieved when the world's leading powers pool their expertise and resources for the greater good of mankind as opposed to squabble.

The idea was originally conceived in 1984 by US President Ronald Reagan, who envisaged the ISS as an international laboratory, observatory and factory in space, that could be used to leverage the environment of space to further science and space exploration, and help foster global diplomatic relations and stimulate economic growth. Nearly ten years later, with support from 16 other countries, development of the ISS began. NASA, ESA, and the Russian and Japanese space programs pooled their resources together to assemble the first pieces of the ISS in space in 1998 – the rest, as they say, is history.

Two decades and over US\$150 billion later, the ISS orbits the Earth every 92 minutes and is larger

than a football pitch and weighs in the region of 500 tons, with each piece of each module having been painstakingly delivered into space over 40 missions at an orbit of 250 miles above the Earth's surface. The final cost could well exceed US\$1 trillion, if its potential expansions and upgrades over the years to come are realised, making it easily the most expensive object ever built.

Sadly, what goes up must come and down. The ISS was not designed to remain in space forever, and at some stage in the future will eventually crash down into the ocean. The incredible achievements, in terms of scientific knowledge gained and a deeper understanding of the universe in which we live, means that the ISS will leave behind a most formidable legacy.

The International Space Station project stands, and will long stand as a pertinent symbol of today's globalised world. Through the application of our species' technological and engineering prowess, the ISS has piqued interest and captured the imagination of millions, serving as much as an educational and PR platform as a scientific one, that has championed science and brought those from all countries and cultures closer together.



# Delhi-Mumbai Industrial Corridor



Considered an infrastructure development that will revolutionise the way India does business, the Delhi-Mumbai Industrial Corridor (DMIC) is a US\$100 billion project that is intended to put the world's second most populous country on the map, so to speak.

The DMIC will be the largest infrastructure project in Indian history, spanning Uttar Pradesh, Delhi, Haryana, Rajasthan, Gujarat and Maharashtra, and putting in place the necessary infrastructure needed to create a first-rank global manufacturing and investment hub. Make no mistake about it, the scale of the DMIC project is immense.

Upon its completion, it will be comprised of 24 industrial regions, eight smart cities, two international airports, five power projects, two mass rapid transit systems, and two logistical hubs.

Additionally, a new water and sewage treatment system will be developed, along with nine new ports and a network of new highways to facilitate access to international markets and trade routes.

At the heart of the project is the Western Dedicated Freight Corridor: multiple train lines which will run from India's capital Delhi through six regions of the country up to the country's booming financial centre, Mumbai. Upon its completion, travel time between the two mega cities will be reduced from 60 to 36 hours.

Construction of the 1,483km corridor will be overseen by Delhi-Mumbai Industrial Corridor Development Corporation, a private-public



sector partnership that will the government work hand-in-hand with a number of India's leading private sector operators. It is anticipated that over five years, the DMIC project will double employment, triple industrial output, and quadruple exports.

The first phase of the US\$100 billion project, a freight corridor linking Delhi and Mumbai, will be ready in 2019.



# South-to-North Water Transfer Project



If you had to take a stab in the dark at what the most serious domestic threat faced by China is today, you'd be forgiven for answering pollution. And you would be wrong. It is water.

Around 80% of the country's water is in the south, where half the population lives. But in the north, where 45% of the country's gross domestic product comes from and half of its power, there's a water crisis. China's entire future is threatened by lack of water, which is becoming a mounting problem.

So, what can they do about it except take some of that water in the south and bring it to the north in the most expensive infrastructure enterprise in the world. Known as the South-to-North Water Diversion Project, it is the largest transfer of water between river basins in history.

Stretching over decades, this incredibly ambitious infrastructure project will eventually channel 44.8 billion cubic meters of water a year from the Yangtze River in southern China to the H2O-deprived cities of the north. A total US\$79 billion has already been spent on the project, which won't be finished until at least 2030.

The North of China is home to almost 50% of China's population but has only about 20 percent of the country's water resources. To rectify this imbalance, China has funded construction of three huge canals, each more than 600 miles long and carrying water to the North from China's three largest rivers. The project has a 48-year construction schedule. When completed it will supply 44 billion cubic meters of water each year.

China is building three giant canals to bring 44.8 billion cubic metres of fresh water a year from the Yangtze River in southern China to arid and industrialised areas of the country in the north. The monumental undertaking is expected to take a whopping 48 years to complete. The scheme has already taken 50 years from conception to commencement. When finished it will link China's four main rivers – the Yangtze, Yellow River, Huaihe and Haihe.



# Dubailand



Along with China, the UAE has made the extraordinary business of initiating the most challenging and expensive construction projects, distinctly ordinary. With this in mind, it should come as little surprise that Dubailand is undoubtedly one of the most ambitious and large-scale entertainment projects ever attempted.

Consider this: Disney World can fit three times over inside the Dubailand complex. With 278 square kilometers, the US\$64 billion Dubailand will have six parts: theme parks, sports venues, eco-tourism, health facilities, science attractions, and hotels.

Operating under the motto 'the fun is building in Dubailand', it's diverse projects range from theme parks to shopping malls - restaurants to residential units, and include Dubai Sports City, Motor City and City of Arabia. Three mega projects, Dreamworks Animation Parks, the Little Big Club from Hit entertainment at Global Village and Six Flags Theme Park - were launched earlier this year, and total investment in Dubailand is currently running at US\$88.4 billion, a 38% increase on the previous amount of US\$63.9 billion.

Dubailand is expected to attract 40,000 visitors per day, which will contribute to Dubai's vision of attracting 15 million visitors a year by 2015. On completion of all projects, Dubailand estimates that it will host a population of 2.5 million people, including workers and residents.

In Dubailand, a series of projects will include replicas of world landmarks such as the Hanging Gardens of Babylon, the Eiffel Tower, the Leaning Tower of Pisa and the Taj Mahal, all located in the Falcon City of



Wonders. This cultural district will be spread over an area of 4 million square metres and will be shaped like a falcon, to represent the UAE's cultural legacy. It will also include a Pharaoh theme park, complete with 'Egyptian' white-knuckle rides.

It will also have the world's largest hotel with 6,500 rooms and a 10 million square foot mall, in addition to a park which will match London's Hyde Park for size, with 30km of pedestrian pathways, 20km of jogging track, more than 14km of cycle tracks and 7km of nature trails. Dubailand will also include 55 playgrounds for children, 45 sports grounds, five major events areas and retail space for shops, restaurants and coffee shops.

This megaproject is scheduled for completion is 2025.



# BUSINESS TRAVEL DESTINATION – DUBAI

**If you're heading to Dubai for business or pleasure, here's what you need to know ahead of your trip, from visa information to how to navigate the city.**

## **Dubai in brief**

Whether for business or pleasure, it is near certainty that most will visit Dubai at some stage in their lifetime, such is its status as a leading global business and tourism hub. What is there to say about this magnificent city? Its grandeur is legendary, as is its reputation for luxury and astonishing conspicuous wealth.

Dubai's flourishing business and finance sector, along with tourism foreign trade, generates enormous wealth, to the extent that its economic output accounts for nearly a third of the UAE's GDP. Long gone are the days when the city relied on petro-wealth to bankroll its ambitions – today, oil and gas exports makeup just 5% of Dubai's US\$105.6 billion GDP.

A city with one of the most incredible hyper-modern skylines to be seen anywhere in the world, Dubai is a cosmopolitan place that is something of a cultural melting pot of cultures and religions – just 15% of its 2 million strong population is made-up of UAE

nationals. It is a place where East meets West; where the world comes together to do business and enjoy the offerings of one of the world's finest cities.

## **Entering Dubai**

Visitors to the United Arab Emirates must obtain a visa prior to travel unless they come from one of the visa exempt countries or one of the countries whose citizens are eligible for visa on arrival.

Citizens of other countries should apply for visas at the UAE Embassy nearest to them and follow the criteria stated. To find out more about visa eligibility, visit Dubai's website.

## **Flying into Dubai**

Made-up of three terminals, one of which is dedicated to Emirates Airline flights at Terminal 3, Dubai International (DXB) is the world's busiest airport for international traffic. Dubai's second airport, Al Maktoum International at Dubai World Central (DWC), an aesthetically jaw-dropping site that is also colossal in size, is an alternative entry-point.





## Climate

A subtropical, arid climate ensures clear blue skies almost throughout the year. Winter may see a few infrequent rain showers. Temperatures vary from season to season: January can fall to a low of 15°C, while July can rise to the mid-40s.

## Time

Dubai operates on Gulf Standard Time (GST), which is GMT+4. There is no daylight saving

## Public transport

**Airport Bus:** Buses operate 24 hours a day at 30-minute intervals. At DXB buses arrive and depart from stands opposite Terminal 1, 2 and 3.

**Taxis:** Taxi services are government regulated. The minimum fare for taxis in Dubai is AED12 (US\$3).

Airport transfers to any emirate start from AED25 (US\$7). Taxis for special needs travellers and ladies' taxis are also available. You will find taxi ranks at the shopping malls and tourist hubs.

You can also hail a taxi from the street. Call +971 4 208 0808 to book.

**Dubai Metro:** covers the length and breadth of the city operating from 6am-11pm Saturday to Wednesday; 6am-midnight on Thursday and 10am-

midnight on Friday. Single journeys cost AED3 (US\$0.80) using a NOL card.

**Bus:** There is an extended bus network of 119 lines internally (including 35 lines to feed the metro stations).

**Tram:** The Dubai Tram runs from Al Sufouh to the Dubai Marina taking 42 minutes to complete the route. With fares starting from AED3 (US\$0.82) using a Nol card, the tram operates 6am-1am Saturday to Thursday, 9am-1am Friday. Among the 11 stations, stops include JBR, Media City, Dubai Marina and Dubai Marina Mall.

## Driving in Dubai

A first-rate network of roads and highways connects Dubai and its neighbouring emirates, making it a great way to explore the country. An Emirate Route Number designates highways and main roads in Dubai and the United Arab Emirates. In the UAE, cars drive on the right side. Speed limits are clearly displayed and are usually 60-80km per hour around town and 100-120km per hour on highways.

Cars are left-hand drive and proceed on the right side of the road as they do in Europe. (Note that international driving permits and overseas driving licences are not valid in private cars in the UAE).





### Hotels and accommodation

Accommodation options vary from luxurious five-star hotels, like the magnificent Burj Al Arab or The Palm, to surprisingly budget-friendly hotel apartments. Conference, convention, meeting and banqueting facilities are available in most hotels.

Dubai is famous for its extensive array of luxury business hotels and resorts, but it also boasts more than its fair share of standard and value hotels so as to meet every budget. Many of the leading international hotel chains are represented in Dubai, as well as a number of fine independent properties. All offer an extensive selection of food and beverage outlets, services and facilities of the highest standards, whether for business, sport or just relaxation.

### Currency and banking

The UAE currency is known as the Arab Emirate Dirham denoted by AED or more commonly Dhs - one dirham is divided into 100 fils. The dirham is pegged to the US dollar. All major international banks are easily accessible and have branches in the city. Their opening hours are 8am-2pm, Saturday to Thursday. ATMs are widely available and major credit cards are widely accepted.

### Correct etiquette

While Dubai is an accommodating city that is open, tolerant and global

in nature, it must not be forgotten by guests that their host city is one which is also inherently conservative.

Contrary to popular belief, virtually all attire is acceptable in Dubai. Swimwear is permissible on beaches, pool and spa areas and for water-based entertainment but is not considered appropriate in areas such as business districts and shopping malls. It is pertinent to note that in the more historical quarters of the city and places of religious worship, dressing conservatively is appreciated. In mosques, clothing that covers shoulders, arms and legs and head scarves for women, are required.

Alcoholic drinks can be purchased in licensed hotels and restaurants, but as an Islamic nation drinking is not considered outside of these environments. There is a zero-tolerance attitude to drink driving in Dubai, as well as inappropriate behaviour while under the influence of alcohol. It should also be noted that during the holy month of Ramadan, eating, drinking, and smoking in public are strictly prohibited.

Public displays of affection between a man and woman are considered disrespectful.

While not essential, a tip of 10 percent is appreciated.

### Healthcare facilities

The city's healthcare offerings are, much as you might expect, world-leading. Dubai Health Authority (DHA) regulates all medical services in the emirate. Rashid, Latifa and Dubai Hospitals are operated by DHA itself and all emergency services are free for both residents and visitors. There are also a great many private hospitals in the city and that vary in cost.

### Communications

Telecom services are provided by Etisalat and du, Direct dialling is available to most countries. Calls made from one fixed line to another within Dubai are free. The country code is +971 and the area code is 04.

### Opening hours

Shopping malls are open 10am-midnight Sunday to Wednesday, 10am-1am Thursday, Friday and Saturday.

Independent retail outlets: 10am-1pm and 4pm-10pm Saturday to Wednesday, 4pm-midnight Friday.

Most companies are open from 8am-6pm Saturday to Thursday.

Embassies, consulates and government offices operate from 7.30am-2.30pm Sunday-Thursday.

Friday and Saturday are official holidays for all government departments.





# THE OCEAN CLEANUP

The world's most ambitious ocean clean up begins...

It's impossible to deny that we as a species have achieved wonderful things during our short time on Earth. When we put out collective minds to it, even the seemingly impossible, be it travelling to the moon or reaching the darkest depths of the world's deepest oceans, becomes possible. However, whilst we've all but succeeded in mastering the world around us, our incredible accomplishments have come at a huge environmental cost to our planet.

This shameful environmental legacy can perhaps best be characterised by the ballooning pollution crisis that blights our oceans. This issue, after years of neglect, is finally out in the open but the belated action that is now being taken by the world's advanced nations to address the problem is thus far, too little, too late. But where governments have shown themselves to be woefully inadequate in tackling the catastrophe, innovative private sector progressives have fortunately proven to be more forward-thinking and capable.

Since it was formed in 2013, the Ocean Cleanup has had one unbending goal – to develop the technologies and systems needed to begin clearing the Earth's oceans of plastic debris, particularly the 'Great Pacific Garbage Patch' in the Pacific Ocean. A hugely ambitious goal if ever there was one.

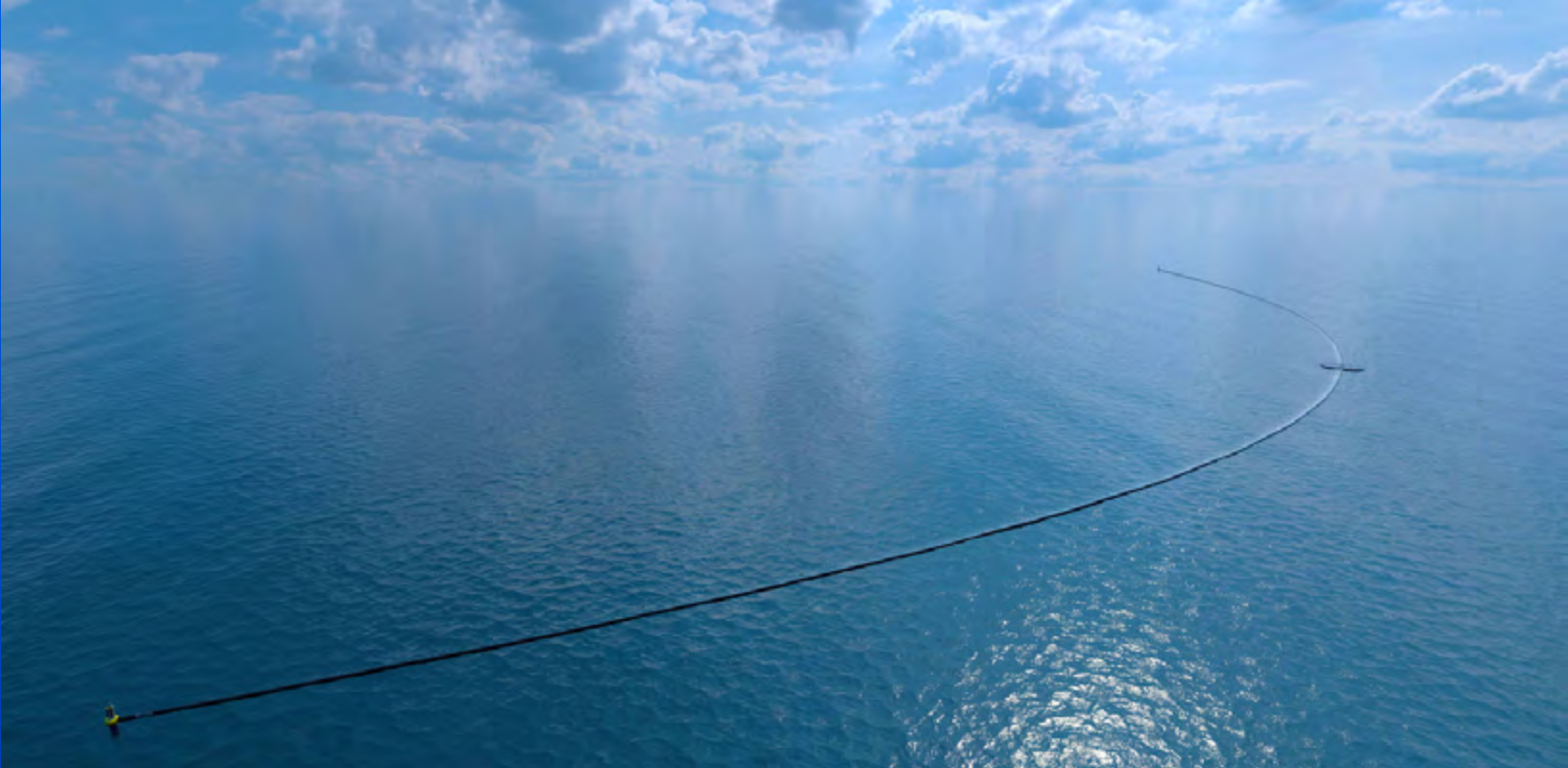
For a sense of scale, consider this: the Great Ocean Garbage Patch, the largest of five gigantic floating rubbish patches that have built up in the swirling waters of five major ocean gyres – vortex like systems that occur where separate currents in the Atlantic, Indian and Pacific Oceans meet.

Now three times larger than France in terms of surface area, The Great Pacific Garbage Patch has been created by the accumulation of 80,000 tons of plastic, primarily from Asia. Rather than being a solid mass, however, it is more a 10 metre deep witches' brew; a marine soup, of sorts, made up of plastic detritus and other man-made rubbish that could take a millennia to fully degrade.

The environmental impact of such huge-scale marine pollution on natural ecosystems and marine life has been devastating, with studies suggesting that at a conservative estimate over one million seabirds and over 100,000 marine mammals are killed each year. The impact of marine plastic pollution on fish stocks is unknown, but it is undoubtable that the damage caused is immeasurably high.







# THE OCEAN CLEANUP

After completing an air and sea expedition to analyse and map the Great Ocean Garbage Patch in 2015 and 2016, the organisation's prodigious founder, 24-year old Dutch inventor Boyan Slat and his 70+ team of scientists and engineers have spent the past two years developing and building an floating ocean boom system designed to capture ocean plastic.

The innovative 600 metre device, named System 001, is currently in testing 400 miles off the coast of San Francisco, and will soon be towed to the Pacific Ocean where it will be put to work. Resembling a giant piece of spaghetti, the cylindrical boom is designed to float on the ocean surface, with a screen hanging vertically in the water column as anchors on either end of the float hold the device in a horseshoe shape. As waves and currents move toward the device, the net should catch pieces of trash and the floating boom should stop the trash from getting pushed over the net. If successful, Slat's organisation intends to deploy dozens of these systems over the coming decade.

However for all the excitement surrounding the project, there has been mounting criticism over the effectiveness and cost of the device. One such criticism is that the system is unable to capture plastics that have degraded into miniscule microplastics – a form of debris accounting for a large proportion of all plastics in the ocean today. There is some legitimacy in this point - the ocean's surface is but the tip of the marine plastic iceberg. Researchers and marine experts who have been monitoring the crisis have detected microplastics and synthetic fibres at the bottom of the world's deepest oceans, and even found them frozen into ice cores.

The great work on the part of The Ocean Cleanup foundation should be seen as the humble beginnings of a campaign to rid our oceans of debris and pollution, rather than an end solution, however. One of the criticisms of Boyan Slat's Ocean Cleanup Array is that it cannot yet capture plastics that have degraded into miniscule microplastics – a form of debris accounting for around 90% of all plastics in the ocean today. Additionally, the ocean surface is but the surface of the problem; researchers and marine experts have found that the pollution crisis facing our oceans extends to microplastics and synthetic fibres being frozen into ice cores, and all manner of unpleasantness which will prove difficult to rectify.





## Facilitating the growth of Australia's global city

Sydney is thriving, and its desirability and success means that across its glittering skyline, countless cranes can be seen building up the residential and commercial skyscrapers needed to facilitate its growth. Sydney is now experiencing a US\$7 billion renaissance, with US\$4.8 billion worth of construction projects underway in the CBD alone. This is coupled with a further US\$3.1 billion of approved projects that are due for completion by 2025. Infrastructure works are booming too, with the development of WestConnex, NorthConnex, Sydney Metro and two light rail lines, which are all taking place concurrently.

Amidst this multi-billion dollar infrastructure boom, the city's construction sector is working tirelessly to ensure that the economic renaissance continues, in-line with its Sustainable Sydney 2030 goal to ensure that Sydney continues to climb the global alpha cities rankings and gain ground on the likes of London,

New York, Singapore, Shanghai, Dubai, and Tokyo – the world's leading business and financial centres. It is against this background that Sydney Build Expo 2019, Australia's largest expo for the construction sector, and indeed one of the most significant in the wider South-East Asia region, will take place.

Taking place at the Royal Hall of Industries & Hordern Pavilion, Sydney Build covers all sectors of the construction industry, from residential to commercial and infrastructure. For the thousands of industry professionals who will be in attendance, the two-day event will showcase all the latest projects and opportunities in Sydney and NSW, and help the construction industry's key connect.

Since its launch three years ago, Sydney Build has fast built a loyal following, drawing in attendees from across Asia who do business in Sydney and its surrounding regions. Last year's event was met with huge success, with 157 exhibitors, 11,839 pre-registered visitors, 56 supporting partners, and 92 speakers.



After reaching full capacity last year, Sydney Build will be taking up both the Royal Hall of Industries and its neighbouring venue, Hordern Pavillion, - for the next edition. And to be sure, the 2019 event will be bigger and better still.

Sydney Build will feature hundreds of exhibitors from across five zones, hundreds of industry speakers across multiple conference floors, themed

networking lounges, the Women in Construction networking morning, and many more free-to-attend sessions. With over 200+ industry experts joining our event programme, Sydney Build is a place to get up to date on the latest industry trends and developments, whilst building new connections with influential figures, and a platform from which new product launches and development opportunities can be announced.



As a meeting point where industry professionals can meet and do business, attendees and exhibitors will be able to generate highly targeted business leads with thousands of senior decision makers including Managing Directors, Senior Buyers, Purchasing Managers and Commercial Managers.

Additionally, you can also raise your brand awareness at the leading construction and design show in London and the UK. By exhibiting at Sydney Build or visiting as an attendee, you will be able to deliver your organisation new quality connections, generation leads, and help position your business to as to achieve improved growth and boost competitiveness.

To win contracts, promote products, learn from leading thought leaders from Sydney and the wider region, enhance your brand awareness, and forge new business opportunities, visit the Sydney Build Expo 2019 website to register and find out more.

Royal Hall of Industries & Hordern Pavilion

**14 March 2019 | 9:30AM - 5:30PM**

**15 March 2019 | 9:30AM - 4:30PM**





# TECH REVOLUTION - INDONESIA

## A DIGITAL DRAGON IN THE MAKING: How Indonesia's digital sector is poised to fly

Let there be no misunderstanding: Silicon Valley is, and will long remain unrivalled as the centre of gravity of the global digital economy. It would be ludicrous to imply anything but.

However, it is indicative of how much the world is changing that, for all San Francisco's tech sector pre-eminence, its monopoly on the acquisition of talent is being broken, and startups are beginning to pop-up in alternative centres across the globe.

The eye-watering costs that come with doing business in the valley has for the first time given the rest of the world a foot in the door, to the extent that it is no longer uncommon to encounter startups that operate out of London, Paris, Beijing, Vancouver, or Portland. In Asia, naturally Singapore, China, South Korea and Japan have captured the lion's share of attention. Indonesia, it would seem, has thus far flown under the international radar - a curious thing indeed, when you look at the country's vital statistics.

As the only Southeast Asian economy in the G20 club, one which is one of the world's fastest growing, it should be added, and with a population in

excess of 250 million, Indonesia is on-course to be one of the world's leading nations within a matter of decades. And as the advanced economies have shown, booming economic growth and an emerging tech-smart middle class soon paves the way for the emergence of an innovative digital economy.

Certainly, this is the case in Indonesia, where tech sector has emerged that is positively flourishing. Following a study by Hootsuite, it has been revealed that nearly 90 million Indonesians are online, 80 million of whom are social media users. Indonesia's digital economy is by all intents and purposes still in its infancy, but a fast-growing Indonesian tech startup scene is helping to drive the growth of e-commerce, fintech, and market research - areas that are big business as its digital sector digital comes-of-age. For some context, Indonesian tech startups managed to attract US\$3 billion in investment in 2017, more than double that of 2016. And with the numbers of new tech startups continuing to soar, it is quite feasible that 2018 could see a similar jump in investment capital into the sector. Unsurprisingly, the sector is beginning to gain global attention.

Tokopedia, an online marketplace that allows Indonesians to buy and sell goods online via an online store, was setup in 2009 and is one of the country's early tech startup success stories - so successful, in fact that it won a US\$1.1 billion investment from Chinese giant, Alibaba.

Then of course there is Indonesia's most famous startup, Go-Jek - a Jakarta-based startup that is part ride-hailing a la Grab or Uber, part digital payments and part online shopping company. Valued at over US\$4.5 billion, the company recently received US\$150 in funding from a number of big-hitting companies, including Google and Allianz.

These more well-known, established startups are but the tip of the iceberg: there's also Traveloka.com, an Indonesian flight booking company a la Skyscanner, there's Zalora Indonesia, the country's largest online fashion company - a website offering 600 brands and a product range of more than 30,000, and Alodokter - a company aiming to become Indonesia's healthcare website of choice. All of these startups are companies that to varying extents have won millions in investment funding - there are many other companies behind them.

Suffice to say the Indonesia startup scene is flourishing, to the extent that even Goldman Sachs has taken notice of Indonesia's 'untapped market potential.' And this is only the beginning

according to a report by McKinsey & Company, stating that when Indonesia fully embraces digitalisation, the national economy could generate an additional US\$250 billion in economic growth by 2025. For this to happen, however, it will take more than a tech-savvy, young middle class and a burgeoning tech startup scene.

As in virtually every other area of its economy, the city state of Singapore has put in place the foundations and digital infrastructure required to build a first-rank digital sector and tech startup scene - its not known as the Silicon Valley of Asia for nothing, after all. With this architecture in place, Singapore has stole a march on the rest of Asia in the great digital race, but even in spite of this Indonesia remains competitive.

For Indonesia, to continue keeping up, let alone catch up, the government will have to step in and provide the support needed to catalyse growth in this most promising sector, and help it reach its unimaginable potential. The government has taken its first steps on this front by deregulating the startup scene for those seeking to enter the market, but this on its own isn't enough. With the offer of financial support and well-thought-out policies tailored to the needs of the sector, the Indonesian government could supercharge the digital economy of this exciting emerging nation.





# Africa's premiere copperbelt mining, industrial and agricultural trade expo

Located in Zambia's mineral-rich Copperbelt heartlands, CAMINEX provides an essential trade platform where industry professionals, investors, and government representatives can come together.

Following the success of CAMINEX & CBM-TEC 2017, expectations of this year's edition of Zambia's premiere mining, industrial, and agricultural trade show were understandably high. On this front, to the delight of its organisers, CAMINEX 2018, didn't disappoint.

Over 4,300 visitors attended the three-day 2018 event earlier last month, which hosted 140 public-private sector exhibitors, and an extensive list of key speakers representing the Zambian Ministries of Mines and Metal Development, Agriculture, and the Zambian Chamber of Mines, as well as representatives from the most well-regarded private sector operators and business leaders who do business in the region today.

Already, however, event organisers are anticipating that next year's chapter will be bigger and better still. Across the board, it is expected that CAMINEX 2019 will, in terms of attendee, exhibitor, and key speaker numbers, potentially far surpass 2018's expo:

**"CAMINEX 2019 OFFERS IMPORTANT VALUE TO BOTH ZAMBIA AND THE DRC'S RICH MINING BELTS. IT IS THE ONLY MINING, AGRICULTURAL AND INDUSTRIAL TRADE EXPO THAT TAKES PLACE IN THE COPPERBELT, WHICH GIVES VISITORS FROM MINES IN THIS AREA DIRECT ACCESS TO THE SHOW. THOUSANDS OF BUSINESS DECISION-MAKERS, PURCHASING INFLUENCERS WILL USE THE TRADE SHOW TO NETWORK, EXCHANGE IDEAS, SHARE INFORMATION AND DEVELOP PARTNERSHIPS. IT IS WELL POSITIONED TO STIMULATE DIVERSIFIED BUSINESS GROWTH IN THE REGION AND PROMOTE ENVIRONMENTAL SUSTAINABILITY."**

Even a short glance at the statistics and growth forecasts for Zambia and its key industries goes some way to explaining the growing enthusiasm for, and interest in the CAMINEX event and Zambia at large. Zambia's natural resource-riches are vast indeed, and its investment potential indisputable.

With a total land area of 75-million hectares, and an abundance of lakes, rivers, and underground water resources and aquifers – alone accounting for 40% of the total water resources of Southern and Central Africa combined – Zambia's agricultural sector provides great opportunity for investors. 58% of its lands has been classified as medium-to-high potential for purposes of agricultural development – so far, only 15% of this land is currently under cultivation.



Already one of Africa's foremost seed exporters, and with form for the cultivation of major crops including corn, cotton, soybeans, wheat, rice, coffee, and tobacco, there is yet agricultural growth potential across a number of sub-sectors.

And then there's the not-to-be-overlooked matter of the country's immense mineral riches. Zambia's mining and metals sector remains largely undeveloped and untapped, which makes it all the more telling that, today, it is one of the world's top-ten producers and exporters of high-grade copper and cobalt. CAMINEX organisers have expanded on this, stating:

**"THE COPPERBELT PROVINCE IS ZAMBIA'S INDUSTRIAL BASE AND ITS PRODUCTION OF COPPER AND COBALT ARE OF GLOBAL IMPORTANCE. ZAMBIA IS CURRENTLY THE 2ND LARGEST COPPER PRODUCER IN AFRICA AND THE WORLD'S 7TH LARGEST COPPER PRODUCER AND 6TH LARGEST PRODUCER OF COBALT. MINING CONTINUES TO BE THE DRIVING FORCE BEHIND ZAMBIA'S ECONOMIC DEVELOPMENT, BUT DIVERSIFICATION IS ALSO GROWING IN IMPORTANCE. AGRICULTURE HAS A PIVOTAL ROLE TO PLAY, WITH POWER GENERATION, MANUFACTURING, TELECOMMUNICATIONS AND FINANCIAL SERVICES ALSO BEING A FOCUS FOR GROWTH."**

In addition to copper and cobalt, Zambia also possesses sizeable deposits of gold, zinc, manganese, and nickel, as well as coal, uranium, and gemstones.

The ongoing efforts of Zambia's pro-business government to stamp out corruption and create a stable platform upon which to foster economic growth and development have been implemented with attracting international investment and expertise in mind. It is against this backdrop of new beginnings and heady investor excitement that CAMINEX 2019 will take place.

In a business climate that remains both challenging and competitive, keeping up-to-speed with the latest industry trends, and the impact this has on doing business, is imperative. Generating growth without compromising environmental sustainability was a primary theme at CAMINEX 2018. As an increasingly important issue on the social, political and economic agenda globally, there is little doubt the subject will remain a key issue at next year's event.

Whether for purposes of networking and building relationships, developing business partnerships, the exchange of ideas and expertise, or to generate sales and leads, CAMINEX 2019 is a business hub perfect for the fostering of valuable stakeholder partnerships.





# A MINING OUTLOOK: AT A GLANCE

**Richly endowed as it is with reserves of virtually every mineral and metal imaginable, mining remains the Africa's primary foreign currency earner, accounting for a large chunk of the continent's natural resource exports. For all the investment risks posed, the incredible mineral wealth of Africa means that it is a hive of activity for companies operating in the mining and exploration sector.**

Throughout 2018, the mining industry in Africa has found itself in a state of flux, as it undergoes significant changes across the board. Technological innovations, including the emergence of battery systems and electric cars, has led to a surge in demand for battery metals, while demand for traditional metals and minerals from a rapidly industrialising emerging world has triggered a spike in commodity prices. And then there's the digital revolution to factor in – modern mining is as much about utilising AI and digital to enhance productivity and competitiveness as it is drills, crushers, and dark, dusty tunnels. In such an evolving market place, new opportunities have been created for wily investors, triggering a latter-day 'scramble for Africa' – the potential rewards on offer are seemingly greater than ever.

However, and there is always a however for investors seeking to do business in Africa, this changing landscape has presented new challenges and difficulties for investors that cause as much concern and unease as its opportunities create optimism.

Regulatory changes and new legislation can have a huge impact on a company's bottom line, and indeed the viability of mining as a country as a whole. As is par for the course when doing business here, it is inevitable that investors will find themselves at the mercy of host governments, whose political whims of the day can be the source of much anxiety. Take the signing into law of the Natural Wealth and Resources Bill 2017 by President John Magufuli in Tanzania, the signing of a new mining code that raises royalties in the DRC, and the forthcoming Rail Statutory Instrument in Zambia, for example: all have caused mining executives their fair share of concern, not to mention the occasional sleepless night. And then there's the incredibly important, but equally challenging matter of ensuring that mining operations cause as little environmental damage and degradation to the lands that host them. For the better, Africa is no longer a soft touch when it comes to operating safely and sustainably.

**Here's a look at what's happening in the most exciting mining investment locations, today.**





# ZAMBIA

Long-regarded as one of the most peaceful nations on the continent, Zambia's political stability has made the country one of Africa's more attractive foreign investment locations. Thanks to its world-famous Copperbelt Province, Zambia has captured the attention of some of the biggest names in the business, like Anglo American and De Beers.

Following the privatisation of the nation's mining industry in the 1990s, copper production increased dramatically from 300,000 tons to a projected 800,000 tons per year by early 2018. As Africa's second largest copper producer, and the seventh largest in the world, rising copper prices have facilitated the country's emergence as commodities global player. Naturally, these are exciting times for the country and its people.

That said, investors here haven't had it all their own way. Zambia's tax regime and mineral royalties have a habit of changing with the wind, so to speak, which has made foreign investors wary on more than one occasion, to the extent that it has frightened off potential investors. And then there's the problems that have



been posed by intermittent power shortages and aging infrastructure, particularly following the signing of a Rail Statutory Instrument that will soon require miners operating in the country to transport at least 30% of freight by rail – a task that is easier said than done, taking into account the amount of investment that will be required to bring Zambia's railways up to speed.

But in spite of such problems, an increasingly buoyant global economy has generated optimism in the country. Zambia's larger mining players have begun to accelerate production again, and exploration projects around the 'new Copperbelt,' a region of immense promise, has generated huge interest in the country's northeast. Between this and the stepping up of work to upgrade the country's power production capabilities, it would appear Zambia is set to experience a mining renaissance in the near future.





# NIGERIA

As the Nigerian government makes significant strides towards diversifying its economy, it has become apparent that facilitating the growth of the country's mining sector is key to realising this ambition.

Nigeria is endowed with vast reserves of minerals and metals, and was a major exporter of tin, columbite and coal in the 1960s to early 1970s. However, due to a number of political and economic factors, activity in this sector began to nose-dive considerably by the mid-1970s, and oil production took over as the primary source of foreign exchange for the country.

Recently, the government has taken steps to make the sector more attractive to investors by putting in place regulatory policies, and launching a new roadmap for the sector that aims to achieve mining prosperity for all stakeholders. Following the recent announcement of Q1 mining sector growth 14.8% this year, it would appear things are moving in the right direction.

A key challenge to further development of the sector, however, is the aging and inadequate infrastructure in some areas of Nigeria, particularly electricity supply, and access roads to sites where mineral deposits can be found.



The privatisation of national utilities and reform of the power sector have stimulated private investment in this area, and as capacity increases with new investments in the generation, transmission and distribution of electricity, the power shortages that currently trouble the mining sector should soon become a thing of the past. Until this time, mining investors can meet their power needs by working with independent power producers who can supply energy to mine sites.

The security problem in Nigeria has also improved markedly and a number of mineral rich communities in the Northern region have now been liberated from the terrorist group, Boko Haram. Communal and religious conflicts occur infrequently in the middle regions of Nigeria, which is known to be rich in minerals and metals, however.

With high expectations and willingness within the government to drive growth in the sector, Nigeria has emerged as an exciting opportunity for investors.

# SOUTH AFRICA

South Africa's mining sector has long been globally renowned for its abundance of minerals and metals, to the extent that it has been a hotspot for the world's mining industry for some decades now. The country has the world's biggest reserves of platinum and manganese, and its mineral deposits also include gold, iron-ore, coal, chrome and zinc. Mining giants such as Anglo American, Glencore, South32, and Sibanye Gold are among those operating in the country.

Today, South Africa's mining industry remains a critical component of the economy, but the sector is facing unparalleled challenges, in the form of scandals, regulatory challenges and a difficult operating environment. To address the problems of youth unemployment, poverty and inequality, breathing life back into the country's mining industry is essential.

Gold mining has lost ground over the last three decades, and ongoing declines in production of the precious metal have continued, slipping by 3.7% in 2017. The annual production index for gold is now 46% lower than it was in 2007. South African gold production



has experienced only four years of positive growth since 1990 - in 1992, 1993, 2002 and 2013. All other years witnessed a decline, with the largest annual fall occurring in 2008. However, while gold has struggled, manganese has been the star of the show in recent years with production rising sharply last year.

Surging demand for the metal came from China, where steel was the main driver behind the rise in manganese production. Rising demand for chromium and iron ore, two other minerals used in the production of steel, have also given the South African mining sector a much-needed shot in the arm.

A fresh wind of optimism has swept across the industry, following the election of Cyril Ramaphosa as ANC president. Known to be a man more business friendly and savvy than his predecessor, it is hoped that the coming 12-months will see the reversal of the negative trends that have buffeted South African mining in recent times.



# DEMOCRATIC REPUBLIC OF CONGO



The DRC is a troubled country blessed with astonishing natural riches, is a high-reward, high-risk destination for investors.

However, whilst the current political and economic uncertainty is a concern for all, strong growth in copper and cobalt prices means that the country continues to be a draw to new foreign investors.

Of the 1,100 different types of minerals and metals that can be found beneath its soil, copper and cobalt mining in particular is the country's greatest source of wealth.

With a majority of the mining taking place in the copper belt of the southern former Katanga Province, both minerals account for nearly 80% of the DRC's export revenue.

By the end of 2016, 482 companies held mining rights, compared to just 35 in 2002, and production of copper

amounted to 1.09 million tons in 2017 – up from just 22,000 tons in 2002. With regards to Cobalt production, the DRC exceeded 64,000 tons at the end of 2017 compared to just 12,000 tons in 2002.

The DRC's government intends to further increase its level of control over the mining industry so as to increase the social and environmental responsibility of mining companies operating within the country, and to balance the legal, customs and tax regimes. This can be seen in the country's decision to pass a new mining code that has substantially increased taxes and royalties by mining sector operators.

Suffice to say, this development has caused uproar amongst mining executives, but such are the potential rewards in the DRC that it will likely not deter braver investors from taking the plunge.





The RioTinto logo is displayed in white serif font on a red rectangular background.

**DIAVIK  
DIAMOND  
MINE**

# INVESTING FOR THE FUTURE...

With the increase in global demand of high-end diamonds, the Diavik Diamond Mine is achieving and demonstrating what it takes to produce some of the world's most pure and exquisite diamonds. Patrick Boitumelo, President and COO of Diavik Diamond Mines tells us why they're leading the way in regional business development and how investing for the future is benefiting local communities to thrive way beyond their mining operations.







PATRICK BOITUMELO  
COO of Diavik Diamond Mine

As President and Chief Operating Officer of the Diavik Diamond Mine, Patrick Boitumelo is responsible for delivering value to stakeholders by leading the Diavik team in the safe production of diamonds from the mine. Key priorities include successfully bringing the A21 pipe into commercial production, building strong, consultative and respectful relationships with communities, and ensuring there is a strong focus on the people who make Diavik the special organisation that it is today.

Patrick has more than 20 years' experience in the mining industry with extensive operational, stakeholder

management and corporate strategy experience at a senior level across several businesses including diamonds, soda ash, salt, nickel, iron ore, copper and copper by-products. Patrick has previously worked at Debswana, the world's leading producer of diamonds by value.

The Diavik Diamond Mine is a joint venture between Rio Tinto (60%) and Dominion Diamond Mines (40%), with Rio Tinto being the operator of the Diavik diamond mine. The Diavik mine is Canada's largest diamond mine producing between 6 and 7 million carats of diamonds each year. Since mining began in 2003 Diavik has produced over 100 million carats of diamonds.

Diavik diamonds are high end and predominantly white gems with a provenance that is clean and pure thus making them strong in demand. Diavik diamonds are ideal for the bridal markets of all established and emerging markets, including China. In China Rio Tinto has a strategic partnership with Chow Tai Fook who sell Diavik diamonds into their bridal markets in Hong Kong and mainland China. Diavik diamonds also find their way into heirloom pieces of jewellery, for sale in the most exclusive luxury diamond salons in the world.

With Diavik being one of the worlds most remote mines, Patrick explains what it takes for the team to excel at what they do best.

"The challenges of operating a diamond mine in a sub-Arctic environment are many and varied, dominated by the extreme weather conditions and lack of year-round road access to the site.

Today at Diavik we are mining three pipes underground at the same time using two different mining methods. It's a very complex, technical and demanding operation that requires, for example, permanent pumping of

water out of the mine, because the orebody was below the lake. Initially, two rockfill dikes were built to safely hold back the waters of Lac de Gras to allow open-pit mining of these three pipes. Though the open pits are directly above the underground mine, water still enters the mine through natural cracks and fissures which extend out to the lakebed. Diavik pumps around 30,000 cubic metres of water to surface per day."







Diavik is also one of the only mines in the world that you must heat the operation. They keep the temperature in the mine underground between 4 to 5 degrees Celsius, so it doesn't freeze and to achieve this, they rely on massive heating and ventilation systems inside the underground tunnels.

Their fourth pipe and recent substantial investment, the A21 pipe, is very close to the other three pipes and is the smallest of the four pipes. The A21 pipe is being mined as an open pit operation and commercial production commenced earlier this year.

With the operations being one of the worlds most unique workplaces, Patrick went on to explain more about how the staff and how they house such a workforce in the northern wilderness of Canada. "It takes a village to run a mine like Diavik and the 1100 strong workforce is very diverse in terms of genders, nationalities and skills. There are underground miners, engineers, heavy equipment operators, environmental technicians, information technology staff, health and safety advisors, and process plant operators as well as people working in human resources, finance, administrative, and communities and communications and many other areas".

"One important aspect is our commitment to hiring northern Indigenous residents. We've put in place significant training and

apprenticeship programmes to give access to employment at the mine to Indigenous people. This is really a part of the success of the mine – this connection that we've been able to create".

Other skilled production workers are flown to the Diavik site for two weeks on/two weeks off rotations, living in what is essentially a self-contained city. Some employees work a four days on/ three days off rotation and accommodation at the mine includes private bedrooms, a fully equipped fitness facility, a running track, a squash court, weights room and an indoor sauna, critical facilities when winter lasts for eight months of the year.

There is a camaraderie that comes from living and working in this remote location – the challenge, the excitement and the knowledge that they are engaged in something very special.

There is also a culture of safety and respect for each other and for the environment. Around a quarter of our workforce is Indigenous and almost half live in the Northwest Territories. The team is largely Canadian with some workers commuting from as far away as Newfoundland and British Columbia. Several have moved from their home countries to the Northwest Territories to work at Diavik including people from Australia, Austria, the United Kingdom, India, Zimbabwe, and Namibia.



When speaking with Patrick it's clear that Diavik and Rio Tinto are committed to the development of local indigenous workers and opening opportunities for careers within the local mining sector, however there will always be areas that need experience. "A test for mining companies in the North will always be accessing a skilled labour base from such a small and widely distributed population base".

"To overcome this challenge, we carefully built relationships with governments, and local Indigenous communities to focus on training and employment – even creating a Northwest Territories Mine Training Society. Developing a Northern workforce takes time but today, almost a quarter of Diavik's workforce is Aboriginal and 50 per cent of our team is Northern. This is a great success story and the development and operation of our fourth pipe, A21, presents another opportunity for Northerners to gain employment".

In terms of customers and Rio Tinto's channel to market for Diavik diamonds, it is important to note that they are an upstream supplier of rough diamonds and sell their diamonds as rough in regular sales to a stable customer base of diamond traders and manufacturers. These customers then add value to the product through their own cutting and polishing and jewellery manufacturing.

Rio Tinto have a global reputation of not being afraid to invest where needed when it comes to their operations and this goes without saying for Diavik. With the mine only having another 7 years life span left, they invested \$350m USD into the A21 pipeline project which will ensure production will remain consistent. Production is scheduled to decrease as operations move deeper underground in the three pipes and

production from the A21 pipe will offset this. The A21 pipe will therefore be an important source of incremental supply over the next four years.

Rio Tinto have a commendable approach on the environment and maintaining that strict international mining environmental regulations are met. They have invested a further \$31m USD into what is a first for them, and that's a renewable wind energy facility. With the temperatures reaching subzero, the wind facility is using state of the art technology and expertly manufactured lubricants to stop the turbines from freezing, it truly is an incredible approach on being self-sufficient.

Patrick explains that strong and respectful partnerships are at the heart of everything they do at Diavik. "The way we operate reflects an empathetic relationship with the land, its people and their legacy".

"We have Participation Agreements with five indigenous groups that oversee our community activities during the operation of the mine. Additionally, we have a Socio-Economic Monitoring Agreement with the Government of the Northwest Territories and the five Indigenous organisations. This Agreement outlines Diavik's commitments to local employment, economic benefits, cultural and community well-being, and the monitoring of these requirements by a Board of community, government and Diavik representatives".

With Diavik being renowned in diamond production, it's safe to say that their legacy after 2025 will continue to be spoken of for generations to come. The passion of the entire business in giving back to the local population is incredible and its morals are something businesses all over the world can certainly learn from.







## ACHIEVING EXCELLENCE, TAKING THE PALM BY STORM

**In a fast-moving tourism region, Viva Holding really has grown with the Dubai and Emirati tourism sector. They have gained a local reputation of providing world class Diving, Water Sports, Yachting, Photography and retail experiences to thousands of people staying within the Luxury Hotels in which they operate from.**

**Mr. Mahmoud Torky, Founder and Managing Director of the Viva Holding and its subsidiaries explains to us the importance of adhering to the strict operational rules across Dubai and their stance on safety & quality over anything else.**

Viva Holding and Viva Blue originated in 2018 when Mr. Torky saw an opportunity he wished to peruse further. This opportunity was to sell his share in the previous company he owned and rebrand as Viva Blue, Viva Blue provide the water sports activities within the group. With the previous company only operating out of 1 of the Palms leading hotels, setting up Viva Blue has allowed this to expand to 3 hotels in just over 7 months.

When speaking to Mr Torky, he modestly believed that the reputation he had developed in the Palm with his previous company he could use to grow a new business by providing the same services as they do today.

**"IN 2014 I CAME TO DUBAI TO EXPLORE BUSINESS OPPORTUNITIES THAT WERE PROVIDING DIVING AND WATER SPORTS EXPERIENCES TO TOURISTS. KNOWING THAT IT WAS A BIG RISK TO GO STRAIGHT IN TO INVESTING AND SETTING UP A BUSINESS WITHOUT KNOWING THE COSTS, PROFITS AND OPERATIONAL EXPECTATIONS WITHIN THE REGION, IT WAS DECIDED THAT I WOULD JOIN A CLOSE FRIEND WHO AT TIME WAS WORKING IN ONE OF THE PALM'S MOST SOUGHT-AFTER HOTELS. IT WAS AT THIS TIME I COULD ASSESS AND DETERMINE THAT THIS WOULD IN FACT BE A GREAT OPPORTUNITY TO DO SOMETHING I HAD ALWAYS DREAMED OF. WE APPROACHED A BUSINESS OPERATING WITHIN THE HOTEL WHICH PROVIDED THE AQUAMARINE SERVICES TO THE HOTEL CUSTOMERS I WAS WORKING FOR AND I WANTED TO SEE IF THEY WOULD BE HAPPY TO SELL A SHARE OF THE BUSINESS. IT WAS LUCKY FOR ME THAT THE PREVIOUS OWNER WAS LOOKING TO SELL SO THAT HE COULD PURSUE OTHER OPPORTUNITIES - AND WITH THAT I HAD MADE MY FIRST STEP INTO LOCAL BUSINESS."**

For Mr. Torky and his business partner, it was just the start of something special. "Buying and investing our money into this business was a massive risk, a risk worth taking explains Mr. Torky.







“WHEN WE ACQUIRED THE BUSINESS, WE WERE AWARE THAT THE TENDER WAS UP FOR RENEWAL OVER THE COMING MONTHS AND WE WERE UP AGAINST 5 OTHER COMPETITOR BUSINESSES WHO DEFINITELY HAD A LOT MORE EXPERIENCE. WE KNEW WHAT WE HAD TO DO TO WIN THE TENDER AND THAT WAS TO SHOW THE HOTEL THAT WE HAVE BOUGHT THIS BUSINESS TO INVEST IN AND MAKE IT EVEN BETTER THAN BEFORE. THIS RANGES FROM ONLINE DIGITAL CREATION TO THE EXPENDITURE ON NEW EQUIPMENT FOR THE PRODUCTS WHICH THE BUSINESS PROVIDED, THIS RANGES FROM YOUR TYPICAL WATER SPORT EQUIPMENT LIKE JET SKIS, POWER BOATS, INFLATABLES AND THEIR STAND OUT INVESTMENT - BRAND NEW YACHTS.”

The risk paid off for Mr. Torky and his business partner as they were awarded the tender. The tender was operational for the next 3 years from 2015 until 2018. Mr. Torky then goes on to explain that the business was a circle of events,

“IN THE EARLY PART OF 2018, I WAS APPROACHED TO SEE IF I WANTED TO SELL A SHARE IN THE BUSINESS WHICH REMINDED ME OF MYSELF IN 2015. AFTER CONSIDERATION AND MY AIMS TO REBRAND, I SOLD MY SHARE IN THE BUSINESS WHILST THERE WAS TIME LEFT ON THE CONTRACT AND USED THIS MONEY TO INVEST AND ESTABLISH VIVA BLUE.”

With the Palm Jumeirah being a very small area in comparison to the Hotels situated, it's a case of all the hotels know one another and reputation is vital to be successful. If you're not well thought of or known, then there will little room to expand. With the reputation of Mr. Torky, it wasn't just because of the water sports business, Viva Holding also have the following subsidiaries: Grand Pyramid, Blue Coast Photography and Sea Marina Adventures - which all have impeccable reputations as well.

“WHEN MY BUSINESS PARTNER AND I SET UP THE PREVIOUS COMPANY IN 2015, WE SET OUT TO MAKE SURE THAT WE WERE GOING TO GAIN A FINE REPUTATION AND OVER THE FOLLOWING 8 MONTHS. FIRST WE APPROACHED ANOTHER HOTEL, DUE TO THERE ALREADY BEING A COMPANY PROVIDING WATER SPORTS, THEY OFFERED US THE CHANCE TO CHARTER OUR YACHTS AND BOATS OUT OF THE HOTEL WHICH WAS EXCITING FOR US TO SAY THE LEAST. I REALLY HAVE TO SAY IT WAS DOWN TO THE PROFESSIONALISM AND HARD WORK OF MY TEAM THAT JUST FOUR MONTHS LATER I WAS THEN OFFERED A FULL ROLLING CONTRACT TO PROVIDE ALL THE VIVA BLUE WATER SPORTS FACILITIES.”



"Although the staff work for me, I don't see my staff as employees, I see them more as partners to a successful business".

With the second Hotel being one of the world's leading Hoteliers and one of the largest and most luxurious on the palm, this was a massive stride forward for Viva Blue.

Mr. Torky goes on to explain proudly and quite fondly that this hotel is very close to his heart - "it was this opportunity that made me realise that I am onto something very special here and it was the platform we needed to hit the next level" he stated.

Like any successful company it was important for Viva to build a competent team who could carry the Viva flag and more importantly be an ambassador to the hotel which they are operating from.

The team grew rapidly along with the business and with their being people all over the world visiting the Palm is was crucial to employ a variety of nationalities speaking multiple languages.

Viva Blue now operates out of 3 Hotels and they aim by the close of 2019 for this to reach a total of 6 "Now we don't just operate in Dubai, but we have an operation in RAK with a leading hotel there too, this operates under the name Sea Marina Adventures. It really has been quite humbling to expand so quickly and the reputation to provide a service which prevails in Business Best Practice and Operational Excellence.

Initially the focus point of concentration for my company was diving and other water sport activities, which you would come to expect in some the world's most pristine resorts.

However, when people were making memories with their families, there wasn't anyone to capture these and that's when Blue Coast Photography was propelled onto the scene.

"For us it was a no brainer and it took off very quickly indeed, not only were people able to capture their diving and water sports adventures, but they were able to hire our photographers for a day or two to follow and capture natural pictures of the family enjoying their holiday and trip of a lifetime and Blue Coast Photography now operates from 4 hotels around the Palm and this business is definitely going to expand next year as well".

"Even though you expect to have beautiful hot sunny days when staying Dubai, there are the occasions where we even get horrible conditions, so when the guests couldn't enjoy the beaches and most importantly the services we provide, it was important that we looked at further revenue streams. We came up with the idea of boutique shops where the guests could buy local authentic jewellery, souvenirs and gifts for family and friends back home." This was when Grand Pyramids LLC was born and they now operate out of two hotels serving tourists from all over the world.

Mr. Torky goes on to explain that with Dubai becoming more and more popular for Tourism and Employment, "It's so important that you don't just sit there and wait for the business to expand, you really do have to go out and be proactive, basically looking down on Dubai as a city and thinking hard to how we will grow, we know that once we get into a certain position, we have the essential factors to be successful".





Viva Blue brings the best Diving and Water Sports experience across the whole of Dubai. We work with some of Dubai's most exclusive Hotels and can create a diving experience which you may not experience in other Hotels or regions worldwide. Please feel free to visit our website to enquire about the other activities provided by us. You can even hire one of our luxury yachts to explore the palm further and relax with family and friends.

Our main aim is to expand our business to other resorts not just in Dubai but all over the world, where we can provide that extra something special for your guests. Please contact Operations Director; Mahmoud Torky on 00971 5696 72667 or [torky@vivablue.ae](mailto:torky@vivablue.ae) to discuss business partnership opportunities.

[WWW.VIVABLUAE.AE](http://WWW.VIVABLUAE.AE)



After just starting with 2 people when originating the business in 2015, Viva Holding now employs just over 100 people across all their subsidiary operations.

Even though each member of staff is important, there are 4 people who have been the foundations and pillars to the success and they are experts in all areas from strategy to sales growth.

We lead onto the importance of supply chain relationships and learn how businesses have worked closely with Viva in line with their expansion.

"I have to say it wasn't as simple as just buying Boats, Yachts, Water Sport and Diving equipment, we really had to look hard at the harsh climates that presents itself to Dubai, the salt levels in the water are some of the highest in the world and with summer temperatures easily peaking at 45 degrees Celsius it was crucial to buy the right equipment, it just isn't sustainable to keep repairing or buying new".

"We had to work with international suppliers for our diving and water sport equipment, one of my key management looks after all purchasing for this area and I have to say he has built a fantastic relationship between all the businesses concerned".

"I look after our Yacht and Boat procurement related services, it's the most expensive part of our spend within the business and I have to ensure that everything is right whether it's a diesel or petrol engine on the yacht to the sharpness of the boat to deal with waves and salt levels, if it's not right then it's going to cost".

"We have built a perfect relationship with one of the region's leading Marine Engineering companies who regularly maintain our Yachts & Boats so they're continuously operational. Again reputation is so important, we always maintain our suppliers are paid on time, with this we can form a trustworthy partnership which in this region is a traditional way of doing business, a handshake still goes a long way here".

Finally, we look further into the plans of Viva Holding and Mr. Torky for 2019. After a highly successful past 12 months Mr. Torky adds "As mentioned earlier we aim to grow our Viva Blue business to at least 6 hotels the next 14 months".

With this you will need to add new staff to the business and I see us employing at least 180 people within the group by then.

"I am also partnering with a media business next year which will add an extra dynamic company within the group's subsidiaries. The future of our business looks amazing and the next 14 months will be very exciting".

"What I would like to add is, the success of our group comes down to hard work all over the business, maintaining our impeccable customer service standards and listening to one another's points of views and suggestions, as we can all learn from each other's experiences.



# ETHIOPIAN AIRLINES



## HEADING INTO THE FUTURE

Ethiopian Airlines has steadily maintained its stature as a formidable aviation powerhouse with its signature service both in the air and on the ground with multiple award-winning safety, excellence and reliability, amid the cut-throat market and environmental regulation in Africa.

Mr. Tewolde Gebre Mariam, CEO of aviation group, explains to us about his time with the business and how he has managed to oversee the company in its exceptional growth trajectory from being a local carrier to an internationally renowned entity.

Ethiopian Airlines came into being in 1945 and then made its inaugural flight the following year in 1946 serving as a local carrier up until 1951. From its humble begging all the way to its current global prominence, Ethiopian Airlines has been uninterruptedly serving business, leisure and religious travellers with its unrivalled efficiency and operational success.

Commanding the lion's share of Pan-African passenger and cargo network with its youngest and most modern fleet including Airbus A350, Boeing 787-8, Boeing 787-9, Boeing 777-300R, Boeing 777-200 Freightliner, Bombardier Q-400 double cabin, the average fleet age is around five years old, Ethiopian currently flies to more than 116 international passenger and cargo destinations across 5 continents.

**"WE ARE CURRENTLY IMPLEMENTING A 15-YEAR STRATEGIC PLAN CALLED VISION 2025 THAT WILL SEE US BECOME ONE OF THE LEADING AVIATION GROUPS IN THE WORLD WITH SIX BUSINESS CENTERS NAMELY, ETHIOPIAN INTERNATIONAL SERVICES; ETHIOPIAN CARGO & LOGISTICS SERVICES; ETHIOPIAN MRO SERVICES; ETHIOPIAN AVIATION ACADEMY; ETHIOPIAN ADD HUB GROUND SERVICES AND ETHIOPIAN AIRPORTS SERVICES. ETHIOPIAN IS A MULTI-AWARD-WINNING AIRLINE REGISTERING AN AVERAGE ANNUAL GROWTH OF 25% IN THE PAST SEVEN YEARS."**

Since 1985, Mr. Tewolde has an exceptional career with Ethiopian Airlines having worked his way up from Transportation Agent into other senior positions, up until he assumed his current highest executive position of Africa's largest airline's group in January 2011.

With the continued expansion of the business, we asked Mr. Tewolde what he feels is key to effective leadership and inspiring success amongst staff;



**TEWOLDE GEBRE MARIAM**  
CEO of Ethiopian Airlines

**"LEADERSHIP IS ABOUT CREATING AN ENGAGED EMPLOYEE POPULATION. AS A CEO OF AFRICA'S LARGEST AIRLINE GROUP, PART OF MY JOB IS TO INSPIRE MY EMPLOYEES AND THE MANAGEMENT TO PUSH THEMSELVES – AND, IN TURN, THE AIRLINE – TO GREATNESS. TO DO THIS, I ALWAYS PIONEER THE WAY BY DOING IT MYSELF. IT IS MY FIRM CONVICTION THAT IF ONE SAYS ONE THING AND DO ANOTHER, THEY LIKELY WON'T GET THEIR EMPLOYEES FOLLOW THEM ENTHUSIASTICALLY. EVERYTHING WE TELL OUR EMPLOYEES WILL EVENTUALLY MEET WITH SUSPICION AND DOUBT AND THE VISION WE PURSUE MAY LOSE ITS APPEAL, JUST BECAUSE OUR TEAM DOESN'T TRUST US ANYMORE. KEEPING THIS IN MIND, I ALWAYS PUSH MY EMPLOYEES FORWARD WITH EXCITEMENT, INSPIRATION, TRUST, AND VISION. BY AND LARGE, LEADING BY EXAMPLE IS FUNDAMENTALLY DECISIVE FOR EFFECTIVE LEADERSHIP AND BUSINESS RESILIENCE."**

It's clear when speaking to Mr. Tewolde that his passions lay in leadership and employee satisfaction. It is imperative to the ongoing operational developments of Ethiopian Airlines and the way this filter's through to customer satisfaction. The strategy to achieve success is as follows "There is only one thing we can't go without if we want to succeed in any area of life, and that's hard work. Success doesn't happen by chance and it takes strategic actions in the right direction to get there.

For Ethiopian Airlines to continue its steady and comprehensive expansion within Africa and the rest of the world, the following areas really need to be addressed; Better developed Airport and ICT infrastructure across the African Continent, quicker paced open sky agreements, lower taxation charges on aviation fuel, overflying, landing and parking and limited market access within Africa. We find they face unfair competition from Gulf based airliners who have access to government subsidies and very cheap aviation fuel.









## CONGRATULATIONS ETHIOPIAN AIRLINES!

The entire team at Rhinestahl CTS is proud to serve one of Africa's leading carriers. As your GENx, LEAP, Rolls-Royce and CFM56 engine tooling provider, we are committed to helping you continue your extraordinary success story.



With Ethiopian Airlines being a fast-paced airliner transporting tens of thousands of customers daily, supply chain relationships are fundamental to the safety and implacable service of the airline. Ethiopian Airlines work with a high number of internationally renowned businesses from all over the globe. MRO supply chain probably must be the most important area of supply chain in terms to annual spending. The MRO unit of the airline provides approved and dependable services which ensure the safety of the fleet, passengers and on-board staff. These relationships are long standing and the carrier maintains a strong and win-win relationship with suppliers.

What really sets Ethiopian Airlines apart from its rivals is the fact that the airline bases its day to day operation with its exceptionally dedicated employees and management, who do not consider their association with their airline as a simple contract of employment for a monthly paycheck; rather they consider themselves to be in a long-term mission of building a competitive global airline brand for their country. With this passion and commitment, its employees serve their customers with an Ethiopian hospitality that is unique to Ethiopian Airlines and retain them with high customer-centricity.

Ethiopian Airlines is located at a geographically ideal position, giving it the advantage of offering seamless and convenient connection options for travelers to and from Europe, Middle East and Asia. With a geocentric advantage enjoys an added level of competitiveness to best connect people of the world within a 10-hour radius.

The Cost Leadership stance of the airline has also immensely contributed to its remarkable growth, producing the maximum value proposition at the least possible unit cost in the industry. In this regard, there is also a continuous cost saving program which helped create any cost reduction way across multiple working areas.

A uniquely strong HRD strategy and execution. Through training and development, unwavering safety first stand and execution of their Vision 2025, Ethiopian strives to nurture a team which can cope with the volatile, uncertain, complex, and ambiguous (VUCA) type of operating environment. Highly skilled and vigilant management skillfully navigating through difficult situations.

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Ethiopian Airlines also has the most reputable corporate governance with a clear relationship with the Ethiopian government, the owner of the carrier. Their airline is a 100% government owned organization, but ownership and management of the airline are separate, the management is handled by seasoned aviation professionals who run the airline on the standards of a normal profit-making business enterprise.

The hallmark of African flavored Ethiopian hospitality has a great place as a success element. Ethiopia is a country, very well-known for its warm hospitality. By nature; Ethiopian people are very welcoming all that's need is to just add professional knowledge and industry procedures through basic and recurrent trainings. For this they have been recognized by the most reputed customer-service tracking organization in the airline industry, Sky Trax, for Best Airline Staff in Africa multiple times.

Above all, they superbly understand the African aviation market, they know their African customers very well, more than any airline, which matters a lot as well. Focusing on establishing a 'global standard of product for the best value' in its Cloud Nine and economy products that will attract the 'price rational' African traveler.

Recent exciting developments were some of the things Mr. Tewolde was keen to discuss;

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**"WE HAVE JUST COLLABORATED WITH CHAD NATIONAL CARRIER WHICH WILL ALLOW US AND THEM TO BENEFIT FROM THE CONTINENTS THRIVING ECONOMIES. IT'S IMPERATIVE THAT PARTNERING WITH OTHER ORGANIZATIONS ACROSS THE INDUSTRY WILL CONTINUE THE EXPANSION OF SERVICES AS THE BUSINESS MOVES FORWARD."**

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Africa today is an economic giant. It is one of the fastest growing regions in the world. Its young population is about one sixth of the world. It is endowed with vast resources of precious minerals and large reserves of oil. Africa has the largest uncultivated arable land in the world. With an ever-growing middle class and fast-growing economy, we are truly seeing the African Renaissance with immense economic growth and transformation. Putting all things together, Africa is now the last frontier in globalization and it will continue to maintain the momentum of its fast growth throughout the 21st century.

Hence, African governments need to understand that aviation is not a luxury and they must ensure that they need to put in place the right policy instruments to support aviation to help it flourish as Aviation is a catalyst for other sectors to grow as well, because Aviation is an enabler for tourism, trade, investment development and economic integration. Our leaders should also pave the way for indigenous airlines to be the prime beneficiaries of their continent's air transport business.





# TELIA FINLAND

## A hub of the digital ecosystem

In typical Finnish fashion, Telia Finland has quietly but definitively grown to become a world-leader telcom operator, particularly in the digital sphere. Following the completion of a world-class new data centre, the company is poised to take its operations to the next level.



In little more than 15-years, a digital revolution has taken place – one that has transformed the world we live in, and the way we live our lives beyond all recognition.

As the world grows ever smaller by the day, serving the digital society – the people, companies, and online communities that connect to each other over impossible distances in the blink of an eye – has become a most essential task. After all, these online entities, from the likes of Google, Amazon, and Facebook, to the countless smaller actors who trade, do business, and connect in the online sphere, are the catalysts for both wealth creation and positive social change.

As the dominant telecom operator in Sweden, Finland, Norway and Denmark, as well as the Baltic region, Telia Company AB stands as a hub of the digital ecosystem, committed to empowering its customers by bringing the world to their fingertips. With a workforce of over 20,000, Telia Company's talented team serve millions of customers 24-hours a day, 7-days a week, 365-days a year, and it goes about this with great passion – passion to deliver great service, and a passion to connect, create, and innovate.

Since its inception in 2002, following the merger of Swedish and Finnish telcom companies, Telia and Sonera, Telia Finland has played a key role in helping to propel the company to the top of the domestic market, as well as markets further afield. Much like its parent company, an ethos of excellence has been instilled into the very roots of Telia Finland, centred around the key tenets of innovation, superior technology, ethics, and delivery of a great customer experience.





Not that the company is resting on its laurels. In the wake of a high-profile rebrand in April 2017, which saw the company change from TeliaSonera Finland to Telia Finland, expectations have never been higher, and CEO, Stein-Erik Vellan, knows that to meet them, there is much for the company to do as it seeks to expand and improve operations even further, both at home and abroad. He stated:

“WHAT DOES SONERA'S BECOMING TELIA MEAN TO ME? WHAT WILL BE BETTER IN THE FUTURE? THESE ARE QUESTIONS THAT OUR CUSTOMERS WILL ASK, AND WE MUST BE ABLE TO GIVE THEM ANSWERS. FURTHERMORE, WITH OUR ACTIONS WE MUST SHOW THAT WE, AN INTERNATIONAL TELCO, ARE IDEALLY PLACED TO HELP OUR CUSTOMERS GET BY IN THE DIGITALISING WORLD.

THE DIGITAL FUTURE HAS ALREADY ARRIVED. THE WAY WE ALL LIVE, WORK AND COMMUNICATE WITH EACH OTHER HAS CHANGED HUGELY OVER THE LAST FEW YEARS. IOT, BIG DATA AND VIRTUAL REALITY WILL PROVIDE MIND-BLOWING OPPORTUNITIES IN THE NEAR FUTURE. AND EVERYTHING WILL CHANGE AGAIN DUE TO 5G. BUT TELECOM OPERATORS ARE AND WILL CONTINUE TO BE STRONGLY INVOLVED IN THE LIVES OF THEIR CUSTOMERS.”

With this in mind, Telia Finland has gone to great efforts to stay ahead of the curve in recent times, as evidenced by the number ambitious ventures the company has invested in to improve both performance and capabilities. Of these, there has been particular excitement surrounding the development, construction, and recent opening of the Telia Data Centre project – a flagship facility that will revolutionise Telia Finland's operations.

“AROUND 2010/2012 WE WERE EXPLORING GROWTH OPPORTUNITIES AND WE SAW THAT OUR OWN DATA CENTRE WAS VERY LIMITED AND ALSO SOMEWHAT OLD FASHIONED. FOR EXAMPLE, THE POWER DENSITY IN THE OLD PREMISES WAS QUITE LOW AMONG OTHER THINGS,” EXPLAINED PASI SUTINEN, HEAD OF THE TELIA DATA CENTRE. HE CONTINUED: “AT THAT TIME WE WERE ALSO EXPERIENCING QUITE ROBUST DEMAND FOR DATA FACILITIES FROM EXISTING CUSTOMERS SO WE DECIDED WHAT IF WE BUILT SOME NEW CAPACITY?”

This exceptionally interesting and challenging building project was carried out on schedule without compromising on quality, thanks to the 2,200 construction experts involved with the project. Naturally, all at Telia are delighted after the inauguration of the facility.



# Telia Company





# Innovative ways to make Systems easy.



**More integrated solutions for the Independent Telecommunications market than any other vendor.**

Innovative Systems has deployed over 1200 advanced, pre-integrated Voice, IPTV and OSS/BSS solutions to the North American Telecommunication industry.

Make no mistake about it, the recent completion of the Telia Data Centre on the rocky soil of Pitäjänmäki, Helsinki – a facility that will house thousands of computers and peripheral systems, capable of transferring and storing huge volumes of data securely - is a gamechanger, and a clear indicator of the scale of Telia Finland's ambition. As the largest, most modern and energy-efficient data centre in the country, Pasi Sutinen, is excited about the role it will play in helping the company to markedly improve service provision, and also satisfy strict new EU data protection legislation regarding the process and storage of customer data:

"The Telia Data Center will meet the needs of new legislation, among other things. Data stored in Finland is kept under round-the-clock control. Trust is an integral part of data centre services. Telia offers this trust to its customers, which enables them in turn to offer it to their own customers. We will serve as a safe haven for data, which is something that companies desperately need today both in Finland and internationally.

The need for a data centre keeps growing in our digitalised world. We must constantly get more storage space, and it has to be secure. For this reason, it is of utmost importance that the additional storage space is located

near the Finnish networks and users instead of being somewhere around Antarctica.

The information, security, electricity and extinguishing systems are tuned with the most advanced solutions of the world. The customers' data is protected here in the best possible manner."

Stein-Erik Vellan expanded further on the impact the new data centre will have, saying: "The data volumes are growing at a huge rate, which means that we have to build new kinds of secure data factories. The Helsinki Data Center is designed specifically for this purpose. In addition, the building is strongly linked to Telia's international network, through which almost 40 per cent of the internet traffic of the whole world is carried each day.

Completion of this project has set the company in good stead for the coming years, and will act as a support for other ground-breaking projects like Telia Finland's foray 5G, IoT, and artificial intelligence. Pasi Sutinen concluded, saying: "These kinds of data factories make it possible for both society and companies to utilize data in full, when artificial intelligence, robotics, the Internet of Things and 5G are changing the everyday lives of us all at an accelerating rate."



# EXECUTIVE INSIGHT *MAGAZINE*