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July **2017** 

## TAIWAN

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### TAIWAN AND ITS 'MIRACLE' SUCCESSES



# Strategic reinvention from manufacturing efficiency to innovation and hi-tech

Over the past 60 years, the Republic of China, known as Taiwan, went from being a largely rural society to becoming a fully industrialized country, a global leader in communications technology and the  $22^{nd}$ -largest economy in the world, a success achieved by no other developing nation in the latter half of the twentieth Century.

Often referred to as the 'Taiwanese miracle', the country's economic resurgence was nevertheless the product of ambitious policies, intelligent investments, careful diplomacy and social responsibility. In fact, and particularly in the past three decades, Taiwan's economic liberalization has grown hand in hand with scientific research and education, political freedom, and a vibrant multiparty democracy which in January last year allowed for the election of the country's first female president, Tsai Ing-wen.

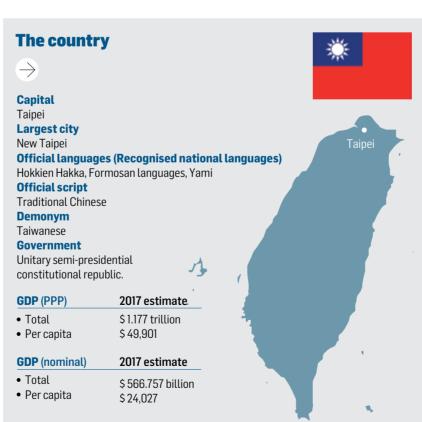
Among Tsai's first acts of government was the presentation of her administration's New Model for Economic Development, a five-point plan through which the government intends to foster further economic growth by focusing heavily on the industries of biotech and pharmaceuticals, green energy, national defense, smart machinery and Internet of Things technology. The model will be driven by a parallel effort to ease regulatory constraints on industrial development and to maintain cross-strait peace with mainland China, a difficult political relationship that in many ways has hindered the economy of the country.

The development of green energy alternatives is perhaps one of the most ambitious plans of the new government, as it has committed itself to ending its dependency on nuclear power by 2025, and to increase the country's supply of renewable energy from its present 5% to 20% by the same deadline. For this reason, the government has announced an eight-year US\$1.6 billion infrastructure plan for green energy investment, and has signed several contracts for wind farms and solar projects. Reliable energy is also one of the major concerns of foreign and local companies with operations based in Taiwan, and of investors in several key industries. And in an economy so strongly dependent on exports, commercial activity in the country's numerous ports, and on its role as a key stop for international trade routes, the country's ability to attract commercial activity is of paramount importance.

In fact, Taiwan owes its present position in international commerce largely to its strategic position in the economy and the geography of Asia, as a springboard for international industries and companies onto the main China market, one of the most rapidly expanding in the world. According to Mr. Freddie Höglund, CEO of the European Chamber of Commerce – Taiwan, the country's main advantage in this respect is its highly developed economy, which provides companies and subsidiaries with excellent infrastructure, telecommunications



Tsai Ing-wen is the second president from the Democratic Progressive Party and the first woman elected to the office.



and transportation systems, a highly-skilled and educated workforce, and a very friendly and positive business environment.

This, along with Taiwan's long-lasting relationship with the US government and American universities and research centers, makes for a very stable and predictable environment in which to set a basis for operation for a posterior incursion into the China market. "It is a great place to do business", Höglund adds, "also because this is a real democracy, the rule of law is very important here, there are no restrictions

on the internet, and regulations for foreign companies don't just change overnight, as they do in China. It is a great advantage for companies to first set up here so they can penetrate China through Taiwan".

Some experts have stressed, nevertheless, that Taiwan's economy may face serious challenges ahead, as threats of protectionism and currency intervention coming from the Trump administration threaten to put the Taiwanese dollar under duress. As exports account for more than 60 percent of Taiwan's economic output, and econom-

ic growth is not expected to go over 2 percent in the following two years, which is below the average pace of 4 percent seen over the past two decades, a strengthening American currency could become a problem for the country's Central Bank. Despite such worries, many are confident in the ability of the Central Bank of Taiwan to use its reserves, equal to nearly 83 percent of economic output, and built thanks to a years of trade surpluses with China, to endure currency volatility and remain stable.

Such confidence, according to Bloomberg, is largely based on the key role of Perng Fai-nan as chief of the Central Bank over the last two decades, under whom the Taiwanese dollar stood strong throughout the Asian financial crisis and the economic output doubled. Central Bank members have described Perng's tenure as that of a ship captain successfully steering the small boat of Taiwanese economy through the

## THE DEVELOPMENT OF GREEN ENERGY ALTERNATIVES is one of the most ambitious plans of the new government, committed itself to ending its dependency on nuclear power by 2025.

storms of capital flows. His policy, one of the key elements of the 'Taiwanese miracle', has been to intervene in markets when exchange rates change rapidly, and to maintain currency stability with a managed float regime so that the Taiwanese dollar will be, in his own words, "like a the branch of a willow tree, bending but not breaking despite storms of hot money blowing in and out".

Despite its diplomatic isolation, global financial crisis and its late start as an industrialized nation competing in international markets, Taiwan has been able not only to rise as one of the most promising economies in Asia, but it has grown as an example to follow in conduct, professionalism and environmental awareness. It has not only developed a strong economy but a healthy society, with the highest standards of living, of healthcare coverage and of democratic participation in Asia, benefitting not only its own people, but through technological advances in computer technology, biomedicine and engineering, benefitting the rest of the world as well, and thus continuing to perform the so called 'Taiwanese miracle', which when looked at closely seems to made simply of commitment, of intelligence and of hard work •

## \varTheta Bio - Pharma

## A Golden Era For Taiwan's Biopharma Sector

Following Tsai Ing-Wen's landslide victory in the presidential elections of January last year, specialists both medical and financial began to talk about a golden era for Taiwan's bustling Biopharma industry. Today, one year into her administration, early optimism seems to be turning into a reality, as biotech shares reach their highest level in three years and market insiders urge stockholders to take part in what promises to be a rewarding and long-lasting venture.

**FUNCTIONING** 

Former chairwoman and co-founder of infrastructure behind "a biotechnology HIV drug-developer TaiMed Biologics Inc., and pharmaceutical industry (that has President Ing-Wen is no newcomer to the shown) hard-earned accomplishments", field. Her partner on the ticket, now Vice as expressed by Dr. Dar-Jen Hsieh, CEO of country's future. President Chen Chien-Jen, is an epidemi- ACRO Biomedical Co., Deputy CEO of the ologist and former health minister who Institute of Biotechnology and a key figure shares the President's knowledge of the in the development of the industry. In fact, industry. Accordingly, since they present- the number of both clinical trials conducted an economic plan naming the biotech ed in Taiwan and Biopharma companies

industry as one of five main engines for future economic growth, and described their vision of Taiwan as a biotech STANDS OUT FOR ITS research hub in the Asia-Pa- cost-effective cific region, members of the and highly-educated sector have reacted more than eagerly; this is an administration that not only THERE IS A HIGHLYunderstands the sector, but that has the political capital to affect significant change and competitive in terms of institutional infrastructure behind support, subsidies and tax a biotechnology breaks.

Nevertheless, the now and pharmaceutical material consequences of industry.

the growing interesting Taisolely based on prevailing political sympaa highly-functioning and competitive as a leading biotech hub.

has shown steady growth, performing well in the local equities market. 94 Biopharma companies are now listed in the Taiwan Stock Exchange and according to Matthew Fulco of Taiwan Business Topics, market capitalization in the sector grew from US\$6 billion in 2009 to US\$22 billion in 2015. Such figures prove Taiwan enjoys a vibrant industry and capital markets, world-class clinical trial capability, and a

between the private and the public sectors. BioTaiwan, wanese Biopharma development are not one of the largest biotech events in Asia, which will to be carried out in June this thies. More importantly, there is already year, is further proof of the country's role



Biotechnology has been seen by Taiwan's government as an industry of particular importance to the



Dr. KC Lin is the CEO and founder of Pharma Essentia. Jack Hwang, General Manager.

Taiwan indeed stands out for its cost-effective and highly-educated workforce. Executives and specialists have mostly been trained overseas and carry broad experience in Big Pharma mainly due to the numwell-established relationship ber of strategic relationships with pharma multinationals through which Taiwanese companies have managed to expand beyond the limits of their small domestic market. Taiwan's strong clinical research capabilities have brought about fundamental advancements such as pancreatic cancer

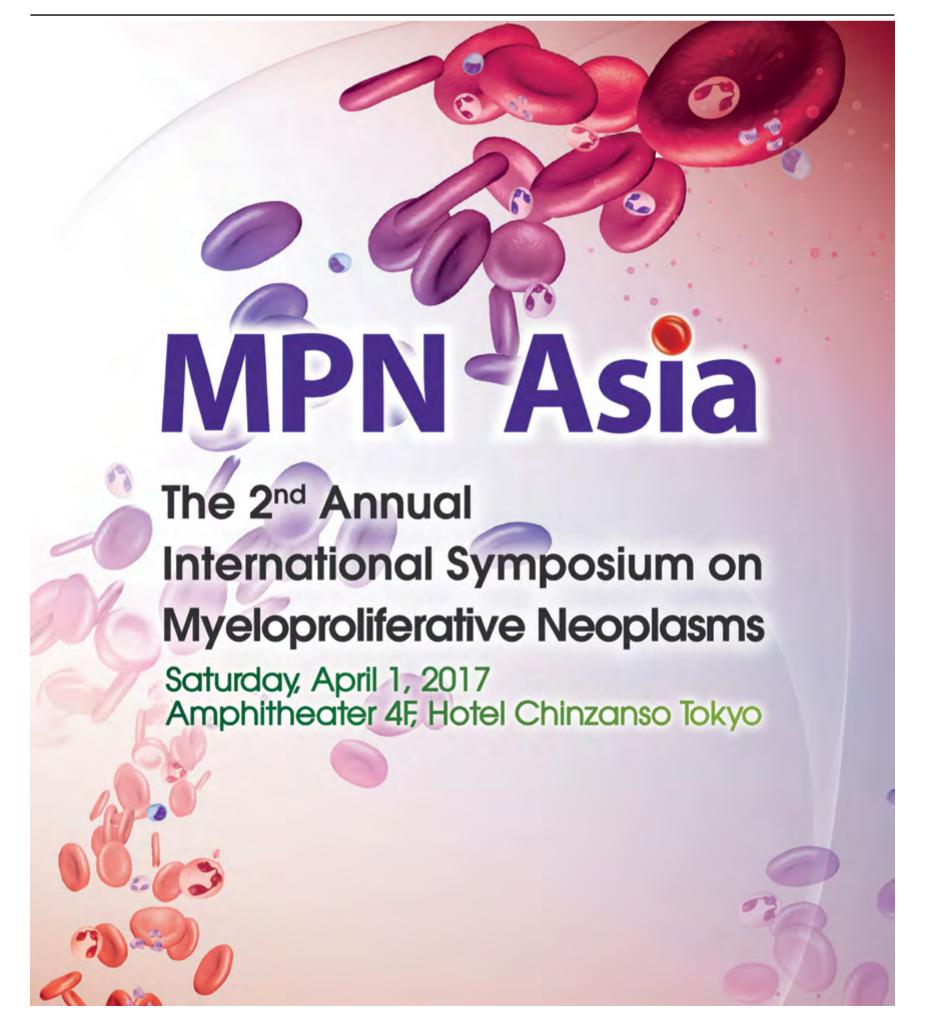
drug Onivyde, which has received regulatory approval from the U.S. FDA, and the HIV entry inhibitor ibalizumab which the FDA designated as a "breakthrough therapy". Both these drugs began their clinical development in Taiwanese companies.

Among the biggest challenges faced by

Biopharma companies, according to Phar-

#### Pharma Essentia

ma Essentia Founder and CEO Dr. KC Lin, is pushing through the protracted process necessary for the clinical development of a drug. Decades may pass from its conception all the wayto the implementation of phases I, II and III, throughout which a steady source of funding needs to be secured through private, public and academic relationships. "I consider ourselves a success since the whole process took 15 years", says Dr. Lin, whose company is about to announce the final results on their research on Leukemia. The development and approval of the drug itself will take another year, having to go through different regulatory systems, namely the Marketing





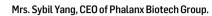
Did you know...

- **President Tsai's** focus on making Taiwan a regional biotech hub.
- **HSINCHU SCIENCE PARK**, a science and tech park, inspired by Silicon Valley is home to small start ups and more than 400 high-tech companies
- Market capitalization in the sector soared from about US\$6 billion in 2009 to US\$22
- The average price of new drugs in Taiwan is just 51.8% that of the median for the
- benchmark A10 countries (a basket of 10 benchmarked developed markets • In recent years, Taiwan has been pouring considerable attention, effort and funding into the development of a sustainable biotech industry, seeking a new economic

driver to replace the diminishing prominence of its once-dominant electronics

**Biotech is hot in Taiwan,** with a number of high profile companies emerging over the past few years with significant market capitalizations on the promise of bold new

drugs and the incoming administration of Tsai Ing-wen promising even greater support.



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Authorization Application (MAA) in Europe and the Biological License Application given by the Food and Drug Administration (FDA) in the United States.

Their success, admits Dr. Lin, was partly due to the policies of promotion of the Biopharma industry put forward by the Taiwanese government during the last two or three years of the development process. In fact, the teamfirst came from the US to Taiwan in response to the government's tract foreign capitals and make the venture

efforts to recruit talented scientists for the local industry. TAIWAN HAS THE They saw it as social responsibility, to develop the biotech industry in their country study medicine, and create job opportunities the best brands at for local scientist. Nevertheless it was "the people", as Dr. Lin admits, "the most import- technologies, and ant factor of our success, as a government that we hire experienced people assists in controlling who have worked for 20 to 30 years in big pharmaceutical companies in the USA".

Pharma Essentia keeps strictly environmentally friendly practices, takes care of pollution and sponsors yearly international symposiums on their field of research, the coming one to be held in Tokyo next year. In July they received their first public offer for investment for US\$ 100 million, but Dr. Lin assures they are constantly looking for foreign partners or investors: "we frequently go to Hong Kong to showcase our company to try and attract more not yet done so in the USA, but we are

Operating in a relatively mid-sized market of 23 million people and with considerably high stakes due to the low success rates of Biopharma companies, foreign investment and association is fundamental to such an enterprise, but Dr. Lin is confident that the many medical and prestigious research institutes in Taiwan generate enough professional scientists to ata success. "Taiwan has great

investment opportunities because people are very intelli-**BEST PEOPLE TO** gent and hardworking, and the government participates actively in the promotion of new drugs", he explains. the hospitals, great And it is precisely in the development of new drugs that Pharma Essentia are focused on at present, planning to develop products

> which can treat patients with many different illnesses. "We try to do everything from the beginning to the end", says Dr. Lin showing great pride of the work being done by Pharma Essentia throughout the years: "our company is **Phalanx Biotech Group**

The Phalanx Biotech Group is a one-ofa-kind company in Asia. They design and develop generic products with their own investors from outside Taiwan. We have technology platform, and they boast the

most industrialized system in Taiwan,

over the next five years

which can manufacture more than 10 million generic products per year. "Most companies", says Mrs. Sybil Yang, the company's CEO, "are only distributors, but we are the original technology developers, which locally puts us in a very unique position". And it is no exaggeration: the production line at Phalanx for making one single generic product is the most ...at an industrialized scale in the world. According to Sybil Yang, such achievements owe a great deal to the country's medical infrastructure: "Taiwan has the best people to study medicine, the best brands at the hospitals, great technologies, and a government that assists in controlling prices".

Astutely, Phalanx Biotech has learned to use Taiwan's world-class medical system as a bridge towards international expansion, commercializing in the Chinese market products developed in the US which American companies cannot commercialize themselves."We are a great gateway", explains Yang, "We are like a bridge to connect with China". And tapping into this 2.3 trillion people market is no simple enterprise, as it involves competing in a country with tremendous government resources while maintaining an impeccable trade record in order to secure products from the US. "US people do not rely as much on China but they do trust Taiwan" - she adds.

In other words, the success of the company is built on its international relationships. "Collaboration is definitely important", states Mrs. Yang, "because it helps making the product more affordable for people by reducing the costs of big labs

and large amounts of data. Being able to export to other countries is what makes us competitive". Today, Phalanx Biotech works closely with many partners in China and in Taiwan, particularly with the Industrial Technology Research Institute (ITRI), which provides a force of 6000 researchers and more than 1000 patents per year in different areas of biotech.

Bio-Pharma

One of the areas the company is heavily investing in for the coming years is that of generic testing. "Generic testing will play a very critical role", says Mrs. Yang, who predicts that in ten to fifteen years the quota of funding spent in drug manufacturing versus product testing will be reversed, and the testing market will occupy at least 75 % of the healthcare industry. They have also started to focus on preventive medicine or treatments, which according to Yang also carries great potential for the future.

In a fast-moving and rapidly-advancing sector such as biotech, staying ahead of the curve is not only difficult but vital, and Yang feels confident about her company's ability to adapt and grow. With a staff of 75 employees, excellent infrastructure and a vision to merge the efforts, platforms and resources of various other companies in an integrated system, Phalanx Biotech is ready to face the challenges of the future and to carry out its mission of helping transform Taiwan's economy from a labor-intensive to a high-tech industry. "If everything goes well, in the next three to four years we will be playing a very unique role not only in Taiwan, but in China and



## **→** Manufacturing and Engineering

## A Smart and Green Future for Taiwan's Manufacturing Sector

**Ranking sixth in world exports**, employing nearly 2.7 million people and representing by far the largest share of the country's industry, Taiwan's manufacturing sector is among the most notorious successes of the past few decades.

Through product quality, a comprehensive supply chain and a fully integrated industrial sector, the "made in Taiwan" label has become a synonym of reliability, and specifically in the areas of machine tools, industrial materials and plastics and rubber machinery, it has carved itself a place among the world's top producers.

In the face of difficulty, such as the decline in exports to China in recent years, Taiwan's industry has been able not only to stem the tide, but to adapt, to innovate and to grow. Such an achievement has been the result of a joint effort of companies, research centers and government policies that have stimulated the industry towards becoming smart and green. Through focusing on smart machinery and automated factories, companies such as HIWIN have begun to turn Taiwanese industrial clusters into "smart machine metropoles", while the parallel advances of engineering companies and manufacturers such as Paul Wurth and Novatec on energy-saving technologies and "green" materials, have brought the sector closer to achieving a "win-win" situation for nomic development.

Established in 1989, in Taichung, Taiwan, as a manufacturer of ball screws and linear motor components, HIWIN has grown in the past decades to become one of the most successful competitors in its indusonly managed to develop and include in its repertoire an altogether new product category, that of auto control systems, but more importantly to become the only



both environmental protection and eco-Hiwin President, Eric Y.T. Chuo, with One World Media representatives, Raquel Carbonell and Irene Isla.

#### a limited array of options.

According to HIWIN Founder and Chairman Mr. Eric Chuo, their success is largely based on their willingness to push the barriers of innovation. "We do not only carry out research in Taiwan, but in many other countries as well, so that we try. Today, through technological dexter- can then integrate different resources ity and business expertise, HIWIN has not from different technologies around the world". In fact, HIWIN works in partnership with research centers in Israel, Russia and Germany, where they also work alongside six different universities on the 3D printer, installed in the spaceship, was company of its kind to offer total solu- development of new products. The R&D programmed to reproduce the pieces in system (research and development), says

With subsidiaries all over the world, HI-WIN must coordinate its efforts carefully, while at the same time keeping customers well informed about available products and applications. "Educating the market about our products is essential for promoting our company and showing them all we can do" says Mr. Chuo, whose company was recently involved in a spaceship mission to Mars in which HIWIN linear motor pieces were used, and in which a case of an emergency. "When you are in a spaceship and something goes wrong, you cannot ask for replacements right away", says Mr. Chuo with a smile.

But HIWIN also has ambitious plans and projects here in Planet Earth, starting with the completion, projected for the end of this year, of their factory in Chicago, which will allow them to expand onto different product categories, specifically Chuo. in automation. This move is particulary strategic considering that most of the manufacturing processes of American companies are not located in the US, and are thus not fully automated. With an expected increase of two digits in the following years, in a market which is still to be fully exploited, HAIWAN's bid to make American companies more competitive could be nothing short of groundbreaking. "The USA needs our products", says Mr. Chuo with confidence.

In fact, HIWIN's expansion into Chicago, which includes the development of one of the most advanced warehousing facilities available with more than 110

thousand square feet over a 15-acre area, is part of a larger incursion strategy into TAIWAN'S INDUSTRY the American market, which HAS BEEN ABLE NOT involves not only supplying only to stem the the local industry with high quality technology, but also tide, but to adapt, to participating directly in the innovate and to grow. is that we can automate all production chain, through partnerships and collabo-

rations. "We are always open to proper opportunities for partnership in the US", explains Mr. Chuo. "If we find the opportunity to acquire a company, for example, we would be very willing to do it, as a synergy could be tremendously important".

But their business strategy would not be complete without a parallel effort to educate the market about the possibilities allowed for by HIWIN's exhaustive range of options. "America needs to know that there are many products that could be manufactured here, making their companies more automated", insists Mr. Chuo. Accordingly, HIWIN has been tremendously active in recent years in their outreach campaign, participating in more than 20 events per year in the US and in more than 200 worldwide. Their idea is to make the most of a long-standing history



Rene Stoltz, Managing Director of Paul Wurth.

of cooperation between the two countries, particularly with the state of California, which Taiwanese people have frequented for years in order to receive degrees in higher education. "We know about a lot of Taiwanese people living and working in the USA who are thus constantly enriching dialogue and collaboration between the industries, universities and research centers of both countries", explains Mr.

At a global level, HIWIN is also aware of the opportunities allowed for by Taiwan's strategic position in both the geography and economy of Asia, which could open the door to many future partnerships. "We know, for example, that there is a lot of equipment manufactured in the US and brought to Asia, as is the case with some parts for Samsung in Korea", explains Mr. Chuo, "and HIWIN could play an important role setting its engineering capabilities to repair the equipment when needed".

By focusing on companies that are looking to upgrade their technologies, and relying on their ability to integrate knowledge and developments from around the

world while at the same time customizing their products to fit the varying needs of customers, Mr. Chuo is confident HIWIN will have a very promising future in the industry. "Our added value the units required", he says with pride, "we don't just sell

### **Paul Wurth**

For international engineering company Paul Wurth, pioneers of the steel industry for nearly 150 years, establishing an international branch in Taiwan has been among its most audacious but also most rewarding challenges. "When we started here", remembers Managing Director Rene Stoltz, "it was not easy to convince local people and companies to cooperate with us, as we were a foreign company. We had to build relationships from scratch in order to gain people's trust, but once you gain their trust the rest comes easy". Today, having not only gained a strong foothold in the country but indisputably leading the steel making industry, Paul Wurth enjoys partnerships and collabora-



## **Manufacturing and Engineering**

tions with customers and suppliers which account for their impeccable reputation.

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But the road is ripe with fresh challenges, which today come mainly from neighboring China. "Our competitors, here in Taiwan and in the South Asia Region", explains Mr. Stoltz, "come from China. Chinese companies can supply products with prices we will never reach, as even when buying in China we are charged different prices, and big Chinese companies can really cover all the shops". Not being able to compete in prices Paul Wurth has focused on offering something far more valuable: a much wider multiple-solution portfolio, a foolproof quality of products and an unflinching reliability. In this way they have managed not only to survive in the market, but to be recognized for their higher quality, to a point where even customers of Chinese products often demand their equipment to be complemented with specific parts from Paul Wurth. For this reason, they have begun to partner with Chinese companies in order to unite forces and replace competition with collaboration. "This is the strength of our compa ny", concludes Mr. Stoltz.

A more delicate threat is certainly that of energy. Controlled by Chinese industries, coal prices have seen rises of 200 to 300% in recent years, which have led the steel industry to struggle. In such a pressing climate Paul Wurth is nevertheless confident to project a rise in revenues of 10 to 15% in the near future. The reason of such confidence is that the company began exploring energy alternatives long before they were even talked about in Taiwan, and they are now far ahead of their competitors on this subject. With many ongoing energy-saving projects, such as waste-transformation for steel plants, emission-reducing facilities and numerous programs of environmental responsibility, Paul Wurth has been able to offer products and services that meet new legal requirements for energy-saving and has thus been able to enter important markets in Asia, particularly in Vietnam. "By next year", explains Mr. Stoltz, "we will be largely investing on energy saving, and attempting to enter new markets such as Myanmar, Laos and Cambodia".

But the company is also exploring their expansion further overseas, particularly into the US. With an operation already running in Pittsburg, and a steady relationship manufacturing plants both in Taiwan and in their Shanghai shop to ex-

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**Special Report** 

Bilateral trade between the U.S. and Taiwan reached \$65.3 billion in 2016, making Taiwan the United States' 10th largest trading partner.

Jeff Chen, Chief Marketing Officer, and Novatec

port to the US, Paul Wurth is nevertheless aware that there are plenty opportunities for expansion. "The US is importing more steel from China than from Taiwan, but Taiwan could largely raise exporting numbers by focusing not on raw material but on machinery", explains Mr. Stoltz. The key, he concludes, is to take advantage of Taiwan's strategic position in the region and the country's positive business environment, in order to open the door for American companies. "In the logistics to use cold forging technolosector, for example", explains Mr. Stoltz, gy, making use of new mate-"I can see American companies having distribution centers here". In order to achieve such broad goals, Mr. Stoltz is certain the company must preserve its image and its higher ranges of the industry. "We always marketing strategy, but particularly its try to be different from our other competiability to adapt to global challenges, its tors by finding new materials, ensuring top commitment to the environment, and to quality for our products and carrying out a "helping make the world a better place".

Novatecwheels

Novatecwheels is a premium product line for bicycle parts manufactured by Joy Industrial Co., in Taichung City, Taiwan. Founded in 1989, Novatecwheels began supplying the domestic market, but soon its high quality products and its innovative techniques outgrew the

boundaries of the country, and today Novatecwheels has INTO CHICAGO, bicycles strolling all around WHICH INCLUDES the the world. "The beginning of our name is Nova, says chief marketing officer Jeff Chen, of the most advanced "and it stands for a new begin- warehousing facilities ning, as we are always trying to add new technologies to our bicycles".

In fact, innovation has bla-square feet over a tantly been the key factor in 15-acre area, is part al success as a major bicycle parts manufacturer. They strategy into the were the first ones in Taiwan American market.

rials ranging from steel to cold forged aluminum, a move that granted them access to new markets and to competing in the strictly environmentally-friendly manufac-

turing process so users will be happy and comfortable with the brand", explains Mr. Chen, whose company has a team dedicated to calculating carbon dioxide produced in manufacturing, and has been certified for environmental protection for the past four

Currently, Novatecwheels is focused on improving performance for sport-related activities, and has made great advances in strengthening materials to resist different kinds of impacts common to professional cycling. Through research and innovation, Mr. Chen believes Novatecwheels will be able to fulfill their goals for the near future, among which is expanding their operations in the US, with an office strategically placed in California (NOVATECH WHEELS US, INC, 41725 Elm Street, Suite 302, Murrieta, Ca 92562). "We have not yet covered all the territory in the US, and we definitely have the potential to grow more the market. Our main strategy to do so is to provide integral services such as product integration and after-service integration among others, having part of our Taiwanese company on call to take care of any problem, and that is why we keep in touch with distributors in the region, and we are definitely open to new partnerships world-wide".

But in an industry in which global demand surpasses 1.2 billion, and a yearly de-

mand of 20 million in the US alone, quality and innovation are not sufficient for staying ahead of competitors, if consumers and possible business partners are not constantly informed about the company's fast-changing range of products. In this respect, Novatecwheels' strategy has also proven tremendously successful. As most other companies, they rely on international trade shows to reach new markets. and have recently participated in the March Taipei Show and other major events in the US. But they have also chosen to use social media as a platform for branding, working

with international and regional writers who know the subject and can thus get directly involved in the cycling environment. "When people use our products we are always eager to hear their thoughts or suggestions", explains Mr. Chen with great honesty, "because that is where we find the inspiration that keeps us moving forward"

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## tions, while competitors still specialize in one or a few particular mechanisms, and Mr. Chuo, allows them to draw knowledge cannot therefore offer their customers but and experience from all these multiple PAUL WURTH SMS group Your Partner for the Primary Stage of Integrated Steelmaking

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## Shipping & Logistics

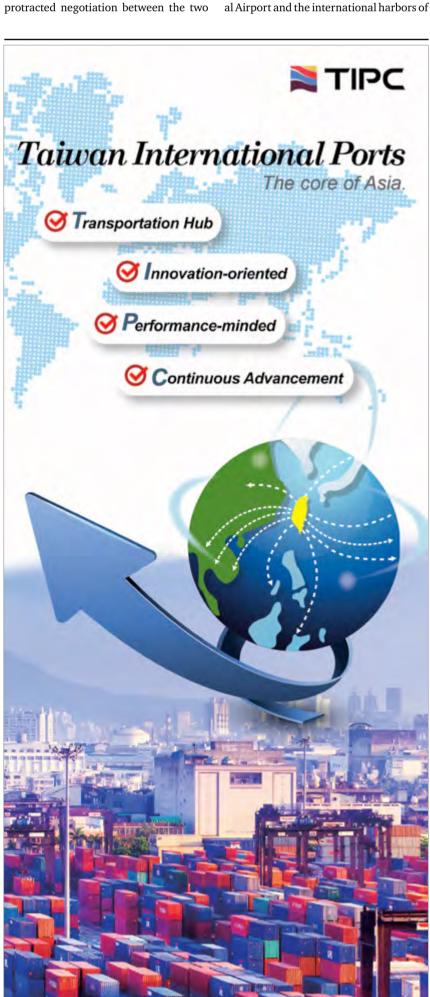


The establishment of the Taiwanese Free Trade Zones in 2004, which began with Port Keelung in the north of the island, has proven to be one of the many groundbreaking maneuvers which made of Taiwan an international development success story. Among the numerous policies put forward in previous decades as engines of economic growth, the creation of the FTZ is certainly among the most influential, as not only has it had tremendous impact on the economy of the country, but also on the global shipping industry itself.

The strategic geographical position of Taiwan as a gate to China and the Asia-Pacific region for trade coming in from the west, allowed for the formation of integrated chains of production and an overall rise in shipping standards, cost effec- has grown to become one of the most suctiveness and operation services, and also for the restructuring of major commercial routes directed at the growing China mar- of the Port of Kaohsiung. ket. This became a particularly promising possibility for trade when in 1997, after a were established at Taoyuan Internation-

governments; direct sailing was introduced across the Taiwan Strait. Originally in the hands of ten Chinese and Taiwanese shipping companies, trade along this route has since expanded notoriously and cessful commercial relations in container transport, mainly due to the strategic role

In 2005, accordingly, four more ports



Taichung, Taipei and Kaohsiung, the last of which has grown to become a major international port hub. Together, the seven locations that make up Taiwan's FTZ have been able to offer notorious global distribution advantages in transshipment, design, manufacture and warehousing, and have played a key role in international trade, particularly since the unification of management operations in 2012, under the direction of the Taiwan International Ports Corporation.

#### **Taiwan International Ports** Corporation

The Taiwan International Ports Corporation (TIPC) was established on March 1<sup>ST</sup> 2012 to take in charge of the main management functions of the four Harbor Bureaus that is the operation of all international commercial ports of Taiwan. The idea behind this major restructuring was to improve the effectiveness and flexibility of port operations under the previous Harbor system through business-oriented operations, a task which according Mr. Men-Feng Wu, Chairman of TIPC, the corporation has not only accomplished but largely surpassed. By delegating the maritime, supervision and port policy functions to its sister institution, the simultaneously created Maritime and Port Bureau (MOTC), they TIPC has been able to "fuel renewed port growth and expan- ume has been experiencing acertain desion, and to stimulate local economic and

ndustrial prosperity' TIPC is a nation-owned enterprise and administers all business aspects of the four subsidiary organizations of the Ports of Keelung, Taichung, Hualien and Kaohsiung, as well as their associated facilities and auxiliary ports, such as Su-Au, An-Ping and Taipei Port. The latter, Kaohsiung Port, is the main transshipment hub in Taiwan and the world's 13th largest container port. Located in Southern Taiwan, the port enjoys great proximity to Siaogang International Airport, several industrial parks and to the Southern Taiwan Science Park, a hub of the biotech industry in the country. It offers the most advanced warehousing facilities and multi-temperature layer of frozen logistics, and the annual cargo volume handled in Kaohsiung Port has exceeded10 million TEU (twenty-feet-equivalent units) ever since 2014. The port is expected to maintain its record performance in the following years, and Mr. Wu is confident that itsachievements "can be attributed to the advantages of Taiwan's low costs, ideal geographic location and high-quality labor".

Is nevertheless not complacent about its early successes, and is thus embarking on a number of large-scale projects directed not only at furthering its business capabilities, but also at leading a growing tourism and cruise-ship industry. For this reason TIPC has injected nearly US\$ 1 billion into the CT7 project at Kaohsiung Port, a Container Terminal composed of five berths of 18 meters in depth along a 2,415-meter-long quay built over 147 hectares of reclamation land. The project will be carried out in two phases, the first one of which will focus on the development of 1.185 meters of quay over 76 hectares of hinterland. On its completion in 2018, says Mr. Wu,"it will be the most advanced container terminal, handling 4.5 million TEU per year".

Only one year later, the port is scheduled to launch the New Kaohsiung Passenger Terminal and Cruise Service Center, which will be able to accommodate two simultaneous 225,000-ton cruise ships and welcome 2000 passengers per hour through its facilities. Based on TIPC's forecast, there will be more than 600 ships call to Taiwan, and total cruise passengers will reach 1 million in 2017. Taiwan is indeed enjoying an increasing popularity as an international cruise destination, represented by a 28% growing rate in outbound passengers last year



Mr. Men-Feng Wu, Chairman of Taiwan International Ports Corporation

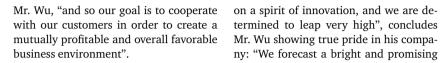
which numbered a total of 750,000, and for that reason TIPC is adamant on expanding its infrastructures in order to rejuvenate the domestic cruise industry. "The new facilities", explains Mr. Wu, "will expedite the arrival and departure of passengers, and help them make the most of their time at the port through new water recreation facilities, while at the same time stimulating new business opportunities in cooperation with local governments"

But the road is not without its challenges. Taiwan's import and export volcline over the past few years, a problem which experts attribute to the rapid de velopment of the country's economy. By boosting capital and technology-intensive industries, rapid economic growth has had a negative impact on traditional and labor-intensive industries, as they are forced to divert in the search for lower costs. In order to reduce the cost of shipping, carriers have places megaships on east-west routes, and taken advantage of vessel slot-sharing in order to meet their loading space requirements. "As demand for larger and fewer hub ports grows" explains Mr. Wu, "international ports continue to construct deep-water terminals. upgrade handling equipment and devise strategies to attract the liners' megaships into their ports". TIPC is thoughtfully aware that its future success will depend on their ability to attract transshipment cargo and routes, and to offer competitive and cost-effective services that will place it ahead of other international ports.

Nevertheless, Mr. Wu is confident about TIPC's ability to navigate through such difficulties. The company, in his opinion, has a unique and innovative approach towards contingency, as it is aimed "not only at maintaining a steady development for our core business, but more importantly at adapting, through diversification, to the changes in global economy and in the shipping industry itself". On the one hand, thus, TIPC will aggressively implement all its major projects and plans, such as providing an integrated chain of services including stevedoring, container terminal operations, harbor craft services and logistics. The scope is to provide a friendly and safe operation environment, highly efficient services for customers and a key balance between sustainable development and the protection of the environment. TIPC has in fact begun the rigorous EcoPort certification process in 2013, implementing an environmental management system which has significantly reduced the environmental impact of port activities. Ports Kaohsiung, Taichung and Keelung have all been certified, and Ports Hualien and Taipei have accepted an on-site audit by the ECOSLC and expect to be certified by EcoPort by the end of the year.

On the other hand, it will aim at enhancing its ability to cooperate with international enterprises, in a move to accelerate the ports' participation in the globalized economy, and turn them into indispensable players. "Our business principle is 'customer-oriented'", explains





Such international partnerships have in fact already proven to be one of TIPC's strongest suits, as theyhave already secured deals with numerous international players. Among its most successful collaborations is that with major Japanese enterprise Mitsui, who will establish an outlet park in the Port of Taichung built over 18 hectares of land and including a shopping mall, office buildings, exhibition hall, conference center, dining and healthcare facilities, harbor staff service and other affiliated facilities. "The park is projected to open in 2018", adds Mr. Wu, "and in conjunction with the beautiful area around Taichung harbor, which is still open for investment, will greatly develop tourism along the coastline".

Currently, Kaohsiung Port handles

19 different trans-pacific routes, ten of which call to the West Coast of the US. Apart from national carriers such as Evergreen and Yang Ming, other carriers like OOCL, APL and Hyundai also lease terminals in Kaohsiung Port. This is due to the ports' exceptionally convenient location, close to the Mainland China Market and the center of Asia, which allows for a highly efficient operation for US goods. Nevertheless, Taiwan's FTZ also provide strong goods-handling and warehousing infrastructure, a rapid customs-clearance process, a well-established and diversified manufacturing base and a comprehensive B2B infrastructure, which make it very convenient for global enterprises to establish their distribution center in the FTZ and consolidate their critical trade, logistics and information flows. "For exeast Asia at the Port of Kaohsiung and

then distribute them to the required destinations, main- TIPC HAS BEEN ly on the US West Coast". They have established a successful business model by renewed port utilizing the Port's efficient growth and container operation and convenient warehousing facilities, which allow for a low-cost and highly efficient **economic** operation.

In fact, Kaohsiung Port has become the hub for both South-North and East-West

bound shipping markets, and this is why TIPC is currently looking for partners, especially carriers and terminal operators, to join one of their most ambitious projects so far, the Intercontinental Terminal Phase II, already under construction and which according to Mr. Wu, "is an ideal target for carriers to invest in and use as their trans-shipment base".

expansion, and

prosperity.

to stimulate local

Its role as a springboard for US enterprises onto the mega market of Asia, and particularly of China, which has become one of the most important consumer markets and manufacturing bases, is where Mr. Wu believes lies the future of TIPC. Taiwan plays a very important role as supplier of intermediate goods and components within the Asia-Pacific region and has a close trading relationship with Trans-Pacific Partnership members, particularly focused in the product categories of fabricated metal, textile, automotive, machinery, iron and steel. At least 10% of the intermediate goods needed by US manufacturers are imported from the region by way of Taiwan. Together with a very close industrial relationship between the two countries that has been stable for years, this makes partnership with the US a very promising venture. "Taiwan is a perfect strategic geographical choice", Mr. Wu explains," We boast the strongest shipping routes connecting the US to Asia, the finest warehousing, and the capability to handle logistics and value-added processing with high efficiency and reasonable costs". By welcoming US enterprises to be their business partners and offering them the best services and a devoted team, Mr. Wu is certain they will be able"to help them stand strong in Asia and springboard to the world". "TIPC stands on a solid foundation and

Mr. Wu showing true pride in his company: "We forecast a bright and promising

#### **Wan Hai Lines** In the extremely competitive world of

cargo shipping, in which international markets grow and change at outstanding speeds, in which commercial routes are constantly shifting directions in the search for the most efficient combinations of port services and operations, Taiwanese carrier Wan Hai Lines has managed to stay not only afloat, but at the forefront of its industry. Founded in 1965 as a log shipping company mainly trading with Japan and Southeast Asia, Wan Hai Lines soon entered the business of container vessel shipping, in response to the rapid development of international trade in the Asia-Pacific region and the international trend in transportation towards what is commonly known as containerization. Today, the company operates through shipping services, shipping agency services, operation of port container stations and leasing and sale of ships and containers, providing full-container shipping and covering numerous international ports in all major port cities of Asia and in numerous hubs in North and South America, Eastern and Western Europe, Africa and the Middle East.

Representing approximately 15% of market share in the region, Wan Hai Lines ranks number one in both services coverage and sailing frequencies in Asia, an achievement which has endowed it with the epitome of the Asian specialists in transportation. Its 75 operative routs, covered by 83 vessels, call at 89 major ample, adds Mr. Wu, an American auto international commercial ports, giving ferent form the ones most managements part company has cooperated with a Tai- it the most comprehensive and intensive in the industry might choose, in order to service network available in Asia. In a and consolidate all the parts and mate- 2016 research survey that included the cumstances. Such a strategy must neverworld's top container liners, Wan Hai Lines came out first in schedule reliability.

According to Chairman Mr. Po-Ting Chen, the company's commitment to its customers is not only an added value, but "a fundamental part of our success".

Achievements such as these come rare in a time in which the global economic slowdown of 2008, which affected many sectors of industrial production, has had a particularly worrisome effect on the international

transportation of goods, hurting freight costs and reducing global demand for overseas products. Certainly the breaking point in this temporary crisis, which sent ports and carriers into confusion regarding the future of transshipment, was the plunging of South Korean shipping line Hanjin, a major player in the industry representing nearly 8% of the trans-Pacific trade volume for the US market and which filed for bankruptcy in September 2016, leaving tens of millions of dollars in goods stranded in ports all around the Pacific. The sinking of Hanjin had a ripple effect throughout the global supply chain and caused damage to both consumers and producers in the US. According to The Guardian, the company had been losing money for years, and its collapse was partly caused by a lack of regulatory control on the part of the Korean state and

the state-run bank that led the company's As particular as this case might have been, it was nevertheless not an isolated incident, as it was shortly followed by the collapse of other Korean and Chinese carriers, and by a merger of the three largest shipping companies in Japan designed to avoid a similar catastrophe. The case was admittedly different in Taiwan, where the state offered two of the main shipping conglomerates facing trouble a relief package worth US\$1.9 billion, showing that the administration recognized the difficulties faced by the industry and was prepared to lend its support. According to the Financial Times, the bailout of those shipping giants certainly helped to stabilize the whole industry in the face of global economic difficulties.

Such circumstances, nevertheless, do not wholly account for the resilience of activities and campaigns promoted by





Po Ting Chen, Chairman of Wan Hai Lines.

companies such as Wan Hai Lines, who were not part of the relief package and yet were able to push through. According to Mr. Chen, the company owes its present position to a complex strategy that consists of a clockwork set of actions and decisions following three main general directives. "Firstly, in order to have a robust performance and a highly efficient operation, we must compete wisely and carefully", explains Mr. Chen, whose company is used to competing with carriers that are much stronger in terms of economic scale, as that tend to be formed by very big conglomerates who have recently begun to team up as consortia and have thus grown considerably more powerful. The second key effort is flexibility. Statistics and information related to the shipping industry is not only dynamic, but also public. Therefore, it is paramount for the company to look beyond the numbers and devise a strategy for operation diftheless include the colleagues and collaborators of the company, on which relies protectionism in international trade, and

the functioning of the whole system and some of which **REPRESENTING** have been in partnership for more than forty years. The third key effort is thus main- 15% of market taining the competitiveness share in the region, of colleagues and collabo- Wan Hai Lines ranks rators. "The combination of these three factors", explains Mr. Chen "has helped services coverage us immensely in becoming and sailing a strong and solid player in such a furiously competitive

One particular instance in which Wan Hai Line's strategy has already proven successful in outpacing competitors is in flexibility of operation. Currently the shipping industry is experiencing a relative halt in growth which has pushed alliances between carriers to be reshuffled and many new consortia to emerge. Mergers, takeovers and alliances between the larger liner shipping companies have allowed them to consolidate domination over the market by redeploying their fleets and reconfiguring and rescheduling their services. According to shipping scholar Kevin Cullinane, "this has led to a worldwide rationalization of container transport so that fewer and fewer container ports are called at directly by mainline vessels" Aggregately, such consortia will repre-

sent as much as 95% percent of the market share in the near future, and as such pose a considerable threat. Nevertheless, what lines may gain in lower costs and wider coverage by teaming up together, they may very well lose in flexibility of operation. And this is where Wan Hai Line's tailored services and impeccable schedule reliability have made a difference. "For customers", Mr. Chen explains, "service is almost the same among different carriers, but only independent carriers like us are able to provide the more compelling services required by particular customers". In an industry of large consortia and impersonal conglomerates, it all comes down to creating a company that customers can trust reason for which Wan Hai Lines has a strong commitment to both social responsibility and the environment..

Through Wan Hai Foundation, created in

2003, the company supports numerous



 Taiwan earmarks \$1.9B to support ailing shipping industry.

**Shipping & Logistics** 

• The Taiwanese government said it will provide 60 billion New Taiwan dollars (\$1.9 billion) to support the country's shipping

 The government announced that it would take additional steps to support the shipping industry, including reducing berthing fees while the country's Bankers Association will grant the shipping lines debt payment extension.

relevant international organizations and have made generous donations to areas hit by devastating catastrophes, such as Sichuan in China and Fukushima in Japan after the earthquakes. In these cases, they offered its vessels for delivering relief supplies to those in urgent need. In terms of the protection of the environment, the company has also invested in the future well beyond expectations or requirements of law, adopting the latest technologies to make its ships more environmentally friendly, monitoring pollution, carrying out a full implementation of an Environmental Management System, and requesting contractors and business partners to enhance environmental protection awareness through joint observation of environmental protection regulations. "We constantly strive to remain a trustworthy

Certainly, a globalized industry such as shipping must act globally and take onto itself the concerns of the world as a whole, and along this responsibility also come broader challenges. Perhaps the most pressing one is that of geopolitics, and the current state of uncertainty regarding

> whether or not it will resurrect. "In my perspective", says Mr. Chen, "no market can stay away from trading goods with others given that the supply chain is a highly exquisite mechanism and is borderless in today's world". In fact, experts agree on the fact that protectionism or an ensuing trade war could cause tremendous damage to the industry and affect

So far, nevertheless, there have been no measures taken in that respect, nor have shipping activities been affected, despite numerous occurrences of protectionist policies being supported through elections. "We do not know how far protectionist measures can or will go, and we will not take any drastic actions until we can see a clearer picture", says Mr. Chen. For the time being a more pressing matter is taking the attention of the management team, which translates into gaining a more solid foothold in the American market. Taiwan's trading relationship with the US has gone through more and less difficult moments, but the US has continued to be an important trading partner for Taiwan, which depends on the success of that partnership to secure greater participation in global and regional trade and economic integration. In order to achieve continued growth in trade. Taiwan must maintain its mportant position within global supply chains and a standard of operation that will place it ahead of its competitors.

"The American market is definitely an important market to us", Mr. Chen explains."According to capacity deployment we now have less than 1.5% of the market share in the US West Coast. and we certainly want to increase that percentage in the long run". In order to achieve this. Mr. Chen is confident they have to walk cautiously, follow carefully the flows of cargo and the market tendencies, and continue doing what Wan Hai Lines does best: cooperating with other carriers to diversify products, and keep their customers close by offering an outstanding service. "This is how we came to be where we are", concludes Mr. Chen with a smile, "and why we come here everv day to do the best we can"

institution", says Mr.Chen.

thousands of consumers.



## Service is our Mission Stability is our Strength

持穩秉實 全心服務

WAN HAI LINES is the optimal choice

With only WAN HAI LINES reporting a positive operating margin in the first half, few, if any, of the other carriers are financially bulletproof " - JOC WAN HAI LINES Ranked No 1 in liner schedule reliability in 2016 from SeaIntel global liner performance report " - 2017.01

## **KEY FEATURES**

Factors to consider when choosing your cargo transportation partner. Wan Hai has them all!



Customer request processing within 24 hrs.



Most comprehensive network in Asia



Personalized and customized service.



Steady sailing frequency



Agility in connection



Stable financial situation

## SERVICE COVERAGE

WAH HAI LINES operates the most intensive service network in Asia. With 146 offices worldwide serving 32 countries and over 70 regular routes, customers are able to optimize their cargo deliveries without sacrificing efficiency.

Service coverage: The Far East, ASEAN, Indian Subcontinent, Middle East, North America west and South America west.

## **AWARDS & ACHIEVEMENTS**

"Green Flag" awarded by Port of Long Beach 4 years in a row

AEO qualification certified by Customs Administration, MOF, Taiwan.

Five Times Winner of "Container Shipping Line of the Year India -Far East Trade Lane" by MALA

"Best Green Shipping Line 2016" by AFLAS

Two Times Winner"Container Shipping Line of the Year - Far East Trade Lane" by Gujarat Junction Asian Freight, Logistics and Supply Chain Awards

Best Shipping Agent, Customer Service for Colombo - Intra Asia Sector
Two Times Winner of "Most Admired Company in Taiwan in the shipping industry" by Common Wealth Magazine



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### Wan Hai Lines (America) Ltd.

