



Report

Panama Port Development

Investment Opportunities in the Maritime Sector 2017

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'Hub of the Americas'

Over the past decade, Panama's strategic location and its integration into the world economy have converted the country into the **fastest growing** economy in Latin America and the Caribbean; transforming it into the **'Hub of the Americas'**. The country seeks to continue being competitive by amplifying services and forming clusters to improve the interconnectivity between all sectors. In the government's five-year plan for 2015-2019, a total public investment of USD 6.4 billion in transport and logistics has been indicated, of which USD 109 million will specifically be invested in maritime infrastructure.

Furthermore, Panama has recently established diplomatic ties with **China**, the second biggest user - after the US - of the **Panama Canal**. As it is expanding its global trade ambitions with its 'One Belt One Road' infrastructure-building initiative, access to the eastern coasts of both Latin America and the US is expected to be of growing importance for Beijing.

In June 2016, the largest infrastructure project since the Panama Canal's opening in 1914 was completed. The \$5.25 billion Canal expansion has **tripled** its capacity and changed the way shipping

lines navigate their global shipping routes. This has already borne fruits as the expansion has led to an impressive increase in the aggregated volume handled: the expanded Canal has registered an increase in tonnage of **23%** in its first year after expansion, while its revenues increased **12.5%** during the same period of time.

The continuous developments around the Canal present challenges for which Dutch expertise can provide solutions. Within the maritime sector **six central developments** can be identified:

1. Peak hours
2. Automation
3. Sustainability
4. LNG Market
5. Agro-logistics
6. Maritime Auxiliary Services

The expansion of the Panama Canal has led to the establishment of new projects in the maritime sector, thus creating **business opportunities for Dutch companies**. This report provides an overview of the projects currently being developed and carried out by the Canal Authority (ACP), the Maritime Authority of Panama (AMP) and other projects and the opportunities they provide for Dutch business.

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1. Introduction

In this report, current business opportunities in the Panamanian maritime sector are identified. Firstly, a short introduction is given on the economic characteristics of Panama whereupon the recently completed expansion of the Panama Canal and its implications are discussed. Thereafter, six developments in the maritime sector are discussed, followed by an overview of Panama's five main ports. The report concludes with the current maritime projects and the opportunities this offers for Dutch business.

2. The Bigger Picture

Over the past decade, Panama's strategic location and its integration into the world economy have converted the country into the **fastest growing economy in Latin America and the**

Caribbean. Average annual growth has been 7.2% between 2001 and 2013; more than double the regional average. Growth reduced slightly to a percentage of 5.4 in 2016. By 2017 the forecast remained at 5.4%¹. In the medium term, Panama's growth is likely to remain one of the highest in Latin America, between 6 and 6.5%. Public investments are also likely to remain high, owing to the construction of the second metro line and the additional traffic generated by the expanded Canal. In the government's five-year plan for 2015-2019, a total public investment of USD 19,5 billion has been indicated. Transport and logistics have been named key sectors by this administration, receiving a total public investment of USD 6,4 billion of which USD 109 million will specifically be invested in maritime infrastructure². Prospects for high growth in the coming years are also supported by emerging opportunities for private sector-led growth in key sectors, such as transport and logistics, mining, financial services, and tourism.

The economy of Panama is centered on a highly-developed service sector, which represents more than 75% of gross domestic product (GDP). The **Panama Canal** and use of the **U.S. dollar** strengthen the globally-oriented service economy. The Panama Canal is essential to global trade and accounts for almost 10% of the country's GDP. Other important components of the service economy are the **Colon Free Trade Zone (CFZ)**, which is the second largest free zone in the world. Panama also has a large logistics sector, as well as a modern banking- and insurance industry. The agricultural sector has lost importance over the years, accounting for less than 3% of GDP today. The main cash crops produced in the country are bananas, corn, coffee and sugar.

Figure 1. Key numbers Panamanian economy.

- Panama has a GDP of **USD 55.2 billion** and a GDP per Capita of **USD 12,140**.
- The country was ranked **42th** in the **2016 Global Competitiveness Index** with an overall score of 4.51 on a 1-7 scale (low-high).
- Panama City was ranked **1st** in the **2015 Doing Business in Central America and the Dominican Republic** index by the World Bank.
- The country was ranked **40th** in the **2016 Logistics Performance Index** with an overall score of 3.43 on a 1-5 scale (low-high).

¹ <http://www.worldbank.org/en/country/panama/overview>

² <http://www.mef.gob.pa/es/Documents/PEG%20PLAN%20ESTRATEGICO%20DE%20GOBIERNO%202015>

Panama wants to develop itself into a **regional hub**, following, amongst others, the example of Rotterdam, by creating a multimodal infrastructure system integrating the Panama Canal, five ports, multiple airports, railways and roads. The completion of the Panama Canal Expansion has increased transshipment volumes handled by the logistics cluster in Panama, as well as adding new commodities like **liquefied natural gas (LNG)**. In order to capitalize on the opportunities, it is of essential importance for Panama to invest in the creation of **added value services** to fully benefit from the expansion of the Panama Canal. Therefore, the development of a **logistic subsystem to support the agriculture sector** is high on the agenda as well.

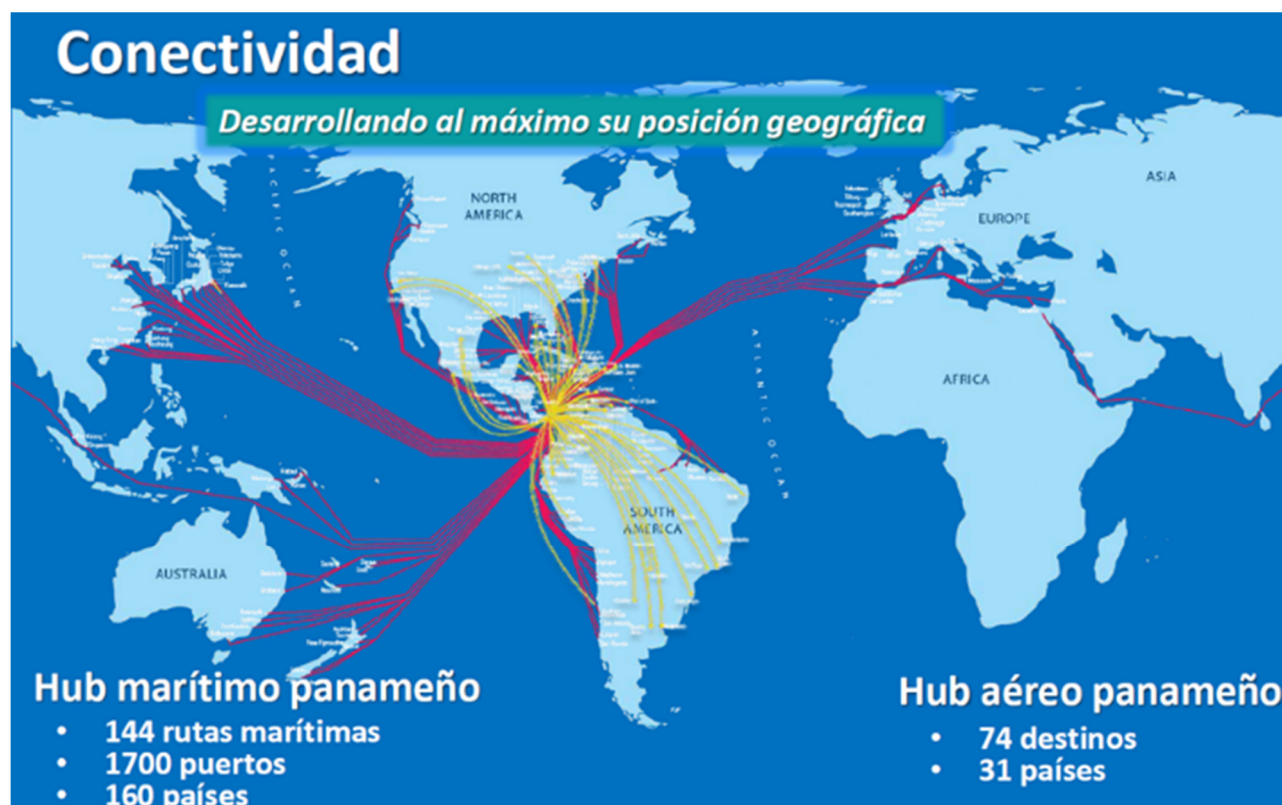
3. The Panama Canal

The Panama Canal is a key world trade route. Due to its favourable geographic location, the canal facilitates a unique connection for commercial maritime routes **between the Atlantic and Pacific oceans**. The Canal currently serves various important trade routes within the region and with Asia and Europe, providing a significantly shorter transit between the Atlantic and Pacific oceans than around the notorious Cape Horn. Next to facilitating a passage, its role in **transshipment** has become increasingly important.

As the movement of container cargo increased globally, the Canal Authority (ACP) decided to focus on this segment. Hence, in 2007 the expansion of the 77-kilometer waterway began with a total investment of USD 5.25 billion. Since its inauguration on June 26, 2016, the expanded Canal increased the waterway's capacity to meet the growing demand of maritime trade using larger vessels, which means that the Panama route provides important economies of scale.

The Panama Canal Expansion has been the largest enhancement project since the Canal's opening in 1914. The Expansion included the construction of a new set of locks on the Atlantic and Pacific sides of the waterway, thereby creating a third lane of traffic, doubling the cargo capacity of the waterway. While the expanded locks are 70 feet wider and 18 feet deeper than those in the original Canal, they use less water due to water-savings basins that recycle 60% of the water used per transit. Before the expansion, the existing locks allowed the passage of vessels that could carry up to 5,000 TEU. **After the expansion, the Post-Panamax vessels are able to transit through the Canal, with up to 13,000/14,000 TEU, thus multiplying the capacity by nearly three times.** According to the ACP, currently 15 out of the 29 liner services that transit through the Canal deploy neopanamax vessels.

Figure 2: Connectivity of Panama.



The recent Canal expansion has helped to generate port investments within Panama and raised the development of LNG terminals, thereby allowing the use of LNG in Panama. New opportunities offered by the expansion of the canal will thus enhance Panama's position as a logistics hub. It offers Panama the chance to maximally employ its geographic position, which is illustrated in *Figure 2*. Currently, Panama maintains **144 sea routes, connected to 1700 ports in 160 countries**.

Together with airport Tocumen, which is connected to 74 destinations in 31 countries, this reinforces Panama's international position as the '**Hub of the Americas**'.

4. Developments in the Maritime Sector

The recently finished Canal expansion has already increased port development in the wider Central America- and Caribbean region and has consequently also led to an increase in competition. Therefore, Panama's ports are continuously planning to expand their terminals to ensure they are able to capture the container volume increase. The amplification of maritime and logistics services around the Canal should consolidate the competitive position of Panama's ports.

Moreover, the development of logistic services on a national level, supporting the agro sector and regional trade, should transform the country into the 'Hub of the Americas'.

Within Panama's maritime sector, **six developments** can be identified:

1. Peak hours
2. Automation
3. Sustainability
4. LNG Market
5. Agro-logistics (Hub de Alimentos)
6. Maritime Auxiliary Services

1. Peak hours

As the Canal expansion has allowed for Post-Panamax ships to pass the Canal, more container ports have increased or are planning to increase their capability of handling bigger volumes by improving efficiency. It is of **crucial importance to avoid congestion** at the entrances of the Canal and of the ports, because this could negatively affect Canal transit activity. Due to the increase in scale by the Canal expansion, the number of vessels has reduced, but problems of congestion could occur during peak hours. Therefore, it is of increasing importance that ports will anticipate efficiently during peak times, to prevent congestion. This concerns both the ACP as well as all private port operators. For example, cranes with more capacity are needed to facilitate a faster transit through the Canal in order to avoid congestion, which offers opportunities for Dutch companies.

2. Automation

Enhancing terminal productivity to capture extra cargo flows is foreseen through terminal expansion and the automation of port processes. The need for automation is becoming especially relevant and pressing as Panama is dealing with a severe lack of skilled (technical) work force.

3. Sustainability

Over the years, the Panama Canal has developed a **growing commitment to sustainability**. The ACP, for example, has integrated sustainability as an important pillar in its current policy: for the period 2015-2020 it has launched 'The Panama Canal Green Route', which is currently leading a number of sustainability initiatives, such as its Green Connection Award and Environmental Premium Ranking, which reward customers who meet high environmental efficiency standards. The ranking awards points based on specific environmental standards by which carriers can improve their position in the Canal classification and encourages the implementation of technologies and standards to help **reduce greenhouse gas emissions**. Previously, the ACP made use of a 'first come, first served' policy for the transit of vessels through the Canal.

Furthermore, ACP has recently approved **toll modifications**, which are scheduled to go into effect at the start of the Canal's fiscal year, on October 1st 2017. For the containership segment, the approved tolls structure offers **more attractive rates** per loaded containers on the return voyage, applicable only to neopanamax vessels. By rewarding ships who return loaded, the ACP is looking for "round the world" (RTW) services, diminishing the number of unloaded containers returning via the Canal, making the Canal route more sustainable. Additionally, the new structure modifies the tolls charged to liquefied natural gas (LNG) and liquid petroleum gas (LPG) vessels. Hereby, ACP stimulates LNG And LPG which are viable and proven cleaner fuels than heavy fuel oil (HFO), therefore contributing to a sustainable energy future in the context of greenhouse gas emissions. Improvement is urgently needed with carbon emissions from global shipping amounting to nearly one billion tons a year and rising: accounting for 2–3 per cent of global GHG emissions. Finally, container/breakbulk vessels will be reclassified into the general cargo segment, thus resulting in more attractive tariffs for customers in this category.

Due to sustainability measures incorporated in the Canal expansion, the Canal has already **reduced its CO₂-emission with 17 million metric tons** during its first year of operations after expansion.

4. LNG Market

The expansion of the Canal has made the passage of LNG carriers possible, thereby **creating opportunities for the LNG-sector** in Panama. As can be seen in *Figure 3*, the Canal has undergone a significant increase in LPG and LNG carriers since the Canal is suited for the transit of neopanamax vessels. Due to stricter emission standards set by the International Maritime Organization (IMO), shipping is likely to experience a big shift in fuel: **from bunker oil to LNG**. Currently, the LNG market is not regulated, thereby making the regulation of access to LNG terminals that will be built in the near future uncertain.

The Panamanian government has already awarded three concessions for the construction of power plants running on LNG including the permission to build their own LNG terminal (see section 7.3). These concessions have been awarded to AES together with Grupo Motta, NG Power (a local consortium) and Grupo Martano (a Chinese-Panamanian group).

5. Agro-logistics

One way for Panama to create added value is by **developing a logistic system to support the agricultural sector**. To create a better picture of the different opportunities for the development of a so-called ‘Hub de Alimentos’ or ‘Food Hub’, a Dutch consultancy will write a masterplan for the Ministry of Agricultural Development (MIDA).

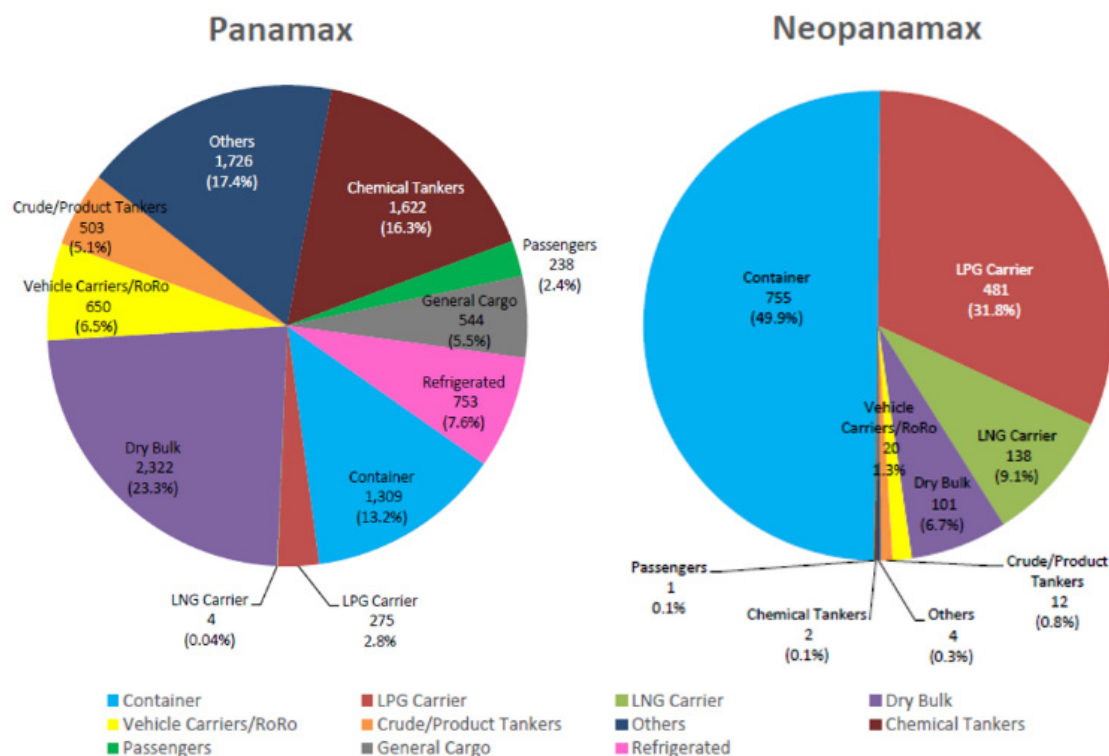
The proposal concerns a market research/location on agro-logistics in Panama and is expected to be published by the end of 2017.

In a nutshell, the project entails, amongst other developments, the development of a free zone for modernized production, processing and distribution of food products on an industrial scale on the banks of the Panama Canal. It would consist of a bulk terminal, cold storage and processing facilities. In this zone, agricultural crops (and fish and meat) from Central and South America can be consolidated and processed for export to Asia, the US and Europe. The agricultural products can enter the zone, be processed and re-exported without border procedures. **The new food hub would have two objectives: to connect local production, but above all, to add value to the products that are passing through the Canal.**

6. Maritime Auxiliary Services

Panama remains attractive for continuous improvements and investments in maritime auxiliary services (small shipyard, ballast water treatment, tug services, bunkering, maintenance dredging, etc.) and in its **connectivity improvements** (eg. short sea shipping or container barge services). The development of a **shipyard** in Panama has already been a long-lasting desire: the shipyard at the Pacific side (MEC) is not providing optimal services, whilst there is no shipyard yet on the Atlantic side.

Figure 3: Cumulative monthly Panama Canal traffic by market segment from October 2016 to July 2017 of fiscal year 2017.



However, the potential of developing a shipyard is limited because the ships passing through the Canal mainly carry cargo and need to continue their journey as quickly as possible. The Atlantic side has several ship (repair) yards close by. A smaller maintenance yard for smaller service vessels (tugs/bunkering etc.) might be feasible in the Canal.

ACP tries to continuously stimulate investment in maritime auxiliary services, for example at the West Bank in Cocolí, which offers supply opportunities to Dutch companies.

5. China's Increasing Influence

China is **the second biggest user - after the US - of the Panama Canal**. The Canal is a vital shipping route for China and as China is expanding its global trade ambitions with its '**One Belt One Road**' infrastructure-building initiative, access to the eastern coasts of both South America and the US is expected to be of growing importance for Beijing.

In June 2017, Panama has cut long-standing **diplomatic ties** with Taiwan in favour of establishing relations with China. Last November 2017, Panama opened its first ever Embassy in Beijing during a diplomatic mission followed by the signing of **19 bilateral cooperation agreements in trade, tourism, finance, the maritime sector, security and (air)transport**.

Most importantly, Panama received the status of '**Most Favored Nation**', which means that ships with the Panamanian flag will receive benefits in port tariffs and preferential treatment in the ports of the People's Republic of China.

Furthermore, China and Panama are currently negotiating the establishment of a **Free Trade Agreement** and China has expressed high interest in the construction of a railroad between Panama City and David, a city close to the Costa Rican border. Besides, a Chinese company is developing the Puerto Panamá-Cólon in Isla Margarita (see section 7.2) and Chinese state firms have expressed interest in the development of the West Bank once the country opens a tender for it at the end of 2017 (see section 7.1).

6. Panama's Ports

Panama has a network of seaports that provides a variety of services to containerized, liquid and general cargo, as well as to passengers in cruise terminals. Panamanian seaports in the National Port System (NPS) are divided into two groups: **state ports and private ports**. Private ports have been given to terminal operators after a privatization process of former state ports (concession). State ports are still operated by the government under the management of the **Panama Maritime Authority (AMP)**, and basically provide dockage and other related services for local users and short-sea services. The figure below (*Figure 4*) gives an overview of the five biggest ports, their operators and the annual throughput (in TEU) for 2016.

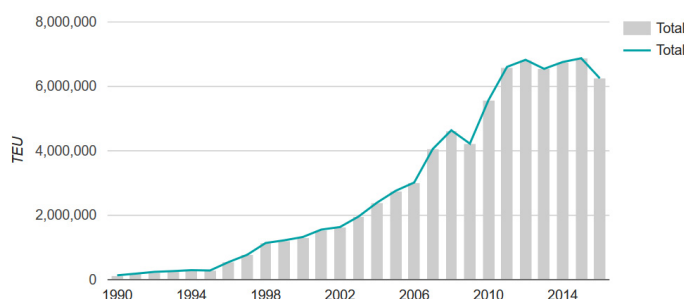
Comparing the annual throughput from 2015 to 2016, the ports show different growing rates. Balboa had a reduction of 8% between both years, while MIT showed a 7.3% decrease in its TEU movements. CCT presented a reduction of 19.9%, as well as Cristobal with a decrease of 2.3% in its TEU movements.

Figure 4: Overview of main ports in Panama, their operators, and container movement in 2016.

Port	Operator	TEU in 2016
Pacific side		
1 Port of Balboa	Panama Ports Company (member of the Hutchison Port Holdings, HWL)	2.800.000
2 PSA Panama Terminal	Port of Singapore Authority International	160.000
Atlantic side		
3 Manzanillo International Terminal (MIT)	Carrix, Inc. and the Motta and Heilbron families of Panama	1.800.000
4 Port of Cristóbal	Panama Ports Company (member of the Hutchison Port Holdings, HWL)	790.000
5 Colon Container Terminal (CCT)	Colon Container Terminal, S.A. (a subsidiary company of Evergreen Group)	630.000

PSA decreased 26.9% in its TEU movements. **On average, the period 2015-2016 thus registered a reduction in the total number of containers handled by the main seaports in Panama.** The preliminary data obtained from the Panama Maritime Authority (AMP) shows an aggregate volume of 6.3 million TEU (not including the port of Almirante) for 2016, which is a decrease of almost 9% compared to the aggregated volume of 6.9 million TEU in 2015.

Figure 5: Panama's Total Annual Container Movement (TEU).



Nevertheless, the expansion of the Panama Canal has already led to an impressive increase in the aggregated volume handled: **the expanded Canal has registered an increase in tonnage of 23% in its first year after expansion, while its revenues increased with 12.5% during the same period of time.** On average, 5.9 vessels are currently transiting the expanded Canal per day, surpassing original forecasts of two to three daily transits for the first year of operation. For the next fiscal year, which will start on the 1st of October 2017, ACP-estimations predict a record of 429,6 million tonnage and more than 13,000 transits, including 2,335 neopanamax.

6.1 PSA Panama International Terminal

Location

PSA is located at the **Pacific** western-side entrance of the Canal in the former US Rodman naval base.

Port Management and Type

The terminal is operated by PSA Corporation Ltd. It is a deep-water port, suited for general container cargo.

General Information

The port has not been able to reach its full potential of handling **450,000 TEU** yet, due to its lack of a railroad and decent highway connection. This makes the port mostly suited for transshipment onto other vessels. Its trade flows are for the most part, namely 90%, made up of transshipment, while the other 10% is made up of 5% of import and 5% of export.

Development and Business Opportunities

Currently, the terminal has a capacity of 450,000 TEU. With the expansion, which is set to be finished by the end of 2017/beginning of 2018, **the port is expected to have a full potential of handling 2 million TEU.**

The development of the terminal can be split up in two phases. The first phase, the Expansion phase, has already been finished. The second phase, a USD 450 million investment, comprises the dredging and excavation of approximately 4 million m³ of material to a depth of 16.3 m, as well as the construction of an 800-meter quay wall. The dredging works are executed by Jan De Nul Group. The quay wall extension has been awarded to the Joint Venture Jan De Nul-Saipem. PSA currently does not leave any new opportunities for Dutch companies.

Contact

PSA Panama International Terminal, S.A.

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6.2 Manzanillo International Terminal

Location

The Manzanillo International Terminal (MIT) is located on the **Atlantic** Coast of Panama, near the Northern entrance of the Panama Canal. It is side-connected to France Field, the largest warehousing area of the Colon Free Zone.

Port Management and Type

MIT is managed by Carrix, Inc. and the Motta and Heilbron families of Panama, which received a concession till December 2033. It is a privately managed, deep water port.

General Information

MIT was originally built as a specialized container terminal. Additionally, it handles vehicles and rolling equipment, known as Roll on-Roll off, and Project Cargo. It was built on a former US Naval base at Coco Solo Sur. Transshipment operations represent 85% of their containerized activity.

Development and Business Opportunities

MIT finished a USD 270 million worth expansion at the end of 2015. **The expansion increased MIT's capacity from 2.0 million TEU to 4.0 million TEU**, and included the construction of a 400-meter quay for neopanamax, with 4 super-Post Panamax cranes, automating the container yard, dredging to 16.5 m of depth around the Post-Panamax berths, and adding 6 yard cranes automatic stacking (ASCs).

Contact

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6.3 Port of Cristóbal

Location

The port of Cristóbal is located in Limon Bay at the southern east part of Colon City and at the **Atlantic** entrance of the Panama Canal. It is one of the most valuable multimodal allies of the Colon Free Zone.

Port Management and Type

The port of Cristobal is managed by Panama Ports Company (PPC) which is a member of Hutchison Port Holdings, HWL. It is a privately managed, deep water port.

General Information

The port of Cristóbal has an annual capacity of **2.0 million TEU**, handling amongst other general cargo, passengers, fishery, tankers, tug and pleasure crafts. Furthermore, the port offers an easy access to the Colon Free Trade Zone. Its trade flows are for the most part, namely 95%, made up by transshipment, while the other 5% is spread over import and export.

Development and Business Opportunities

The Port of Cristóbal does not have further expansions planned. The only recent investment made was in a mobile crane, allowing management of larger projects and better control of the general cargo loads. The Port of Cristóbal does therefore not leave any opportunities for Dutch companies at this moment.

Contact

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6.4 Port of Balboa

Location

The Port of Balboa is located at the **Pacific** east side of the Canal.

Port Management and Type

The Port of Balboa is managed by Panama Ports Company (PPC) which is a member of Hutchison Port Holdings, HWL, and also manages the port of Cristóbal at the Atlantic. It is a privately managed, deep water port.

General Information

Balboa is the only container terminal fully operating in the country to serve the many shipping lines for loading, discharging and transshipping operations from the Pacific basin to the region. The port is the largest transshipment container port throughout Latin America, with an annual average of **3 million TEU**. This port manages containers, Ro-Ro, dry and liquid bulk, and general cargo. Its trade flows are similar to those of the port of Cristóbal, namely 95% is made up by transshipment, while the other 5% is spread over import and export.

Development and Business Opportunities

Panama Ports Company has finished the expansion of this port at the end of 2015, **increasing its capacity from 4 to 5 million TEU**. Balboa has been developed from two separate piers, originally built for general cargo, to a modern terminal capable of simultaneously receiving up to two Post-Panamax, two Panamax and a Feeder. Partly due to the fact that PPC does not have a lot of land left around this port for expansion, no new investments are planned, thus not leaving any opportunities for Dutch companies at this moment.

Contact

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6.5 Colon Container Terminal

Location

The Colon Container Terminal (CCT) is located in Coco Solo Norte, province of Colon. This seaport forms an ideal site for transshipment and cargo inbound/outbound to and from the Colon Free Zone. At the **Atlantic** entrance of the Panama Canal, CCT serves to the regional markets of the Caribbean, North, South and Central America with shipments mainly originated in the Far East.

Port Management and Type

CCT is managed by the Taiwanese Evergreen Marine Corp. which extended its license for another period of 20 years in 2016. It is a privately managed, deep water port.

General Information

CCT is a modern port specialized in handling containers, general cargo and rolling stock.

Development and Business Opportunities

The Colon Container Terminal is currently in its last phase of the construction of a 4th berth which went together with the purchase of additional cranes and additional container storage.

With this expansion, which is expected to be finished by the end of 2017, the terminal will **increase its capacity from 1.5 TEU to a full potential of handling 2.4 million TEU**. The expansion counted for a total investment of USD 600 million, of which USD 150 million was spent on the 4th berth. CCT does not have further expansions planned and does thus not leave any opportunities for Dutch companies at this moment.

Contact

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Figure 6. Location of the five main ports of Panama.



7. Opportunities for Dutch Business

Although there are no direct opportunities regarding Panama's five main seaports as described above, the expansion of the Panama Canal has led to the establishment of new projects in the maritime sector and thus creating business opportunities for Dutch companies. *Figure 5* gives an overview of all foreseen maritime projects with the best possible estimation of when tenders are expected to be released. This is merely meant to give an indication of what to expect on the short term, as well as on the long term. As the ACP is Panama's frontrunner when it comes to diversification and project development, their plans are presented first. Next, the development plans of the AMP, as well as private developments are presented.

7.1 The Canal Authority (ACP)

The ACP is currently focusing on **four different projects**, aimed at offering services of added value and a better employment of the opportunities that are created by the expansion of the Canal.

These projects concern the construction of the Port of Corozal, the development of a Roll-on/Roll-off port and a Logistic Park, both located at the West Bank, and a storage plant for liquefied natural gas (LNG).

Port of Corozal

The new port of Corozal is one of the biggest new developments by the ACP, with a total **investment of USD 750 million**. The project is planned to be developed in Corozal, which is located on the east bank of the **Pacific** entrance of the Canal. If the development of this port eventually takes place, it is expected to become the biggest container terminal at the Pacific side. The Corozal project will be developed in two stages: first a 1350-meter dock and a container park with capacity of 3.2million TEU will be constructed, which will be followed by the construction of a second dock of 731 meters, with a capacity of 2.1 million TEU. Due to its location on the Pacific side, the construction could result in technical challenges – such as the coordination between ships passing through the Canal and ships entering and leaving the docks - for which Dutch expertise could potentially provide solutions.

Figure 7. Current maritime projects and their corresponding investment, and tender.

	Project	Investment in USD	Estimated tender release
ACP	Port of Corozal	750 mln	Not clear yet
	Logistic Park	1.7 bln	January 2018
	RoRo Port	200-300 mln	First trimester 2018
	LNG Terminal	Not clear yet	Not clear yet
	Fourth Set of Locks	16-17 bln	Not clear yet
	Tugboats	Not clear yet	March/April 2018
	Floating Dry Dock		2018
	350 T Floating Crane		2018
AMP	Port of Armuelles	16.2-22.2 mln	Not clear yet
	Port of Aguadulce	Not clear yet	Not clear yet
	Port of Vacamonte	Not clear yet	Not clear yet
	Fuerte Amador Cruise	165 mln	Already tendered
	Panamá-Colón Container Port	1 bln	Already tenderd
Other Projects	Bahia de las Minas	120 mln (1 st phase)	Already tendered
	Martano Terminal	1 bln	Already tendered
	AES Terminal	1.15 bln	Already tenderd
	PATSA Terminal	Not clear yet	Not clear yet
	Oil Pipeline Tocumen	Not clear yet	Not clear yet

The tender has faced some problems due to the controversy of the project. The Panama Canal Authority gave its go-ahead for the port at the end of September 2016, and published the specifications and requirements on the 8th of October. Four companies were prequalified earlier in 2017 to participate in the final tender: the Dutch APM Terminals B.V., France's Terminal Link, Singapore-based PSA International Pte., Ltd and the Dutch Terminal Investment Limited, S.A., but none of them eventually filed a bid. Among other requirements, the failed tender consisted of a minimum container movement rate of 12 dollars, instead of the usual 9-dollar rate. Besides, in the initial tender dredging would be carried out by ACP and the port would be provided with railroad access. However, the ACP did already announce that the dredging will probably be done by the ACP itself and will thus most likely not be part of the upcoming tender.

The ACP indicated that it is not yet clear when the new tender specifications for the concession of the project will be ready for publication. The ACP is currently in a consultation process with the companies that participated in the failed tender and other companies interested in the concession, to improve the tender specifications and make them more attractive. There are currently six companies interested in the Port of Corozal.

Figure 8: The two development phases of Corozal.



Development West Bank

Commissioned by the ACP, Dutch STIG Delta and Antea have provided a master plan for the development of the Panama Canal West Bank (1200-hectares area). The plan foresees investments in logistics parks, ports, railways and road connections, ensuring optimum commercial use of the area.

Logistic Park

The ACP is currently analyzing different business models for the development of the Logistic Park which will offer a strategic location for distribution and added value services. The Park will

be located between the Centennial Bridge and the container terminal of PSA Panama. The masterplan by STIG Delta and Antea analyzes the different markets that transit through the Canal, in order to determine which markets have the highest growth potential following the expansion of the Canal, and for how many markets it can develop logistic activities and added value to Panama. Due to the big scale of the project, ACP has decided to carry out the project in different phases. The project requires an investment of USD 1,700 million to cover the first 1,200 available hectares, after another 1,100 hectares will be incorporated, set to be developed in a period of five years. **The ACP has planned to finalize the documents for the tender by December of 2017, or January 2018.**

Roll-On/Roll-Off Port

The ACP has plans for the construction of a Ro-Ro port, which will be part of the Logistic Park. The investment for this Ro-Ro port includes the construction of a dock, vehicle storage yard and vehicle processing areas in an area of approximately 43 hectares. This future roll-on-roll-off port will be located at the west side of the Pacific entrance of the Panama Canal. Because of its strategic location on the international trade route, it is expected to become a pivot point that would serve sub-markets in the region. The ACP is currently in the process of preparing the public tender for the concession of the Roll-On/Roll-Off port.

The tender is set to be published during the first trimester of 2018. The project requires an investment between USD 200-300 million and will be developed in two phases. The Ro-Ro port is estimated to handle till 500.000 vehicles on an annual base. Simultaneously, a vehicle processing center will be incorporated that adds value to the cargo. The RoRo port could be used by Latin American car assembly plants as a distribution center and to realize modifications to the heavy equipment, by adding value and thereafter re-exporting them to different countries in the region, thereby boosting the hiring of technical labor.

LNG Terminal

Due to the Canal expansion, more than 90% of the global LNG fleet can now transit the waterway for the first time in history, opening a new market and allowing LNG producers in the United States to ship natural gas to Asia at competitive prices.

In order to capitalize on this growth, **the ACP is interested in developing LNG-related infrastructure projects**, including an import terminal that will provide LNG bunkering and redistribution capabilities.

Figure 9: Panama's Special Economic Zone



The U.S. Trade and Development Agency awarded a grant to the Panama Canal Authority (ACP) to support the planning of a liquefied natural gas (LNG) import terminal by carrying out a feasibility study.

The ACP still has to decide upon the location of the new LNG terminal. The report on the technical and financial viability of a terminal for Liquid Natural Gas (LNG) is in the process of being tendered and awarded. However, it is not yet clear when the tender specifications for the terminal will be published.

Development of a Fourth Set of Locks

The ACP considers building a fourth set of locks in order to better compete with the Suez Canal in Egypt. This new set of locks would serve a new generation of ships that can carry up to **20,000 TEU**. The project is estimated to **cost between USD 16 and 17 billion**. If the ACP decides to go ahead with the project, it could be completed within 15 years. Financing options include issuing bonds and the Canal's own revenues. However, the ACP already indicated that more water will be needed, amongst other necessary improvements, in order to be able to build a fourth set of locks. The ACP is currently conducting studies on finding other ways to get extra water, such as in Río Indio and Bayano.

Short Term Tenders

On the short term, three different tenders will be released:

1. Purchase of **6 tugboats** with the option of buying 4 additional tugboats. The publication of this tender is expected in **March/April 2018**. The type of tender is not yet known, but it is expected to become a best value tender.
2. **Floating dry dock**, which will be suited for neopanamax vessels. ACP is currently working on the specifications to be published in 2018.
3. **350 T floating crane**. Likewise, the tender is expected to be published in 2018. On the long term, ACP is interested in purchasing a hopper dredger additionally to the 3 dredgers the ACP already owns (1 cutter and 2 hoppers).

7.2 The Maritime Authority (AMP)

The AMP is continuously investing in its ports in order to make use of the opportunities provided by the Canal expansion. The following section will provide an overview of the different projects planned by the AMP.

Port of Armuelles

The AMP and the Latin American Development Bank (CAF) investigate possibilities to redevelop the Port of Armuelles, as well as the development of an interoceanic highway, connecting the port to the Atlantic. The port is located in the province of Chiriquí on the Pacific, bordering with Costa Rica. It has two different deep-sea ports: one for bananas and one for oil. The AMP is investigating possibilities to turn the currently inactive port for bananas into a multipurpose dock of around 150-300 meters. The redeveloped port should improve agricultural exports, while simultaneously focusing on the revival of the banana region.

CAF approved a loan of USD 100,000 in September 2015 for a technical study for the realization of a viable model. The objective of this study was to research the feasibility of a multimodal port by determining potential users of a logistics center and the business flow needed to attract investors. The results of the study have not been made public. The AMP has indicated the expected **costs between USD 16.3 million and USD 22.2 million**, with a concession of 20 years to be awarded with a renewal option for another 20 years. The first expected outputs should annually be **between 15,000 and 30,000 TEU**, with a desired 5% annual increase. Dredging will not be needed.

In April 2017, the American multinational Del Monte has reached an agreement with the Panamanian Government for the reactivation of the banana sector for the next 20 years. Del Monte is planning to invest more than USD 100 million in a period of 7 years, due to inactivity in the banana sector. Del Monte is set to begin operations in May 2018 with the first sowing of bananas on the first 970 hectares, of a total of 4,000 hectares it has planned to cultivate. The disappearance of the banana sector has led to serious economic and social problems in Chiriquí. Almost half of the population has left the region in the past decade and current unemployment is estimated at a level of 60%. According to the Panamanian government, the investment of Del Monte will lead to the creation of more than 3,100 direct and 12,000 indirect jobs. **The reactivation of the banana sector would highly increase the need of the establishment of a multipurpose dock** and would make the region more attractive for continuous investment.

Port of Aguadulce

The plan to modernize the Port of Aguadulce has already been on the table for more than 20 years. Despite multiple attempts to re-tender the modernization of this port, no companies have ever filed a formal bid. It is not probable that the port will be modernized with private investments in the near future. At this moment, the port is having a decrease in its operations. The last

tender for the Port of Aguadulce was published in June 2016, but the AMP did not receive any bids before the deadline, mid-October 2016. Since the first attempt in 2015 the tender specifications had remained the same: a reference price of USD 53.5 million concerning a 20-years concession for the design, construction, operation and maintenance of a terminal in the Port. Despite the cancellation of tenders last year, the AMP indicates that it remains analyzing possibilities to release a new tender. It is unclear whether this will happen under the same conditions as the previous tenders. According to sources within the industry, the volume of cargo that would be moved through the port, would not suffice to make up for the payment of USD 53 million that the State has desired for the concession. The modernization of the port would lead to a decrease in costs of the transport of goods and create new forms of employment in the region.

Port of Vacamonte

The Port of Vacamonte is a relatively small fishing port which the AMP would like to redevelop into a multipurpose port. Studies have shown that the fish in this area might be depleted in 20 years. Besides, Vacamonte is located at a strategic position for transshipment, which creates the necessity to redevelop the port.

As the port of Balboa is running pretty full, the AMP sees high potential in the redevelopment of this port. AMP is working together with CAF on the development and is currently looking into options of either tendering a master plan for development, or developing such a plan itself. It is unclear when new tender expectations for the Port of Vacamonte will be published, but this is not expected to take place in the near future. However, several companies already seem to be interested in this location and have been asking about LNG storage or terminal possibilities. The area around Vacamonte offers possibilities for expansion in the areas of LNG storage, container terminals, ballast water, shipyards and the processing of waste.

Some problems that might delay the process are several houses/slums that have been built on the official ground belonging to the port of Vacamonte. AMP is still discussing solutions for the people that are already living there and tries to avoid the construction of new houses on the territory.

Fuerte Amador Cruise Port Terminal

In August 2017, the consortium Cruceros del Pacifico, formed by the Belgium Jan de Nul Group and Beijing-based China Harbour Engineering Co. (CHEC), was awarded a **USD 165.7 million** contract by AMP to design, develop and build the Amador Cruise Terminal at the Panama Canal's Pacific entrance. The

construction of a cruise terminal at the Pacific side follows after Panama already built a cruise terminal at the Atlantic side, namely Colon 2000 Cruise Terminal, which is already in operation and furthermore connected to our Islands via the southern Caribbean route: Curacao, Aruba, and Bonaire.

The terminal will have capacity to accommodate two ships of 360 meters in length, with a capacity of 5,000 passengers per vessel, in an area whose draught must reach 10.5 meters and be able to receive cruise ships at any time of the day, regardless of the condition of the tide. The AMP envisions the new terminal as a home port for large ships and it will have space for two vessels of nearly 1,200 feet in length. It will also have passenger parking, administrative buildings and green spaces. AMP will oversee its operations directly. The development will be completed within 24 months. In total, Panama's government has committed more than USD 300 million to develop Amador as a tourist and residential center.

Panamá-Colón Container Port (Isla Margarita)

The Panama Colon Container Port (PCCP) will be located at Isla Margarita in Limon Bay, Colon Province at the Atlantic Coast of Panama. The project is positioned as an international transshipment container terminal, whose annual throughput will be around **2,5 million TEU**, including international transit container volume accounting for about 80 to 85 % and the local Colon Free Trade Zone container volume accounting for the other 15 to 20 %. PCCP will be the first Panamanian port to be designed from its conception for the **Super Post-Panamax era**, offering transit to containerships with a size of 400x59x15.5meter. PCCP is connected to an adjacent 27-hectare site being designed and developed to provide port-side logistics, power generation, fuel storage and handling capabilities to PCCP customers and 3rd party service providers.

The concession for operation of the port has been given to the Chinese Landbridge Group by the AMP, who will invest USD 1 billion. The construction will be overseen by the China Communications and Construction Company (CCCC). The construction has already started and is set to take a maximum of 3 years. Nevertheless, question marks are posed to the necessity of the development of this port, because of underutilization of the existing ports. As the full potential of TEU at the Atlantic side of the Canal is far from being reached, some are of the opinion that more emphasis should be put on the full employment of the already existing ports, instead of building new ports.

7.3 Other Projects

Besides the ACP and AMP projects, several other projects can be identified in the Panamanian maritime sector. The next section provides an overview of these projects.

Bahia de las Minas

Since September 1, 2016, Royal Vopak has taken over operations in Bahia de Las minas from Chevron, who continues to be the owner. The agreement entails operating the already existing 509,000 cbm terminal. Next to this agreement with Chevron, Vopak is in charge of the development of a first phase 360,000 cbm independent oil terminal at the same location. The project entails, in addition to the new tankage, complementary marine infrastructure, including jetties to handle ships of up to 80,000 dwt. The construction started in January 2017 and will take approximately 2 years. Vopak has planned to **invest USD 120 million** in the first phase of expansion.

Bahia de las Minas is strategically situated at the crossroads of international trade and transportation routes for refined products. It is very well located to serve the international refined products markets in the Panama region, and **to serve the increasing bunkering needs resulting from the expansion of the Panama Canal.**

Martano Terminal

Grupo Martano (a Chinese-Panamanian consortium) has gained the tender for the construction of an LNG terminal in Bahia de las Minas. It concerns a **USD 1 billion investment** for which construction might possibly start by the end of 2017. Part of the project is the construction of a new jetty, of which the location is not yet sure. This project will generate opportunities for Dutch companies in dredging and the construction of the jetty.

AES Terminal

The American AES Corporation is currently constructing an LNG terminal and a Natural Gas Combined Cycle (NGCC) plant at the Atlantic side of the Canal in Costa Norte, Colón. In further detail, the project includes the construction of a 350 MW NGCC plant with a 10-year power purchase agreement, and a 170,000 cbm LNG storage tank and regasification facility, to supply gas to the plant, as well as to potentially serve the growing demand for natural gas in Central America. The main contractor is the South Korean POSCO E&C. A joint venture between the Dutch BAM International and the Panamanian ICONSA is constructing the marine facilities, consisting of the LNG jetty with a 216-metre-long trestle, a 50x35m platform, four breasting dolphins, six mooring dolphins, as well as the intake and outfall structure.

Sister company BAM Infraconsult/DMC is involved in the design of the new jetty. The total capacity of the Costa Norte LNG terminal will be approximately 1.5 million tons annually (mtpa). The total extend of the investment is **USD 1150 million**. **The NGCC plant is expected to start operations in mid-2018, while the LNG Terminal is expected to be completed in mid-2019.** In May 2017, AES and Engie have agreed to enter into a joint venture to market and sell liquefied natural gas (LNG) to third parties in Central America to serve on the increasing domestic and regional demand for gas.

PetroAmérica Terminal (PATSA)

The PetroAmérica Terminal is a logistics center for oil products with storage facilities for 1.1 million barrels, situated at the Pacific Ocean entrance to the Panama Canal. It has two quays with 39-foot-deep berthing and loading area for tanker trucks (local market) – the ideal facilities for meeting the needs of ships, barges and industrial customers. 75% of the Terminal's rights are owned by a Dutch fuel terminal operator. Currently, no big developments are planned, although there are plans for the construction of scaffolds/piers for maritime auxiliary service and dredging, which might offer opportunities for Dutch companies.

Oil Pipeline Tocumen

The Panamanian government is looking into options to build a **pipeline to transport kerosene to Tocumen Airport**. The construction of a pipeline might offer great opportunities for Dutch companies, as the Netherlands forms an excellent example for Panama with the knowledge of the existing pipeline to Airport Schiphol readily available.

8. Maritime & Logistics Events 2018

22 January: Panama Network Event on the occasion of visit President Varela – Amsterdam, The Netherlands

11-12 April: Latin America Ports Forum – Panama City, Panama

7-12 May: PIANC World Congress – Panama City, Panama

12-14 June: Terminal Operators Conference (TOC) Europe – Rotterdam, The Netherlands

21-24 October: American Association of Port Authorities (AAPA) Conference – Valparaiso, Chile

13-15 November: Terminal Operators Conference (TOC) Americas – Panama City, Panama

TBC: Annual Maritime Conference of Panama (CAM) – Panama City, Panama

For more information and questions about projects specifically or developments mentioned in this report, contact the Embassy: pan-ea@minbuza.nl.