

BATAM ISLAND INFRASTRUCTURE PROJECTS

Trading Center



Industrial Region



Transshipment



Tourism



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LIST OF BATAM'S FORTHCOMING INFRASTRUCTURE PROJECTS

1. GENERAL CARGO AND CONTAINER PORT BATU AMPAR
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1. GENERAL CARGO AND CONTAINER PORT OF BATU AMPAR

Background:

- ▶ Batam as an area for free port, industries, and tourism, plays a very important role in the development of Indonesia. At the end of 2002, value of exported goods from Batam has reached US\$ 5.89 billion. These are coming from about 611 foreign manufacturing plants.
- ▶ The Batu Ampar Port is the main seaport of the island, serving the very busy industrial activities, with the existing capacity of 70,000 TEU's container (actual demand is estimated to reach 200.000 TEU's, but cannot be served due to the limited facilities) and 3,000,000 ton of general cargo per year
- ▶ The number of foreign investor in Batam is increasing and by the end of 2007 there will be around 950 foreign investment companies. At that time, the port has to be ready to ship all goods for export destination.
- ▶ There is a high demand for the extension of Batu Ampar Port to accommodate the rising volume of cargo and container in line with the growth of foreign investment. Otherwise, Batu Ampar will become congested and will result in the decrease the port service.

Objective and Goal:

- ▶ To develop the existing Batu Ampar Port.
- ▶ The goal is to have a capacity of 900.000 TEU's (Phase I) and an ultimate container capacity of 2,000,000 TEU's and 5,000,000 ton of general cargo.

Location:

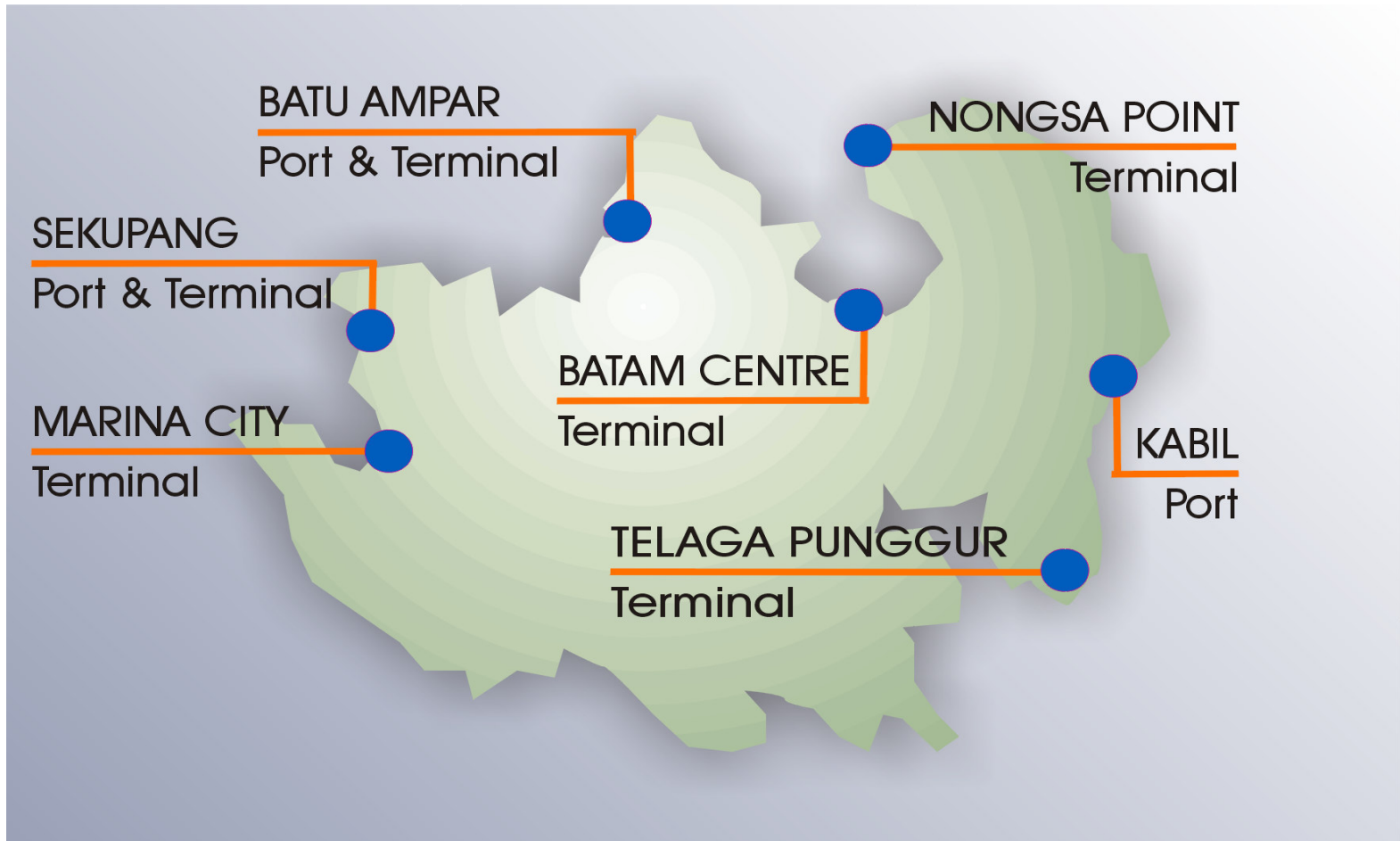
- Geographically, Batu Ampar Port has a very strategic position on the international ship route, and located close to Singapore (18 km to the South of Singapore).

Project Accomplishment:

- Port construction shall commence in 2007 (Phase I) and ultimate stage will take place in 2005.

Investment cost:

- Investment cost is estimated to reach US\$ 105 million (phase I) covering the works of (among others):
 - Dredging
 - Container wharf
 - Reclamation
 - Offices
 - Gentry crane



2. ELECTRICITY

Background:

- ▶ The development plan of gas piping from Asamera (Jambi) to Singapore via Batam, which is scheduled to be completed in October 2003, makes the possibility of using gas turbine generators.
- ▶ Considering the availability of fuel in Batam, it is most likely that the generator to be constructed will be fueled by gas and coal.
- ▶ Based on the load growth, it is projected that in the next 5 years, Batam shall have additional capacity of 230 MW, with the growth of 20% per year which will require higher capacity generators. It is estimated that 60 MW will be generated by gas and 2 x 50 MW generated by steam, all of which will be provided by PLN – Batam in corporation with private companies (PLN Incorporate), while the rest will be provided fully by private companies.
- ▶ Current proportion of electricity in Batam: PLN – Batam 138 MW and Private 220 MW.

Pricing (US\$ 1 = Rp. 7500,- and SIN\$= Rp. 4600)

Current price of electricity in Batam is as follows:

Batam:

- Batamindo Industrial Estate : US\$ 0.09 – 0.1 per KWh (private)
- Kabil Industrial Estate (private) : Rp. 450,-/ KWh or US\$ 0.06/ KWh
- PLN/ Government (diesel) ±Rp. 625,- / KWh or US\$ 0.06 / KWh

Investment cost:

Additional demand for electricity is estimated to reach 100 MW (with the investment value of US \$ 55 million), with coal and it is planned to operate in 2004.

3. INDUSTRIAL PARK IN TANJUNG UNCANG

Background

- ◆ There are 16 industrial parks located in Batam and currently in operation. Among these, the biggest industrial park, Batamindo, has almost reached its full capacity utilization (90 %).
- ◆ Average growth at industry sector in the last five years is 6% per year.
- ◆ There are 611 foreign companies in Batam and estimated projection is 950 companies in 2007.

Objective and Goal

- ◆ To facilitate plants and buildings to accommodate both foreign and local investors who wish to invest in the small, medium and large industries.

Location

- ◆ The new industrial park is planned to be located at Tanjung Uncang – Batam with total area of 200 Ha.

Projection

- ◆ The rapid international and regional economic growth is expected to increase the industrial relocation in Batam island.
- ◆ The projection of industry in a five years later are :

The first year	: 50 industries
The second year	: 144 industries
The third year	: 170 industries
The fourth year	: 197 industries
The fifth year	: 224 industries

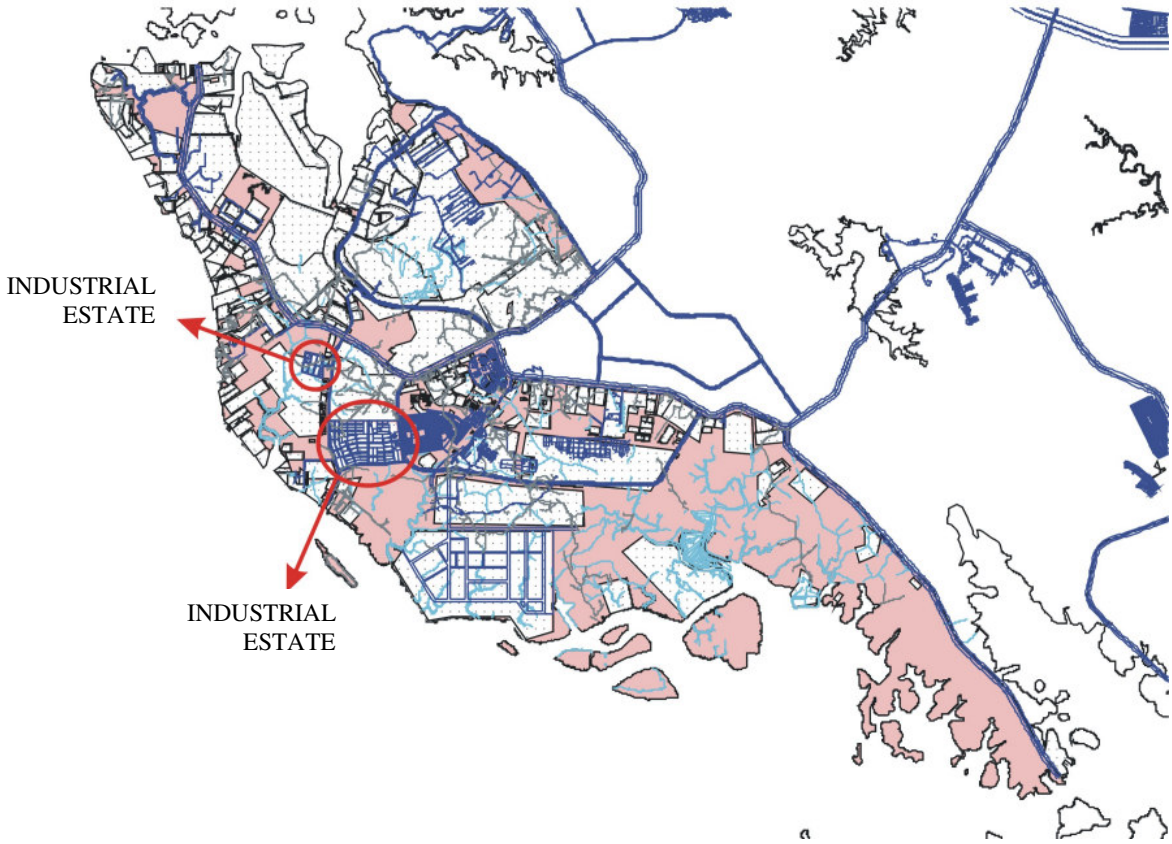
Activities Project

- ◆ The main activities of this project are : detail engineering design, construction of factory, road, electricity, water (including pipe line), sewage (pipe and waste water treatment plant), drainage, telecommunication.

Investment Cost

- ◆ Investment cost is estimated to reach US\$ 300 million.

LOCATION OF INDUSTRIAL ESTATE



4. INTERNATIONAL CONVENTION CENTER

Background:

As a growing industrial area and tourist destination, the city of Batam becomes attractive from time to time.

There is no adequate and representative international convention center.

Such center could accommodate with art and cultural events such as theaters and hotel.

An international convention center is needed with the facilities of Hotel, Marina and visitor center.

Objective:

To provide and develop facilities for conferences.

To provide facilities for art and cultural events, at local as well as international level.

To facilitate for promotion and information activities for the tourism and marketing of Barelang.

To provide accommodation for the participants of workshop, seminar and conference.

To facilitate marine tourism activities (theme park, recreation club, botanical/ agricultural garden, etc.).

Location:

- International Convention Center Barelang is located at Batam island, having a beautiful view at the side of the bridge between Batam and Tonton islands.

Projection:

The main auditorium will accommodate 2500 people per event, while the small auditorium can accommodate up to 500 people. The total area of the convention center shall reach 50,000 sq.m. Five-star Hotel shall consist of 500 rooms.

Project Accomplishment:

- The project shall take 2 years to complete (including the Detail design works).

Investment cost:

- Investment cost for the first stage is estimated to reach US\$ 36 million, covering the works of (among others):

Convention center	- US\$ 21 million
Hotel	- US\$ 15 million



5. KABIL CONTAINER PORT

Background:

- Batam Island is designated to be a transshipment container port. Many studies have been conducted to develop Kabil container port. The latest study recommends the construction of Kabil Container Port at Kabil.

Objective and Goal:

To serve the import and export activities from Batam Island and Indonesia in general.

The goal is the construction of Kabil Container Port that shall have ultimate capacity of more than 5 million TEU's.

Location:

- Kabil Port is planned to be constructed at Kabil and Tanjung Sauh Island, about 20 km to the South East of Singapore.

Development Stage:

- The port is projected to accommodate :
 - a. Stage I : 1,000,000 TEU's (2 years constr. period)
 - b. Stage II : 1,500,000 TEU's (3 years constr. period)

Project Accomplishment:

- The project shall take 5 years (two stages) to complete.

Investment cost:

- Investment cost is estimated to reach US\$ 700 million, covering the works of (among others):
 - a. 1,400 m of Berth
 - b. Closing Dam between Batam and Tanjung Sauh Islands (functioning as sea current barrier as well as a connecting road between the two islands)
 - c. Equipment : 10 – 11 cranes
 - d. Building, Warehouse, Container Yard, Offices.

KABIL PORT



6. NEW INTERNATIONAL HOSPITAL

Background:

- ▶ Currently, there are 3 (three) hospitals in Batam consisting of 1 public and 2 private.
- ▶ Batam population growth is one of the highest growth rates in the nation, i.e. 15% per year.
- ▶ According to data, the population of Batam has now reached 570,000 people, while the number of workers has reached 175,000 people. It is estimated that in the year 2007, the population will reach 900,550 people.
- ▶ With such a large population, the urgent need for additional beds in Batam's hospitals is estimated to be 160 units with the assumption of 1 bed for 1000 people. The number of beds in the three hospitals in Batam at the moment is around 300 units.
- ▶ The hospital shall have the standard of treatment comparable to that of Singapore hospitals', so that it would also be seen as an alternative for the treatment of people in Batam, rather than having to go hospitals in other big cities of Indonesia, i.e. Jakarta, Medan, Pekanbaru, etc.

Objective and Goal:

- ▶ The objective of the project is to improve the health facilities both for Batam inhabitants as well as for the international tourists whose number keeps growing from year to year. In the past few years, number of foreign visitors to Batam has averaged 100,000 people monthly. Such project has a high priority since Batam is designated to be the main gate of tourism in Indonesia.
- ▶ The goal is the provision of proper health facilities that can be enjoyed by Batam's population as well as by the foreign visitors and workers. At the moment, the number of foreign workers has reached 2,547 people, mostly at managerial level.

Location:

- ▶ The new hospital is planned to be located at Batam Center, Batam.

Projection:

- ▶ The projection of beds demanded in the year 2005 will reach 700 units, meaning that up to the year 2005, there should be an additional 400 beds to accommodate such demand.

Project Accomplishment:

- ▶ The project shall take 2 (two) years to complete.

Investment cost:

- ▶ Investment cost is about US\$ 16.7 million.

7. POLYTECHNIC BATAM



Background:

With the average investment growth of 30% per year, the industrial development in Batam has grown rapidly, resulting in the rising demand for qualified human resources for the industries.

In 2002, the total number of workers in Batam reached 175,000 people. In anticipating current and future requirement of skilled workers by the industries and competition from neighbouring countries, it is expected that the Polytechnic will produce better quality workers from the population in Batam and its surrounding areas.

Objective and Goal:

The objective of the project is to establish an education institution that produces middle level technicians to meet the demand for professional workers in Batam, in the fields of informatics, electronics and electrical, mechanics.

The goal is the realization of a Polytechnic in Batam that possess internationally recognized standards and capable of accommodating more than one thousand students.

Location:

- The new polytechnic is planned to be located in Batam Center, Batam, with an estimated area of 15 Ha (the main building shall occupy around 9000 m² of land).

Projection:

- The projection of the number of students are:
 - a. Stage I : 270 students
 - b. Stage II : 540 students
 - c. Ultimate : 1080 students (in five years of operation)
- In addition, the polytechnic shall also conduct short time course (around 200 participants per session) and training for trainers (around 50 participants per session). In a year, the number of participants may reach 1000 – 1500 people.

Project Accomplishment:

- The project shall take 2 (two) years to complete.

Investment cost:

- Investment cost is estimated to reach US\$ 11 million, covering costs for recruitment of lecturers, temporary facilities, training, workshop, building and equipment.

Progress Report:

- Batam Polytechnic developed a strategic cooperation with one largest Polytechnics in Singapore: Nanyang Polytechnics in field of cooperation: developing curriculum, training on particular skilled and attachment training program.
- Batam Polytechnics made cooperation with industries in Batam (such as MKPI) to give third year students an attachment programs.
- Establishment of the new facilities in Batam Centre has achieved site development and will move to build students dormitory.
- Batam Polytechnic and SMKN I Batam (a vocational senior high school) initiate a bridging programme that provides additional skill for the SMKN I Batam's graduates in their fourth year.
- Batam Polytechnic wins its first time research grant from Ministry of research and technology of Indonesia with its topic: "Prototyping a PC Based CNC Flame Cutting for Quadratic and Ellipse Curve".
- Batam Polytechnic peppers wrote by its lectures also published in national and international seminars on IT related fields: Malaysia/ICEEE (2001), Pekan Baru/Caltex (2002) and Batam/ICEEE (2002).

8. WASTE WATER POLLUTION CONTROL

Background:

- ▶ Waste treatment has been done in each industrial estate and hotel in Batam Island, but it only involves the collection and treatment of waste water within a limited area.
- ▶ For the residential areas, waste coming from toilets is generally contained in a septic tank. However, since there is a scarcity of land and a soil condition that can absorb only a little amount of water, the utilization of septic tanks has proved to be ineffective. Greywater coming from households or other activities such as from restaurants are mostly not treated at the moment.
- ▶ Current wastewater production is +/- 81 lt./sec.

Objective and Goal:

- ▶ The objective of the project is to reduce the level of pollution in dams and coastal water, by establishing the waste water collection and treatment system to collect and treat wastes from potential waste sources (residential areas, tourism and industries) in accordance with the prevailing Environment Quality Standard in Batam.
- ▶ The goal is the provision of a waste water collection system for the areas of Batu Ampar/Nagoya and Sekupang, including drainage, pump station, and transmission line as well as waste water treatment facilities.

Location:

- ▶ Waste Treatment Centers are planned to be established in 2 (two) locations by an integrated system, i.e. Batu Ampar and Sekupang, Batam Island.

Projection:

- ▶ Projection of daily average wastewater production in the year 2006 is 225 lt./sec with the peak volume of 340 lt./sec.

Project Accomplishment:

- ▶ The project shall take 2 (two) years to complete (including the Detail design works).

Investment cost:

- ▶ Investment cost is estimated to reach US\$ 30 million, covering the works of drainage, pump station, and transmission line as well as waste water treatment facilities.

9. BATAM INTELLIGENT ISLAND

Background:

- ▶ Most of the industries operating in Batam are a multinational company with export oriented, so that information technology with international standard is a must to be implemented in Batam. Globalization era and the fast growing the development of Technology Information has foster Batam to better equipped with information infrastructure to remind competitive, exist and survive in the global competition.
- ▶ Information and Communications Technology or ICT is a concept to solve the problem

Objective and Goal:

- ▶ The objective of the project is to set up Information Technology facility for Public Sector and Private Sector use.
 - a. Public Sector:
 - To develop IT infrastructure in Government sector
 - To develop IT Centre
 - E-Government
 - E-One Stop Service for Citizens.
 - E-Kiosk
 - Electronic Data Interchange in Customs Excise
 - b. Private Sector:
 - To develop IT infrastructure in Private sector or Industrial Estate
 - E-One Stop Service for Investors
 - E-One Stop Service for Foreign Visitors
- ▶ The goal is to give value added to Batam Island as a Free Trade Zone become more competitive and attractive for investment destination.

Location:

- ▶ The whole area of Batam Island.

Projection:

The project is divided into 3 phases of Projection:

- First Year, to create awareness/socialization to BII user with scope of work covering:
 - Feasibility Study
 - BII working committee
 - Planning
 - Legal Framework
 - Requirement & Strategy
 - Partnership

- Seminar/Event
- Second Year, to set up IT infrastructure with scope area of development:
 - Basic Infrastructure
 - Business process design
 - Application development
 - Set up component of E-application (6 C's)
 - Security management
 - Communication infrastructure needed
 - BII model start up
 - BII user-consortia-sponsored
- Third Year, Implementation of BII homepage which is covering;
 - Pilot access to BII (read only)
 - End-to-end integration
 - Technology management
 - Business continuity management
 - Consolidated user's system
 - User system transform into e-platform
 - Setting-up of integrated commerce network by e-platform
 - Consolidated process

Project Accomplishment:

- ▶ The project shall take 4 (four) years to complete.

Investment cost:

- ▶ Investment cost is estimated to reach US\$ 30 million, covering installation of fiber optic backbone cable line and other IT supporting facilities.



10. BATAM PUBLIC GAS FACILITY

Background:

- ▶ The construction of gas distribution from Asamera (Jambi - Indonesia) to Singapore via Batam is planned to be completed in October 2003.
- ▶ Batam is a “hub” functioning as a control center to ensure the quality of gas supply.
- ▶ The kerosene supply in Batam frequently suffers delays that result in the instability of price and causes distribution difficulties.
- ▶ Gas may be used as household fuel substitute to replace kerosene.
- ▶ To promote gas utilization rather than fuel consumption regarding to the lower cost of gas, diversification of energy, conservation of fuel which is affordable, healthy, and environment-friendly.

Objective:

- ▶ To establish public gas network for the households and other commercial purposes, such as: public transport, hotel, small industry, etc.

Location:

- ▶ Covering the whole area of Batam, with the possibility of expansion to Barelang if the networking in Batam has been accomplished.

Projection:

- ▶ Phase I (2003): Feasibility study on the gas utilization potentials in Batam.
- ▶ Phase II (2004-2007): Construction of distribution network in Batam Island

Project Accomplishment:

- The project shall take 5 years complete

Investment cost:

- Investment cost has not been fully calculated, but such cost shall cover the works of:
 - a. Feasibility Study
 - b. Mapping of Distribution Area, Public Awareness/Campaign
 - c. Piping Network, Pumping Stations, Machinery, Offices, etc