

Chapter 1.

Introduction

Economic growth in developing countries, especially Indonesia during the last decade, shows an increasing trend.

Some internal factors contribute to the improved growth, such as improved investment climate, taxation, interest rate policy, political stability, etc.

These conditions encourage investors from developed countries to relocate their investments to countries with better comparative advantage, such as the availability of skilled labor or local partners to establish new plants.



Some investments are relocated to countries with more diverse industry type, from light, medium to heavy industry like cement, building materials, properties, beverages, shipbuilding, steel, aluminum etc.

And with more investors coming to Indonesia, the need for physical infrastructure grows as well, like roads, high way, sea ports, airport, etc. When infrastructure grows, housing and properties grow too, for residences, offices, hotels and, some other industries. These increased needs will increase the demand for AAC (Autoclaved Aerated Concrete) bricks, widely known in Indonesia as '*Bata Ringan*' or light bricks.

For the next 5 years, demand for AAC bricks will surpass 7,000,000 m³/year which still exceeds supply, which stands around 3,000,000 m³/year. Even with average production growth of 10% per year, AAC production capacity will still be around 5,000,000 m³/year, and continue to grow along with property sector that grows over 10% per year.

PT. SB Con Pratama (SB Con) intends to contribute by establishing AAC manufacturing plant in Semarang-Demak, Central Java.

SB Con AAC bricks are considered as one of the best in quality and management in Indonesia with modern technology when compared to competitors.

The establishment of AAC manufacturing plant by SB Con has positive impacts, such as:

- A. For the government
 1. Increase income from taxes and retribution
 2. Help provide employment opportunities for the society
 3. Encourage regional growth through multiplier effect
 4. Increase diversity of industries in Indonesia
- B. For the society
 1. Increase income per capita through multiplier effect
 2. More employment opportunities
 3. Improve infrastructures, both directly and indirectly

- C. For the investors and financial institutions
 - 1. Increase revenue through good return or profit from investment
 - 2. Reduce equity risk through asset placement
 - 3. Increase company's assets through investment or credit
- D. For the company
 - 1. Increase shareholder's value
 - 2. Gain a high return
 - 3. As a means of self-actualization through professional management
 - 4. Contribute as Indonesian citizens to help improve national economy

SB Con therefore conducts feasibility study regarding various aspects in relation to establishing an AAC manufacturing plant in Semarang-Demak, Central Java. At this time, SB Con is operating one AAC production line with capacity of 200,000 m³/year with Chinese machines. SB Con plans to buy one more production line with capacity of 400,000 m³/year with state-of-the-art European machines. Physical construction of the new project/investment (expansion) is expected to be completed within 6 (six) months.

The main purpose of this project proposal is to identify the financial feasibility of the establishment of the new plant. Project proposal consists of various aspects and its analysis.

Purpose of the Proposal (Feasibility Study)

The purpose of this project proposal is as follows:

- 1. To determine the amount of funds (cost of project) for the establishment and operation, especially for the new expansion project.
- 2. To determine the optimum composition of the financing needs.
- 3. To evaluate the profitability and the ability to project cash flow to meet its obligations to creditors in accordance to the schedule and other financial obligations.
- 4. To provide information to support decision making for various interested parties related to the establishment of the new project.



Chapter 2.

Economy Background & Overview



With Indonesia's economic growth is expected to reach 6.4% to 6.7% in 2012, businesses are optimistic and building material industry, especially for AAC bricks, will flourish. The property sector is believed to be the main pillar of growth.

Demand for AAC bricks will continue to increase along with infrastructure and construction projects from the government as well as from private sectors that have set up this year and expected to complete within the next few years. This is in line with realization and disbursement of state funds on government projects, which was delayed this year.

Stable macroeconomic situation contributes to construction business, such as the construction of housing, buildings and other supporting facilities. Private sectors are also constructing residential real estate, hotels, apartments and some other investment activities.

This project proposal is made with a very conservative perspective, assuming only minimum profit generated given the good market potential. It is being done this way to avoid excessive expectations on the above project plan, leaving room for unexpected conditions.

2.1. Indonesia Economic Review & Business Outlook

Government projects economic growth for 2013 at 6.8%-7.2%, and has received positive feedback from private sectors. For the first time in history, investment is expected to be the largest source of economic growth, replacing domestic consumption.

The government had prepared many things to support foreign long-term investors to realize their investment, such as:

- Improve and enhance infrastructure
- Provide with sufficient energy supply
- Provide legal assurance and a conducive as well as safe investment climate
- Improve legal procedures to make investing easier

2012: The world economy is still fragile, but not with INDONESIA

Macro Economic Assumptions (2011 – 2013)

Assumptions	2011	APBN-P 2012*	2013
Economic Growth (%)	6.5	6.5	6.8-7.2
Inflation (% , y-o-y)	3.79	6.8	4.5-5.5
Interest Rate of 3-Month SPN (%)	4.48	5.0	4.5-5.5
Exchange Rate (Rp/US Dollar)	8,779	9,000	8,700-9,300
Oil Price (US Dollar/Barrel)	111.5	105.0	100-120
Lifting Oil (Thousand Barrels/Day)	898	930	910-940
Lifting Gas (MBOEPD) **	-	-	1,290-1,360

NOTE:

* APBN: State Budget

** Million Barrel Of Oil Equivalents Per Day

Source: Ministry Of Finance

Bappenas (Investment Coordinating Board) has developed simulation until 2013 to anticipate the development of the World Economy, especially Euro zone economy. Thus, in 2013 the economy is expected to grow better than in 2012.

Structure Of GDP By Its Application (In %)

Description	2008	2009	2010	2011	Quarter I-2012
Consumption Expense/RT	60.6	58.6	56.6	54.6	55
Consumption Expense PMRT	8.4	9.6	9	9	7
PMTB	27.2	31.1	32.1	32	31.8
Change in Inventory & Discrepancy Statistic	2.2	-2.1	0.6	3	6.2
Export minus Import	1.1	2.8	1.7	1.4	0

NOTE

GDP = Gross Domestic Product

PMRT = Government

GFCF = Gross Fixed Capital Formation

Source: Research 'Kompas' /RSW prepared from BPS, 2012

Hatta Rajasa: Indonesia Economy Top Ten By 2025

Coordinating Minister for the Economy, Hatta Rajasa, said, Indonesia's economy is now progressing rapidly, and on its track to be the 10th strongest in the world by 2025.

"Indonesia's economy is currently 15th strongest, and we are confident that we can be get into the Top 10 by 2025. Income per capita will exceed US\$5,000 by 2014. In 2025, he added, according to the master plan, income per capita of Indonesian people will reach US\$16,000, and at that time Indonesia will be among the world's top 10 economic powers.

"We are the G20 members, which means that Indonesia is among top 20 largest economies in the world," said the minister. According to him, to help boost the growth of the national economy with the objective of getting into Top Ten, the government will continue to push popular economic programs.

"The infrastructure sector still supports economic activity to catch up with other countries. The fact is that harbor and road improvement is key to successfully attracting investment," he said.

State Budget (APBN) Allocation For Infrastructure (In Trillion Rupiah)

Description	2010	2011	2012	2013
State Budget (APBN)	1,126.15	1,229.60	1,435.41	1,544.80
% Infrastructure In APBN	5.00%	7.2%	7.10%	7.40%
Gross Domestic Product (GDP)	6,436.30	7,427.10	7,909.86	8,424.00
% Infrastructure In GDP	0.87%	1.20%	1.28%	1.36%
5% Minimum Standard In GDP *)	321.82	371.36	395.49	421.20
Total Infrastructure (Trillion Rp)	56.13	89.02	101.55	114.66

* Requires minimum investment in infrastructure to support growth of 5% of GDP

Source: Research 'Kompas' / IWN, calculated from Bappenas

Although there was an increase in the budget allocation for infrastructure, but it is still considered inadequate for the development of infrastructure as expected. Private sectors are expected to contribute to maintain and improve the nation's economic growth, especially in infrastructure.

However, BKPM (Investment Coordinating Board) recorded actual investment per quarter in the year 2012, which continues to increase. This trend is expected to continue until the first quarter of 2013.

Realization Of Foreign & Domestic Investment In 2012

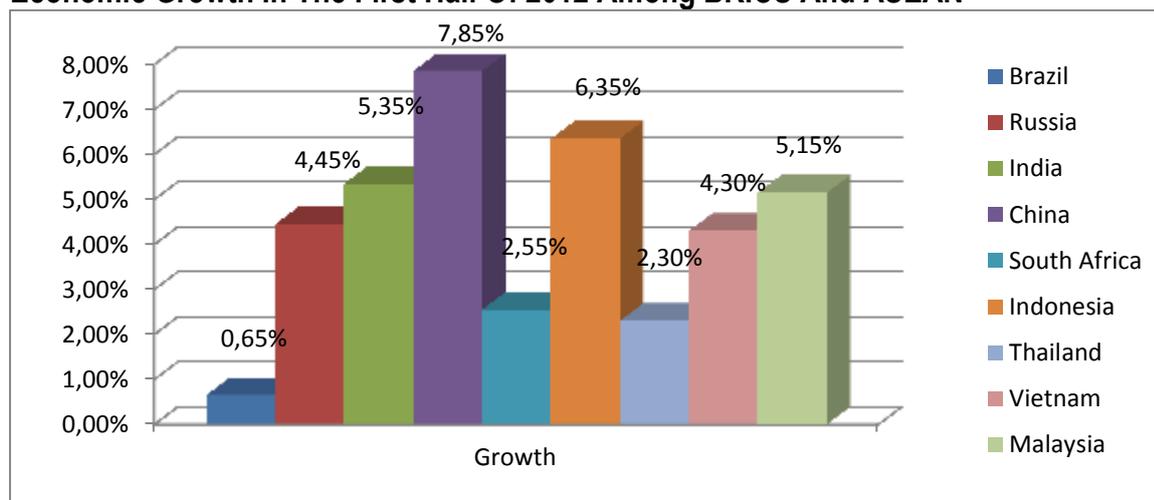
Period	Foreign Projects (Billion USD)	Domestic Projects (Trillion Rupiah)
Quarter I	5.73	19.70
Quarter II	6.24	20.77
Quarter III	6.29	25.21
Investment Sectors*		
	Basic Chemicals Industry, Chemical Product And Pharmaceutical	Non-Metal Mineral Industry
	Transportation, Warehouse And Telecommunication	Food Industry
	Paper Industry, Paper & Printing Product	Textile Industry
	Industrial, Equipment/Others	Construction

* During the third quarter – 2012

Source: Research 'Kompas' / BIM, calculated from the Bappenas

Currently, Indonesia continues to climb up the elite ranks of the world economy. Indonesia is now second highest growing economy in the world, losing only to China.

Economic Growth In The First Half Of 2012 Among BRICS And ASEAN



Sources: Jawa Pos Daily, September 15, 2012, 'Ekonomi Bisnis'

Unlike China, Indonesia recorded an increasing trend in the economic growth of 6.3% in the first quarter and rose to 6.4% in the second quarter. China actually slowed, from 8.1% to 7.6%.

In Asean region, Indonesia is far beyond Thailand. On the other hand, economic growth in the BRICS (Brazil, Russia, India, China and South Africa), which is regarded as a new economic power in the world, is not as strong.

One of the most important things in Indonesia's economic growth is unemployment and poverty. From Bappenas calculation, for each percentage in economic growth, new 350,000 jobs will be created.

Indonesia Expects To Be 7th Wealthiest In the World

Description	Indonesia Today	Indonesia 2030
Rank # in World Economy	# 16	# 7
Nominal GDP (PPP) – (In Trillion)	USD 1.2	USD 6.7
Middle Class Population (People)	45 Million	135 Million
Skilled Manpower (People)	55 Million	113 Million
Market Potential*	USD 500 Billion	USD 1.8 Trillion
Population (People)	240 Million	302 Million

* Consumption of Services Sector, Agriculture, Fisheries, Natural Resources, Education

Source: McKinsey Global Institute (MGI) and National Economic Committee (KEN)

Global Investor Happy With Indonesia Economic Conditions

A number of international portfolio investors who attended the Indonesia Investment Day "Echopulence" said they will soon add Indonesia to their portfolio, believing Indonesian economy is getting better.

"They are very happy with the Indonesian economy and are considering increasing their investment," said Director of Danareksa Securities Marciano H. Hendra on the sidelines of an event held in BNI branch office in Hong Kong.

Indonesia's economy is improving and has a positive impact on various business sectors, which is growing, including construction business. Therefore, needs for building materials, especially AAC, will continue to increase along with increased physical development in various sectors.

Marciano said, investors are happy as Indonesian economy is stable and improving, yielding increasing profit from the companies whose shares they buy, especially at the six state-owned public companies.

Indonesia at a Glance: Key Economic Indicators (In Billion EUR)

	2007	2008	2009	2010	2011	2012**
GDP	255.2	302.5	408.2	372.2	544.0	635.1
Real GDP Growth *)	6.3	6.0	4.6	6.2	6.5	6.0
Inflation	6.7	9.8	4.8	5.1	5.4	4.4
Government Spending	54.1	70.4	62.5	86.6	100.2	119.6
(% change YoY)		30.1%	-11.2%	38.6%	15.6%	19.4%
Property Project Spending	6.6	6.0	5.0	6.7	9.4	11.7
(% change YoY)		-8.8%	-17.7%	34.2%	41.7%	23.5%
Property Prices Index	125.0	127.0	130.0	133.0	140.0	145.0
(% change YoY)		1.6%	2.4%	2.3%	5.3%	3.6%

*% change YoY

**Projected

Sources: Bank Indonesia (Indonesian Central Bank); Ministry Of Finance, Indonesia

2.2. Overview of Property Business In Indonesia (Particularly AAC Bricks)

As the global crisis has not been resolved, Indonesia will excel in each industry sector, especially property, which continues to increase. Entering the second half of 2012, the property industry has recorded an increase of 20%.

Political and economic conditions are relatively stable and relatively low interest rates increasingly exciting property market. Purchasing power increases, especially with the growing middle class in Indonesia. Not to mention the number of expatriates who comes to settle down. Huge population in Indonesia makes sure the demand will never cease growing. It is natural that the developers are increasingly optimistic. The issue is no longer just looking for a place to live, but also able to provide a quality of life for the residents.

It is now the right time to buy properties. In the past two years, income per capita has grown very rapidly. Consumers reap the benefit. Not only that we have more developers than ever before, various housing loans make it even easier to buy houses.

Interest rates have reached a single digit, which is the lowest in history. Banks in turn provide low interest for their home loans with more convenience, even cutting the interest further to encourage people to buy houses.

Bank Indonesia requires that people pay 30% down payment for their mortgage, and people still continue to file for house loans. The developers continue to innovate to provide quality residence to meet the expectations of the society.

The rapid development in the property sector, both for hospitality, office use and housing requires the availability and ensured supply continuity of construction and support material.

AAC plays an important role in building construction. There are 4 main factors driving growth of building material consumption. They are:

- Robust national economic growth
- Low interest rate

- Large scale infrastructure development
- Low level of consumption per capita which may in turn increase demand for building material with increased purchasing power.

Master Plan for the Acceleration and Expansion of Indonesia's Economic Development (MP3EI) will further promote infrastructure development and therefore increase demand for material products including AAC bricks for infrastructure projects and other properties, which will in turn enlarge the property market.

Chapter 3.

Organization & Human Resources

3.1. Company Overview

Company Name: PT. SB Con Pratama

Office & Plant : Semarang-Demak, KM 8.2, Sayung, Demak 59563, Central Java



Incorporation & License Information:

No	Description	No/Dated	Notary/Others
1	Article Of Incorporation	No. 27 12-Mar-2010	Maria Tjandra, SH Surabaya
2	Ministry Of Law Approval	AHU-13806. AH.01.01. Year 2010	Ministry Of Law
3	Article Of Change	No. 12 9-Aug-2011	Maria Tjandra, SH Surabaya
4	Ministry Of Law Approval	AHU-48642. AH.01.02. Year 2011	Ministry Of Law
5	BKPM License	15/33/IP/III/PMDN/ 2011	BKPM

3.2. Capital & Corporate Ownership

In accordance with the certificate of incorporation no. 62 dated May 31, 2010 by Maria Tjandra, SH, it is stated that the total capital of PT. SB Con Pratama is Rp40,000,000,000 (fourty billion Rupiah) and paid in capital is Rp21,000,000,000 (twenty one billion Rupiah) by the following shareholders:

The composition of the ownership of shares in PT. SB Con Pratama

No.	Shareholders	# of Shares	Share (%)	Amount (Rp)
1	PT. Singa Braga	10,630	50.6	10,630,000,000
2	PT. Indobangun Investama	6,930	33.0	6,930,000,000
3	PT. Dwijaya Internusa	3,430	16.3	3,430,000,000
4	Adriaan Sudharmanto N.	10	0.1	10,000,000
	Total	21,000	100.0	21,000,000,000

Brief description about the company shareholders:

- **PT. Singa Braga**
An investment holding company of PT. Imasco Pacific Minerals. The company's mainstay business is in the mining industry, whose operations include manganese, coal and limestone mining, especially in East Java and East Kalimantan.
- **PT. Indobangun Investama**
An investment holding company of PT. Budiono Madura Bangun Persada, the company's main business is salt manufacturing and is the biggest of its kind at Madura Island, East Java
- **PT. Dwijaya Internusa**
A veteran in the electrical industry, the company and its subsidiaries manufactures transformer and has been a supplier of PLN, the state-owned electricity company, for the past 30 years. The company is also a sole distributor to many brands of electrical components. The company has subsidiaries running in the IT industry as a distributor for Microsoft and Pearson products, including its trainings and certifications.

The company's management is as follows:

No	Name	Position
Board of Commissioners		
1	Indra Rustam Winata	President Commissioner
2	Rusdianto Hidayat	Commissioner
Board of Directors		
3	Adriaan Sudharmanto Nafarin	President Director
4	Alfred Harioprasetyo Hidayat	Director
5	Evans Winata	Director

Brief description about the company management:

Indra Rustam Winata, 63 years old, married with 3 children	
1970-1980	Agent of Gudang Garam Cigarettes (one of the biggest cigarette manufacturer in Indonesia) for North Sumatera region
1980-1990	<p>Founder, shareholder and CEO, PT. Sari Pangan Utama Nusantara.</p> <p>PT. Sari Pangan Utama Nusantara is the biggest baby food manufacturer in Indonesia, marketed under the brand SUN Baby Food. At its incorporation, PT. Sari Pangan Utama Nusantara was the pioneer in Indonesia to use carton packaging for its products, allowing its retail prices to be much more affordable for its customers.</p> <p>Because of PT. Sari Pangan Utama Nusantara's rapid growth and prolific range of product, it garnered a market share of 65% by 1988. At its peak in 1988, Indofood group stated their intention to acquire PT. Sari Pangan Utama Nusantara. After much consideration, due to the company's dependency of raw material from PT. Bogasari, the company was sold to Indofood group at a premium price.</p>
1990-2006	<p>Founder, shareholder and CEO, PT. Decoco Utama</p> <p>PT. Decoco Utama is a coconut jelly drink producer that is marketed as De Coco. 70% of its products are exported, mainly to Saudi Arabia, Iran, Turkey, Spain, Italy and France. PT. Decoco Utama is the pioneer of ready-to-drink canned fruits in Indonesia for export. In 2006, De Coco products were categorized as luxury items and was taxed an additional 20% for luxury tax. For this reason, the factory shut down its operation and now rented out its factory space to other business.</p>

Rusdianto Hidayat, 56 years old, married with 3 children	
1978-1996	<p>Founder, Shareholder and CEO, PT. Telagamas Pertiwi, Tbk</p> <p>PT. Telagamas Pertiwi Tbk is a sport shoes manufacturing company that owns one factory in Surabaya and two in Pasuruan, and became publicly listed in 1994 (now known as PT. Agis Tbk).</p>
1992-Present	<p>Founder, Shareholder and CEO, PT. Imasco Pacific Mineral</p> <p>1992-1996, PT. Imasco Pacific Mineral was founded under the name PT. Oxly Corporation as a plastic company, mainly in the manufacturing of stationeries, which changed its name to PT. Imasco Pacific.</p> <p>1998-present, after changing its name to PT. Imasco Pacific Minerals, the company becomes active in the mining industry, with various investment in mining operations and trading mainly in coal, manganese ore, nickel ore and limestone.</p>
2005-Present	<p>Shareholder and CEO, PT. Sinar Agung Gemilang</p> <p>A property development company in Jakarta</p>

Ir. Adriaan Nafarin, MBA, 63 years old, married with 3 children	
1972-Present	<p>Founder, Shareholder and CEO, PT. Dwijaya Internusa</p> <p>CV. Dwijaya, then incorporated in 1986 as PT. Dwijaya Internusa, is a company in the Mechanical & Electrical (M&E) industry. The company and its subsidiaries manufacture transformers and has been a supplier of PLN, the state-owned electricity company, for the past 30 years.</p> <p>Other than being sole distributor to many electrical component brands, the company has also grown to become a well-known M&E contractor in East Java.</p>
2000-Present	<p>Founder, Shareholder And CEO, PT. E-Biz Infotama Interindo</p> <p>A Gold Certified Partner of Microsoft, PT. E-Biz Infotama Interindo is a company that provides training and certification for Microsoft products. The company also owns a Certificate Center for taking Kaplan and ETS standardized tests, namely the TOEFL, SAT and GMAT tests.</p>
1990-Present	Committee of AKLI (Indonesian Electrical Contractors Association)
1998-Present	Legislative Committee of LPJK (Construction Services Development Body)
2002-Present	Committee of AKAINDO (Indonesia Water Contractors Association)
2002-Present	Legislative Chairman of YPPI (Indonesia Teaching & Training Foundation)

Alfred H. Hidayat&Evans Winata, are professionals in their fields

3.3. Human Resources Development (Human Capital Master Plan)

In anticipation of aggressive expansion of the company, the company has developed a Human Capital Master Plan (HCMP) which is a framework of the progressive development of human resources of the company in the period ahead, to guarantee the achievement of the company's vision. In HCMP, the company plans to establish fundamental policies and develop a human resource management system. All HRD policies comes down to one goal, that is to attract and develop human resources with the best talent to drive the company on the course of achieving the vision.

SB Con's HCMP consists of four stages:

1. Fundamental
It involves induction of the employees to the SB Con's corporate culture while carrying out their duties.
2. Synergy
It integrates the employees into the company's business system with aligned workflow to achieve mutual objectives.
3. Excellence
All processes are constantly reviewed and refined to achieve excellent performance through better competitive edge.
4. World-class
SB Con becomes world-class company with international management standards that entices the best talents to join and grow together.

Training And Development

SB Con is fully aware that it carries responsibilities to create leaders with excellent capacity from all perspectives at all levels of the organization. All efforts will be undertaken to ensure robust teamwork with the spirit of constant and never-ending improvement.

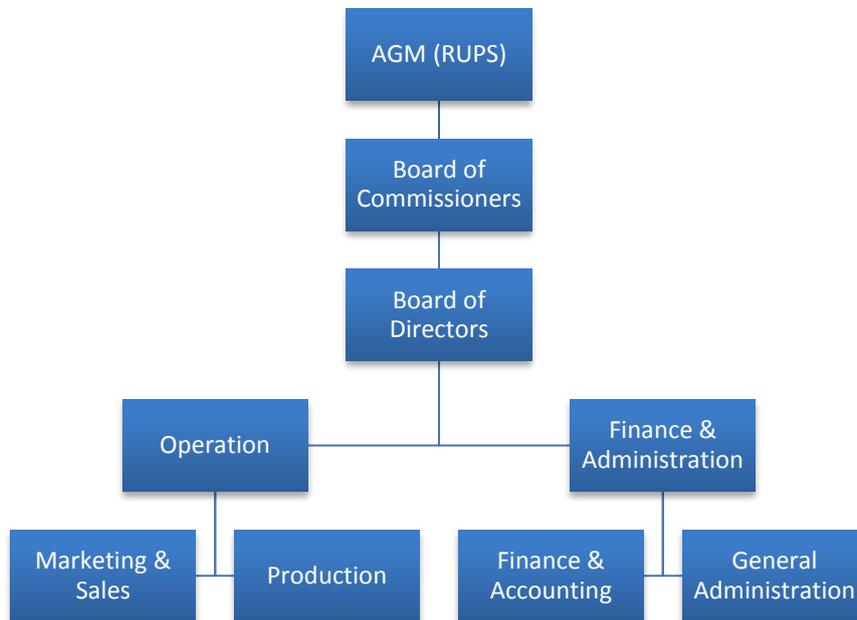
From time to time, SB Con will get the team into trainings to further develop their competencies and capacities.

Performance Management And Compensation System

SB Con employs performance-based compensation system to promote working excellence and powerful attitude while developing team competencies.

3.4. Organization Structure

Company organization is structured in such a way to cover all the daily operations of the company. The organization chart is as follows:



Duties & Responsibilities of Each Division

Annual General Meeting of Shareholders (AGM) is the highest, just above the Board of Commissioners, to whom the Board of Directors shall report to. Board of Directors is in charge of the operation of the company.

Teams under the Board of Directors are supported by professionals in their field. Below are the functions and roles of some key positions:

A. Annual General Meeting of Shareholders (AGM)

Under Law. 40 in 2007, the General Meeting of Shareholders (AGM) shall be the highest organ of limited liability enterprises. GMS has special authority not granted to the Board of Commissioners or the Board of Directors, within the limits specified in the Act and / or the articles of association of the company.

In AGM forums, shareholders are entitled to obtain information related to the company's Board of Directors and/or Board of Commissioners, as far as it does not conflict with the interests of the company.

All shareholders must be present and/or represented during the meeting to make decisions with unanimous approval.

B. Board of Commissioners

The Board of Commissioners has a role to oversee management policies, the maintenance of the course in general, both the company and the company's business, and advise the Board of Directors. The role is solely for the benefit of the company and shall be in accordance with the purposes and objectives of the company.

The Board of Commissioners has personal responsibility for the loss if the company is found guilty or neglect their duties to oversee and advise the Board of Directors.

C. Board of Directors

Directors run the management of the company for the benefit of the company and in accordance with the aims and objectives of the company. In accordance to their functions, directors determines corporate strategies, policies, regulations, objectives and targets for terms set out in the AGM in order to achieve its vision.

D. Manager

Managers have a responsibility to manage key result areas in accordance with policies and regulations set by the Board of Directors.

Process management has the objective to achieve the level of effectiveness and efficiency for the successful achievement of goals and targets within a certain time which has been declared by the Board of Directors. The general manager and managers are assisted in daily operations by staffs and employees.

Labor Qualification

In general, workers in the company can be divided according to their skills:

- Expert (Skilled)
- Trained (Trained)
- Regular Workers (Untrained)

SB Con employs high standard of human resources management practice, which includes:

1. Human resources development programs
2. Performance-based management system to improve team's welfare in the right manner in company's perspective
3. Clear and precise job description that adheres to company's standard operating procedure
4. Powerful attitude that adheres to SB Con's corporate culture

Chapter 4.

Technical & Production

4.1. Strategic Location



The current factory sits on 3.3 hectares of land. With our contiguous land bank of 5.1 hectares, our land area totals 8.4 hectares.

The factory is located at Km 8.2 of the Semarang-Demak provincial road in Sayung District, Demak Regency, Central Java.

The factory location is only 10 minutes from the Provincial Bus Interchange and

30 minutes from Achmad Yani International Airport in Semarang.

The project needs 3.3 hectares land area with the following allocation:

Building Area	Total (m ²)
Office Building	1,200 m ²
Factory & Warehouse	10,800 m ²
Security	15 m ²
Fences, roads, praying room, clinic and vacant land	17,985 m ²
Total	30,000 m²

Being based in Central Java, SB Con's location is very strategic, so that it is easy to cover not only Central Java market, but also West Java and Jakarta, the capital of Indonesia, as well as East Java and even Bali Island.

Central Java also gives competitive advantage with its abundant and low-cost raw materials. It is also close to coal power plant, which has committed to supplying SB Con with its fly ash, one of the key raw materials in manufacturing AAC.

4.2. Competitive Advantages

SB Con also possess silica sand mining field in Blora, around 2-3 hour drive from Demak, which is a huge advantage when compared to other competitors.

Minimum wage in Demak is 40% lower than Jakarta, so that SB Con is able to lower down production cost.

Prime quality fly ash is available in Central Java from Tanjung Jati Power Plant, owned by Sumitomo Group (Japan). Other competitors have no access to fly ash, a blending raw material that will reduce the AAC production cost by about 10% to 15%.

As the result, SB Con enjoys the lowest production cost among other AAC manufacturers in Indonesia.

4.3. Building & Civil Work

a. Office Building

Office building serves as a workspace for all administration activities, which consists of the boardroom, staff room and living room. Following is the building's technical specification:

Foundation	: stone
Construction	: reinforced concrete
Walls	: array of red brick plastered
Floors	: tile polishing
Roof construction	: wooden frame
Roof covering	: tiles



b. Manufacturing Plant

This is the main building, where the production activity takes place. This building has the following technical specifications:

Foundation	: stone
Construction	: steel frame profiles
Floor	: concrete slabs and mashed
Roof construction	: steel frame
Roof covering	: asbestos



c. Facilities And Other Public Utilities

Public facilities consist of praying room, clinic, gatehouse, paved roads, and fences.

d. Machinery And Equipment

Existing equipment in the production line can be categorized as **Main Equipment** and **SupportEquipment**.

d.1. Main Equipment

Section	Equipment	Quantity (pcs)
A1	Raw Material Treatment	
101	Raw Material Silo	3
102	Jaw Crusher	2
103	Bucket Elevator	2
104	Belt Conveyor System	2
105	Screw Conveyor	4
106	Bucket Vibrator	2
107	Wet Ball Mill	1
108	Dry Ball Mill	1
109	Underground Pump	1
110	Slurry Tank	3
A2	Matching & Pouring	
111	Single Screw Pipa Feeder	3

Section	Equipment	Quantity (pcs)
112	Electronic Powder Scale	1
113	Water Measurement Scale	1
114	Aluminium Powder Mixer	2
115	Pouring Mixer	1
116	Pouring Ferry	1
117	Mortar Beater	1
A3 Resting, Curing & Cutting		
118	Moulds	22
119	Side Plates	102
120	Mould Wheels	46
121	Turning Crane System	1
122	Turning Hoister System	1
123	Vacuum Section	1
124	Alternated Level Cutting Machine	1
125	Alternated Vertical Cutting Machine	1
126	Underwater Pump Below Cutter	1
127	Rolling Channel Of Plates	25
128	Curing Room	1
A4 Grouping & Autoclaving Section		
129	Crane Loading Preceding Autoclave	1
130	Hoister For Semi product	1
131	Autoclave Car	10
132	Autoclave Car Moving Set	7
133	Autoclave	6
A5 End Product Packaging Section		
134	Load Crane Behind Autoclave	1
135	Hoister	1
136	Unload Crane Behind Autoclave	1
137	Grab	1
138	Packaging System	1
139	Packaging Sealing Machine	1
A6 Others		
152	Laboratory Equipment	1
153	Spare Parts	1

d.2. Supporting Equipment

Section	Equipment	Quantity (pcs)
C	Heating And Ventilating Section	
140	Steam Boiler With Water Treatment	1
141	Sub-Cylinder	5
142	Steam Valve And Meters	56
143	Radiation Fins And Traps	16
144	Air Compressor System	1
F	Packing & Transportation	
150	Packing	1
151	Equipment Freight	1
152	Inland Transportation	1

4.4. Production Capacity

Product

PT. SB Con Pratama manufactures AAC (Autoclave Aerated Concrete), also widely known in Indonesia as “*Bata Ringan*”. It is a lightweight, precast building material that simultaneously provides structure, insulation, and fire and mold resistance. Known for its many economic and environmental features, the AAC bricks is in line with our vision to build a better Indonesia.

Product technical specification, generally known as lightweight brick, is as follows:

Density	750	Kg/M ³
Heat Absorption	0.14	Watt/m.k
Endurance Fire	4	Hour
Water Absorption	17	%
Sound Absorption	44	STC (dB)

Width Size	7.5 cm	10 cm
1 m ³	111.11 pcs	83.33 pcs
1 Palette	224 pcs	168 pcs
Net Weight	1,512 Kg	
Pallettes Dimension (cm)	120 x 120 x 140	
Length (mm)	600	
High (mm)	200	
Thick (mm)	75	100



Lightweight brick excels red brick in these areas:

Description	Red Brick	AAC Light Brick		Unit
		7.5 cm	10 cm	
Net Weight	130	56	75	Kg/m ²
Heavy + Plaster	180	80-90	100-110	Kg/m ²
Quantity Per m³	130-145	111.11	83.33	pcs/m ²
Comparison Of Strength	15-40	30-80	30-80	Kg/cm ²
Heat Absorption	1.15	0.14	0.14	W/w x K
Sound Absorption	38	44	44	STC (dB)
Fire resistance	1-2	4	4	Hours
Surface Broad Area Per Day	6-12	20-25	20-25	m ² /day
Percentage Of Damage	10-30	0-3	0-3	%
Cement	Standard	Standard	Standard	-

The advantages of AAC bricks compared to ordinary red brick is as follows:

Aspect	Description
Soundproof	AAC reduces noise from outside through the pores inside.
Fireproof	AAC is more fireproof so that it is an appropriate solution for fire safety. AAC is able to resist fire for up to 4 hours, the highest among all kinds of wall material.
Saving Time	Being light and easy, installation of AAC is 3 times faster than red bricks.
Cement Consumption	Much less cement is used when bonding AAC when compared to red bricks.
Lightweight	AAC weighs only 1/3 of red bricks, making transportation and construction cost efficient.
Energy Efficient	AAC maintains cool room temperature, making efficient use of air conditioning.
Water Resistant	AAC is more waterproof than ordinary bricks. It floats on water, preventing the wall from fungi and leakage.
Durable	SB Con is strong and able to withstand weather changes, making it stable and durable.
Accuracy and precision	With fully automated system, SB Con is consistently and precisely accurate.
Easy To Work On	SB Con is easy to be shaped with regular woodworking tools, such as saws and drills.
Environment-friendly	SB Con does not contain poisonous or harmful substances. SB Con cannot be used as shelter for vermin or insects.

As an illustration of the comparative cost of using lightweight concrete (AAC bricks) and brick used are presented in the following calculation:

With Red Bricks			With SB Con Light Bricks		
Material	Unit Cost	Cost (Rp)	Material	Unit Cost	Cost
Red bricks	Rp.450/pc 70 pcs/m ²	31,500	SB Con Light bricks	Rp.575,000/m ³ 0.1 m ³ /m ²	57,500
Adhesive (Cement)	Rp.1,075/kg 31.68 kg/m ²	34,056	Adhesive (Mortar)	Rp.2,075/kg 4 kg/m ²	8,300
Sand mixture	Rp.132,075/m ³ 0.126 m ³ /m ²	16,641	Plaster (Mortar)	Rp.960/kg 27 kg/m ²	25,920
Layers	Rp.2,940/kg 4 kg/m ²	11,760	Layers (Mortar)	Rp.2,940/kg 5 kg/m ²	14,700
Wage	Rp.15,000/m ²	15,000	Wage	Rp.5,000/m ²	5,000
Total Cost		108,957			111,420

From above illustration, wall construction using SB Con light bricks is only 2.2% more, but 3 times faster.

Production Capacity

The company is currently operating with 1 (one) AAC production line with capacity of 200,000 m³/year, using Chinese equipments. The company plans to invest one more AAC production line with capacity of 400,000 m³/year using machine with German technology.

mbanga

The following is the company's production capacity: (Production m³/year)

Description	Existing	New (Expansion)	Total
Production capacity (m³/year)	200,000	400,000	600,000
Capacity used (utility)	110,000	200,000	310,000
Potential Loss (average)	5%	1%	
Annual Production (m³/year)	107,250	198,000	305,250

4.5. Production Process

Building material technology continues to grow, including AAC technology. It was first developed in Sweden in 1923 as an alternative building material to reduce deforestation.

The dough mixture consists of quartz sand (silica), cement, lime, gypsum (little), water and aluminum paste. Once the dough is completely mixed, it takes 7-8 hours to expand. Aluminum paste used in the mixture will create bubbles inside and plays a key role to harden up the concrete. Aluminum paste volume is around 5%-8% of the dough, depending on the desired density. The dough is then cut into desired size.

The raw AAC dough of Aerated Concrete is then put into the steam autoclave chamber with high pressure. Temperature inside the autoclave chamber is about 183 degrees Celsius. This is the drying or curing process.

Quartz sand (silica), cement, lime, gypsum, water and aluminum paste when mixed together will incur chemical reaction. Aluminum powder reacts with calcium hydroxide inside the quartz sand and water to form hydrogen. This hydrogen gas creates air bubbles, which in turn expand the dough to double in

size. At the end of the development or foaming process, hydrogen is released into the atmosphere and immediately replaced by air which makes it a lightweight concrete.

4.6. Raw Materials & Its Availability

Silica/Quartz Sand

Quartz sand is one of the minerals that are relatively abundant in Indonesia. This mineral plays an important role for the building material industry, either as the main raw material as well as a follow-up.

As the main raw material, quartz sand is used by the manufacturing industry to produce consumer products, especially for building materials and as main ingredient in interior/exterior design as well as household needs.

While as follow-up material, quartz sand is used for printed materials in the foundry, refractory materials and as filler in the mining and petroleum industry, especially when performing drilling activities.

The chemical composition of quartz sand generally consists of the following elements:

SiO₂	55,30	-	99,87%
Fe₂O₃	0,01	-	9,14%
Al₂O₃	0,01	-	18,00%
TiO₂	0,01	-	0,49%,
CaO	0,01	-	3,24%
MgO	0,01	-	0,26%
K₂O	0,01	-	17,00%

Potential & Reserve (In Indonesia)

From previous research report, Indonesia quartz sand is found in the western part of Indonesia, because rocks in this area are sour. Based on previous research and report finding, the amount of quartz sand is estimated around 4.55 billion tons, with details of the proposal measured 78.6 million tons, 12.4 million tons, 21.3 million tons of engineered and 4.4 billion of hypothetical reserve.

Quartz sand is mostly located in West Sumatra, which is around 82.5% of Indonesia's reserve. Next is in Kalimantan and Java. However, the best quartz sand is located in Central Java, with silica (SiO₂) composition at around 98.7 to 99.9%.

Utilization And Specification

In industrial activity, the use of well-developed quartz sand is mostly as a primary raw material, used in:

- Glass industry
- Cement industry
- Manufacture of ceramic tiles and mosaics
- Industrial raw material ferro silicon, silicon carbide materials industry abrasite (sandpaper and sand blasting)
- Industrial materials / building materials, etc.

Meanwhile, as a follow-up, for example in the castings industry, petroleum and mining industries, refractory bricks (refractory), and others.

Gypsum

Gypsum is the main additive is added to the clinker when fed to the milling machine (cement mill).

SB Conbuys such material from Tanjung Jati B/Power Plant in Jebara (Central Java), which is not too far away from the plant site.



Utilization

Gypsum has many uses since prehistoric times to the present. Some uses of gypsum are:

- Drywall
- The adhesive material.
- Filters and as a soil fertilizer. In the late 18th and early 19th century, Nova Scotia gypsum or better known as the plaster, used in large quantities as a fertilizer on wheat fields in the United States.
- The mix of materials for tennis courts.
- As a substitute for wood in the time of kingdoms. For example, when wood became scarce in the Bronze Age, gypsum is used as a building material.
- As a thickener tofu because it has a high calcium levels, particularly on the continent of Asia (East Asian countries) are processed by traditional means.
- As an addition to the building materials violence
- For raw chalk
- As a raw material for portland cement
- As an indicator of the soil and water
- As medical agents in traditional Chinese herb called Shi Gao.

Fly Ash

Fly ash is a byproduct from burning coal in boilers and steam power plant. With increasing oil prices, many power plants switch to coals to generate power.

From coal combustion process, we have fly ash (80%-90%) and bottom ash (10%-20%).

Fly ash is often used to mix cement. Fly ash from the Power Plant Suralaya has been bought by Indocement, and fly ash from Power Plant Paiton has been bought by Semen Gresik. SB Con has signed a contract to purchase fly ash from the Power Plant Tanjung Jati B in Jebara.



Quality of fly ash from the Power Plant Tanjung Jati B is very good, because the power plant is owned by Sumitomo Corporation, a group of Japanese conglomerate, using Japanese technology, producing high quality ash.

Even with a number of power plant construction by China, the quality will not match Power Plant Tanjung Jati which employs Japanese technology.

Fly ash has the characteristics of cement (hence used to mix cement products), so if the company is using fly ash to make lightweight concrete, the percentage of cement raw materials the company will

decrease, so the cost of production will decrease. Compared to other lightweight concrete plant in Indonesia, all using silica sand, no one uses fly ash, so their costs are higher. (And also the price of silica sand itself is more expensive than fly ash).

Power Station

The need for electricity energy is about 400 KW and will be entirely provided by state-owned electricity company (PLN).

Water

Water required for the production will be obtained from wells and state-owned water company (PDAM).

4.7. Technology Used In AAC Production

SB Con at this time employs Chinese technology to product AAC bricks, which is not yet fully automatic. Chinese technology is used by most AAC manufacturers in Indonesia.

For this expansion, SB Con will employ German technology, which is actually made in Netherland, which is considered as a pioneer in this field.

AAC bricks are already very popular, especially in European Countries in building construction, who are very concerned regarding various aspects, such as resilience, security, speed of installation, environmentally friendly, economical and other aspects, so as to provide assurance and satisfaction for the customers/users of the building materials.

From the above description, summary of advantages and benefits of AAC is as follows:

- Lightweight, strong & earthquake resistant
- Quick, neat and precise installation
- Fire resistant
- Energy-efficient
- Noise resistant
- Low water absorption
- Green and uses environmental-friendly materials.

4.8. Project Implementation Schedule

This new investment project is scheduled to be physically completed within 6 (six) months.

To give an overview of the project schedule, the following is the project implementation schedule:

No	Activity	Month					
		1	2	3	4	5	6
1	Land finishing, including land legality/permit						
2	Construction of factory & other support facilities						
3	Machinery & equipment installation						
4	Engineering & Testing						
5	Employees recruitment						
6	Employees training						
7	Commercial operation						

Chapter 5.

Marketing

There are several factors that determine the direction of the company's plan and operation in this business. Since the market is still in the early stage, a well-run business has the potential to grow and dominate the industry.

5.1. Market Potential & Strategy

There are some factors that lead SB Con to decide to invest more in this business, such as:

- The needs for accelerated infrastructure development to support rapid economic growth. At this time, economic movement is still hampered by inadequate infrastructure quantity and quality. Through MP3EI (Masterplan for the Acceleration and Expansion of Indonesia's Economic Development) that accelerates property and infrastructure development, demand for building materials like AAC bricks will increase. In order to ensure continued supply, the industry needs construction of new plants.

Indonesia's economy is currently growing outstandingly, which is predicted in the range of 6.5%-7.5% in 2011-2014, and can achieve at 8% -9% in 2015-2025. The growth target can be realistically achieved partly by boosting infrastructural investments. Industry-support materials and building materials such as AAC bricks above must be able to ensure its continuity of supply to support economic growth.

Continued supply of AAC bricks is vital in the construction of infrastructure facilities and other property projects. Without the additional production capacity through new plants, supply will not meet demand and price will rise uncontrollably. It will hamper economic growth.

- Demand for AAC bricks, especially in big cities in Java like Jakarta, Semarang, Jogjakarta, Surabaya and many other cities, is growing rapidly. It is particularly associated with economic growth, with the increase in development and construction, both by the government (infrastructure development and other buildings) as well as by private parties (hotels, apartments, industrial estates, residential, etc).
- Purchasing power of the population is increasing, and together with the positive economic situation it will lead to a healthy and conducive environment to drive purchasing power towards property sector.



Considering the market situation, to take advantage of this opportunity, now is the best time to invest in an AAC production line, which only takes 6 months to build and start running.

5.2. Market Segment

AAC bricks can improve the quality and reduce the cost of construction. Therefore, AAC bricks are used in many types of construction:

- Hotel, Hospital, Apartments, Office Building, Mall, etc.
- Housing, Household & Infrastructure/Supporting Facilities
- Factory Building, Industrial Estate & Supporting Facilities
- School, University, etc.

AAC bricks are used most commonly in high-rise buildings, such as office buildings, apartments, shopping centers and hotels. Residential construction market opportunities (landed houses) is also very big. Moreover, market potential is still very big, because market in Central Java, East Java, Kalimantan and Sulawesi still relies mostly on red bricks.

5.3. Market Strategy & Selling Price

Due to the high demand of this product, competition in local market may increase. SB Con has anticipated this by setting the following marketing strategy:

Product

SB Con's product is AAC bricks as red brick substitution for building construction. AAC bricks have lots of advantages when compared to conventional red bricks. AAC bricks may still be less popular than red bricks, but SB Con will keep on educating the market and have the market switch to SB Con AAC bricks.

SB Con will acquire SNI (Indonesian National Standards Institute) for SB Con AAC bricks. By achieving SNI recognition, public confidence in SB Con products will increase.

When compared to the competition, SB Con AAC bricks have some advantages:

No	Description	SB Con AAC bricks	Competitors
1	Raw material (silica sand)	Has own silica sand mine in Blera & Rembang (Central Java)	Depends on vendor supply
2	Material cost (silica sand), received in the plant	Rp.120,000/m ³	Rp.250,000/m ³
3	Fly ash	Uses 20% fly ash, reduces cement consumption by 10%	Uses cement entirely
4	Transportation cost	10%-20% lower due to strategic geographic plant location	10%-20% higher than SB Con

Based on the above condition, although the selling price of SB Con AAC bricks that uses Dutch machinery (German technology) will be more expensive than products using Chinese machines, but the production cost structure (due to the conditions described above) is in fact much cheaper than competition. Therefore SB Con enjoys higher profit margin, and gives an edge to SB Con in its pricing strategy ahead of competitors, especially that SB Con enjoys a status as prime quality producer in the market.

Selling Price

SB Con produces fly ash-based AAC bricks, and is therefore able to sell at price 20% lower than competition.

The selling price is Rp.575,000/m³.

In Central Java, other popular AAC brands are Citicon and Hebel, with selling price of Rp.650,000/m³ and Rp.840,000/m³ respectively. With such a low price, SB Con quickly gains significant marketshare.

Distribution

SB Con has appointed several distributors to cover certain areas, and they are fully supported by SB Con in their marketing efforts.

SB Con also approaches REI (Real Estate Indonesia) and all contractors in Indonesia to gain their further support and access to potential buyers (developers, contractors, architects, consultants, shops and more).

Services

SB Con provides these following services in terms of sales efforts:

Before Sales	SB Con help consumers to estimate their project cost with optimum use of SB Con AAC bricks.
Sales	Technical support
	Delivery technician
	Training
	Logistic support
	Tools & equipment support
After Sales	SB Con sets up a hotline number so that customers can call should they have questions regarding the installation of SB Con AAC bricks.

5.4. AAC Bricks Industry In Indonesia

There are more than 10 listed AAC bricks manufacturer in Indonesia in the past 10 years, all of them are privately owned. 90% of them are located in Jakarta and surrounding areas (West Java and Banten). Only one company resides in Mojokerto, East Java.

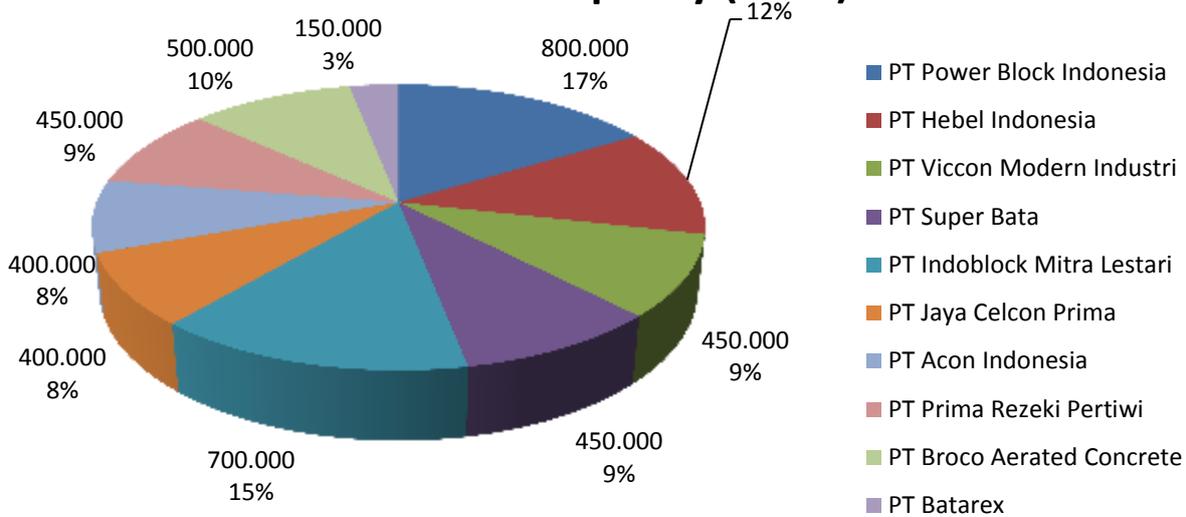
In term of production capacity, 89% of the total national production capacity was in Jakarta and surrounding areas.

Overall, the production capacity of AAC brick plant in Indonesia in 2010 is 4,500 m³/day, or about 1.806 million m³/year, or equivalent to 18 million m² of wall.

The largest capacity owned by PT. Broco Aerated Concrete is 300,000 m³/year. Other factories that are major players includes PT. Power Block Indonesia which is 291,600 m³/year, followed by PT. Hebel Indonesia (210,600 m³/year) and PT. Viccon Modern Industry (178,200 m³/year).

PT. Broco Aerated Concrete has increased its production capacity to 400,000 m³, making it the largest manufacturer of AAC bricks in Indonesia. From 2011 to 2012, there will be 10 more new AAC plants with Chinese machines.

Installed Capacity (2010)



Only Hebel and Broco use European machines. Other plants use Chinese machines. Market has formed certain segments who care more on product quality instead of price. Products manufactured with Chinese machines are considered second-grade, while the ones manufactured with European machines are considered top grade or premium quality. The difference in the manufacturing process is on accuracy in dosing raw materials, precision in handling and cutting.

Demand for AAC bricks in Indonesia has grown faster than the supply.

SB Con production capacity after the expansion is as follows:

Existing capacity	200,000 m³/year
New expansion capacity	400,000 m³/year
Total production capacity	600,000 m³/year

With the newly expanded production capacity, SB Con will equal Hebel as the third largest AAC bricks manufacturer in Indonesia.

Following is the difference between manufacturing process with Chinese and European machines:

Description	Chinese Machines	European Machines
Manpower per line	130-150 people, 3 shift	60 people, 3 shift
Production capacity	200,000 m³/year	400,000 m³/year
Machine specification	Semi-automatic	Full-automatic
Selling price	10% lower	10% higher
Waste	More than 5%	Only 1% max
Product quality	Second grade	Premium quality
Maintenance cost	High cost, high risk, high damage	Low cost, low risk, low damage

With this new expansion, SB Con will be the third AAC bricks manufacturer that uses European machines. The price may be 10% higher, but carries a lot of advantages, especially for high-rise building in terms of efficiency and construction quality.

5.5. Business Prospect

With the introduction of the 5-year program of “1,000 Buildings of Cheap Apartments” (Rusuna) by the government, especially for low-income communities, it is a priority to realize Rusuna project to expand access to healthy and affordable housing for people in urban areas.

Therefore, the government encourages the private sector to get involved in Rusuna development by providing incentives to developers through value added tax relief for 26 m²unit area with maximum selling price of Rp.144,000,000 per unit.

The government also provides subsidies to people with low income to be able to reach the Rusuna price installments. This year the government aims to build 67 Twin Block Rusunami, Rusunawa and encourages the development of as many as 31 towers in Jakarta and 10 other cities like Yogyakarta, Surabaya, Banjarmasin and Makassar.

“1,000 Buildings of Cheap Apartments” is expected to provide new 475,048 units.

AAC bricks are suitable for Rusuna development, because it allows the projects to be built more quickly and efficiently, reducing development cost with its light weight.

Market demand of AAC bricks in the residential construction market sectors (landed house) are also very big. The rise of residential property/housing has come back. After slump affected by the global crisis, property sales has bounced back.

Observers noticed that prospect of selling the property below Rp.300 million/unit in the greater Jakarta area alone will reach 150,000 units per year from 2010 to 2020. As housing sales price average up to Rp. 300 million/unit has reached 60,000 units per year over the next 10 years.

Data from real estate broker, researcher and property service providers, shows that during the year 2009 condominium sales dropped by up to 30% and residential sales dropped to 20%. However, in the year 2010 until today, the conditions have reversed.

Based on the observations done by Jones Lang LaSalle, one of the leading property consultants in Indonesia, for the year 2010 and last year, the sale of apartments has increased quite significantly by 25%, while home sales rose by 15%. Other observers are even more optimistic. They believe that the residential sector will grow by more than 25% next year, the main reason for improvement in economic conditions in Indonesia.

Of course, population growth also helped sustain growth in the residential property business. For example, housing needs in Jakarta is very large due to growth of population that will have additional 8.1 million people during the years 2007-2020. Accommodating 8.1 million people requires approximately 2.1 million units of homes.

AAC bricks market for Semarang area in Central Java is still very open. In fact, Semarang has long been the target of large-scale national property investors such as Ciputra Group who have been expanding by establishing Ciputra Mall and Hotel (Five Star) managed by Swiss-Bel Hotel. Other property groups that are getting into Semarang is the Golden Flower Group Real Estate.

Growth of retail and hotel in Semarang in the next 3 years is big due to recovery of purchasing power. One of the most accurate indications is the number of property transactions recorded last year.

A total of 30,000 units of residential property were absorbed by the market last year. In the same period of the previous year recorded just 18,000 units. The selling price range is between Rp. 40 million up to Rp. 2 billion.

In addition, the plan to build a highway connecting Semarang to Solo, Semarang to Batang and Semarang to Surabaya, also influences the return of investment of the property sector in the city.

It is common that the development of highway infrastructure will generate economic growth in the region. Even if the highway is a connection between two cities, we can imagine the growth would be evenly dispersed, and not concentrated in a single point.

Geographically, Semarang-Solo highway will be 82.6 km long and is flanked by two provinces of West Java and East Java, and a connection between the Western and Eastern Region (East Java, Bali) and Jogjakarta in the South. With such a wide geographic coverage and accessibility, it can be predicted how the area traversed will have positive acceleration in the development of social, cultural and economic growth.

The actual development of transport infrastructure has been enthusiastically supported by property developers. Their contribution include the development of new projects in the accommodation sector (hotels), shopping centers and residential premises with investment value of Rp. 3 trillion. It makes up more than half of total property investment in Central Java, which reached Rp. 5 trillion. These investors are increasingly aware that Semarang is open and has large market potential.

With these conditions, it is likely that Semarang and its surrounding areas will be nominated as the primary investment objective of business and industrial properties nationwide.

In Jakarta, more than 75.318 units of new apartment will be launched in 2013.

According to the Head of Research & Advisory of Cushman & Wakefield Indonesia, apartment sales in Jakarta and its surrounding will continue to increase due to the demand especially from investors as well as users. Accumulated supply of apartments built in Jakarta has reached 105,793 units, 40,225 units built in 2012. Around 28,143 units of apartment units will be completed this year.

The significant increase of the above apartment projects will further increase demand for AAC bricks in the future.

At last, the Minister Of Housing (Menpera) has declared to continue the program of 1000 towers of simple flat-strata title (called 'Rusunami') in the area of Jakarta and its surrounding (Jabodetabek).

Business Growth

Indonesia's property sector is undergoing massive growth. There is a huge supply-demand gap in AAC market, and the gap is expected to increase further.

In line with SB Con vision, SB Con will seize this opportunity by investing in a new production line using European machines and lead the market.



True to SB Con mission to pursue quality, SB Con's commitment to install European lines will garner a competitive edge in quality above the competition, whose lines are mostly made in China. This edge will help gain more market share, cementing SB Con as an industry leader.

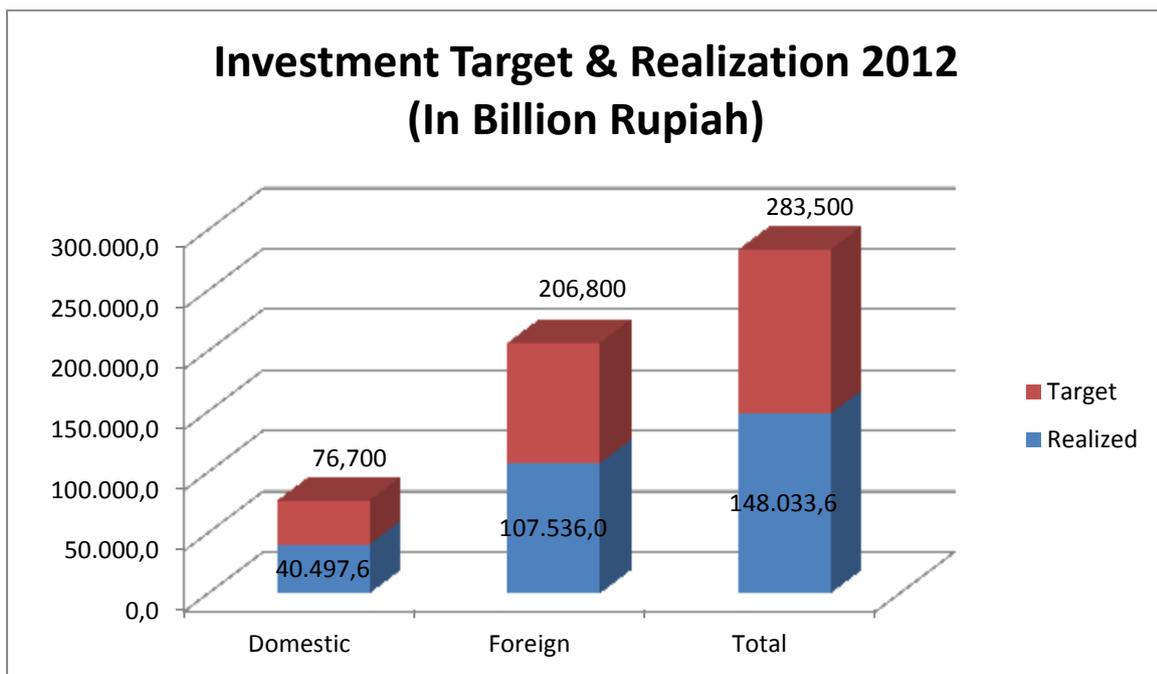


5.6. Indonesia As Foreign Investment Target

Indonesia has achieved investment grade status from two agencies, namely Fitch and Moody's. Indonesia is also investment target by foreign companies. The assessment above is positive indicators for foreign investors to have growing confidence to invest in Indonesia.



Source: BKPM



* Refers to the strategic plan 2010-2014 BKPM

Source: Research 'Kompas Daily', made from BKPM

Chapter 6.

Financial Analysis

Following is the summary of financial projections both for the existing financial performance as well as the company's new expansion/investment of Autoclaved Aerated Concrete (AAC) manufacturing line.

6.1. Financial Performance

Projected Profit & Loss (New Expansion)

No.	Description	Year 1	Year 2	Year 3	Year 4
1	Annual Revenue	113,850	126,487	139,366	152,489
2	Production Cost	45,168	45,914	50,812	52,339
3	Gross Profit (EBIT)	68,681	80,572	88,553	100,150
4	Net Profit (EAT)	29,116	37,478	43,241	51,517
5	Profit Margin (IAT)	25.57%	29.63%	31.03%	33.78%

(in million Rupiah)

Projected Profit & Loss (Consolidated: New Expansion + Existing Line)

No.	Description	Year 1	Year 2	Year 3	Year 4
1	Annual Revenue	173,937	192,692	211,805	231,281
2	Production Cost	83,045	91,350	102,312	109,985
3	Gross Profit (EBIT)	90,891	101,342	109,493	121,296
4	Net Profit (EAT)	40,958	48,017	53,180	60,396
5	Profit Margin (IAT)	23.55%	24.92%	25.11%	26.11%

(in million Rupiah)

Projected Balance Sheet (Consolidated)

No.	Description	Year 1	Year 2	Year 3	Year 4
1	Current Assets	71,175	110,027	156,237	174,803
2	Fixed Assets – Net	208,821	188,492	168,163	147,834
3	Total Assets	279,997	298,520	324,401	322,638
4	Total Liabilities	119,000	79,333	52,888	26,444
5	Equity	141,709	196,786	246,808	268,300
6	Current Ratio	369%	491%	632%	626%
7	ROI	14.63%	16.09%	16.39%	18.72%
8	ROE	28.90%	24.40%	21.55%	22.51%

(in million Rupiah)

Projected Cash Flow (New Expansion)

No.	Description	Year 1	Year 2	Year 3	Year 4
1	Beginning Cash Balance	11,068	42,062	72,085	107,550
2	Cash In (Received)	111,003	123,325	135,881	148,677
3	Cash Out (Expenditure)	70,943	75,168	82,283	87,131
4	Ending Cash Balance	42,062	72,085	107,550	150,550
5	Payback Period	4.75 years			

(in million Rupiah)

Projected Cash Flow (Consolidated)

No.	Description	Year 1	Year 2	Year 3	Year 4
1	Beginning Cash Balance	6,052	28,825	44,541	65,717
2	Cash In (Received)	165,240	183,058	201,215	219,717
3	Cash Out (Expenditure)	133,656	148,953	161,906	173,168
4	Ending Cash Balance	28,825	44,541	65,717	94,133
5	Payback Period	6.46 years			

(in million Rupiah)

Based on the financial projections above, we conclude that it is feasible to expand for a new production line, and recommended for immediate realization, based on these following reasons:

- Return on investment (payback period) is quite good, about 4.75 years for the new expansion value of Rp.157,012,689,505. It is still under bank loan repayment term at 5 (five) years, including grace period for 6 (six) months.
- Profit margin stands above 20% and gradually increasing year after year
- Other financial indicators (ROI and NPV) also show feasible values.

The above numbers and calculations are made with conservative perspective, with annual growth only around 5%.

6.2. Project Cost (Investment & Working Capital)

Total project cost of the new AAC manufacturing line, which include investment and working capital, is described below:

No	Description	Amount (Rp)
1	Land acquisition (already owned by SB Con)	0
2	Plant & Building, including civil works	30,000,000,000
3	New AAC manufacturing line from Netherlands (€8,000,000)	96,000,000,000
4	Other support materials	19,250,000,000
Total Investment Cost		145,250,000,000
5	Working capital	11,762,689,505
Total Project Cost		157,012,689,505

Notes:

* 85% of machine price (Rp.81,600,000,000) is proposed to be financed by supplier from Germany (Netherlands), while the remaining 15% will be financed by SB Con itself.

Therefore, total assets after the new expansion will be as follows:

No.	Description	Existing	New Expansion	Total
1	Land acquisition	21,092,437	0	21,092,437
2	Plant & building, including civil works	14,832,075	30,000,000	44,832,075
3	Manufacturing lines (Chinese & Dutch)	44,679,244	115,250,000	159,929,244
4	Others (vehicles, office inventories, etc)	3,297,387	0	3,297,387
	Total	83,901,144	145,250,000	229,151,144

(in thousand Rupiah)

Financing composition for the new manufacturing line is as follows:

Source of Fund	Investment Cost	Working Capital	Total	In %
Machine supplier	81,600,000,000	0	81,600,000,000	51.97%
Self-financing	63,650,000,000	11,762,689,505	75,412,689,505	48.13%
Total	145,250,000,000	11,762,689,505	157,012,689,505	100%

Total project cost and the source of financing for both existing and new lines are as follows:

Source of Fund	Investment Cost	Working Capital	Total	In %
Bank Loan*	37,400,000,000	7,600,000,000	45,000,000,000	17.89%
Machine supplier**	81,600,000,000	0	81,600,000,000	32.45%
Self-financing	98,292,503,186	26,609,476,585	124,901,979,771	49.66%
Total	217,292,503,186	34,209,476,585	251,501,979,771	100%

* Existing project

** New expansion

6.3. Assumptions in Financial Projection

Following is the assumptions in financial projection of SB Con, based on conservative business condition business, with figures drawn from present time.

No	DESCRIPTION	Year 1	Year 2	Year 3	Year 4
1	Production capacity (m ³):				
	a. Existing	200,000	200,000	200,000	200,000
	b. New Expansion	600,000	600,000	600,000	600,000
2	Utilization (%):				
	a. Existing	55%	60%	65%	70%
	b. New Expansion	50%	55%	60%	65%
3	Potential loss at 1%-5%(m ³)	(7,500)	(8,200)	(8,900)	(9,600)
5	Revenue (m ³)				
	a. Existing	107,250	117,000	126,750	136,500
	b. New Expansion	198,000	217,800	237,600	257,400
6	Selling Price (m ³)	575,000	580,750	586,558	592,423
7	Revenue (in million Rupiah)	173,793	192,692	211,805	231,281
8	Revenue & expenses	Will grow 5% for each subsequent years			
9	Exchange rates	Rp.9,500 / USD, Rp.12,000 / EUR			
10	Interest rate				
	a. Bank loan	a. 12% pa			
	b. Machine supplier	b. 4.5% pa			
11	Financing period	5 years, including 6 months grace period			

Distribution Facility

SB Con owns 5 vehicles to deliver finished AAC bricks to consumers around Semarang and Demak. For delivery to other cities, SB Con uses the services from local logistics companies.

Interest During Construction

Interest during construction (IDC) is the interest on the loan during construction, accounted for 6 (six) months. Interest rate is 12% from bank and 4.5% from machine supplier.

6.4. Financial Projections

Projected Income

SB Con AAC Light Brick sells at Rp.575,000 / m³. This price doesn't include VAT and is expected to increase at around 1%-2.5% per year.

SB Con has succeeded in incorporating fly ash into its production process, driving the cost down, which can be seen from this table:

No	Raw Material	With Fly Ash	Standard
1	Fly Ash	435 kg	
2	Silica / Quartz Sand		415 kg
3	Cement	40 kg	52 kg
4	Gypsum	85 kg	90 kg
5	Limestone	5 kg	5 kg
6	Aluminum paste	0.55 kg	0.55 kg
7	Electricity	Rp.24,840	Rp.38,640
8	Water	Rp.18,100	Rp.18,100
9	Coal		Rp.23,580
10	Lubricant		Rp.10,860

Price of raw material is expected to increase by 5% per year.

Other cost incurred for buildings and machinery is:

	Buildings	Machinery
Maintenance & repair	0.5% investment value	1.0% investment value
Insurance	0.125% investment value	0.125% investment value
Depreciation & amortization	20 years	10 years

Salary for the sales team and distribution insurance are as follows:

Position	Monthly Salary (Rp)
Sales Manager	8,500,000
Sales Administration Staff	2,000,000
Driver	1,500,000
Assistant Driver	850,000

Salaries and benefits are accounted for 13 (thirteen) months and increase 5% each year.

Distribution insurance against any loss is at 0.125% of the value, expected to increase 5% each year

Salaries for other staffs are as follows:

Position	Monthly Salary (Rp)
Commissioner	10,000,000
Directors	20,000,000
Manager	8,500,000
Administration Staff	2,000,000
Driver	1,250,000
Office Boy	750,000
Security Guard	1,500,000

Salaries and benefits are accounted for 13 (thirteen) months and increase 5% each year.

Other cost incurred for vehicles and inventory is:

	Vehicles	Inventory
Maintenance & repair	20% investment value	10% investment value
Insurance	0.025% investment value	
Depreciation & amortization	5 years	

Value Added Tax (VAT) is 10%, income tax is assumed at 25%.

Exchange rate is Rp.9,500 to USD and Rp.12,000 to EUR. Exchange rate is expected to remain the same for the next 5 years.

Cash Flow Projection

Sales are assumed to be on credit terms for up to 3 (three) months. All purchase of raw materials are on credit terms for up to 1 (one) month.

6.5. Analysis of Project Feasibility

Income Statement

Based on the above projections, it appears that the projected operating income increases from year to year. Mean Return on Investment (ROI) per year is above 15%, while Return on Equity (ROE) per year by above 25%. With this data, the project is expected to break even within 4.75 years.

Cash Flow Statement

By using the assumption in terms-of-payment of account receivables, account payables, inventory turnover and the availability of a minimum cash, net cash flow is always positive and more stable from year to year.

Cash flow projection indicates that this project is able to repay the loans within 5 years including 6 (six) months grace period.

Financial Solvency

From the financial projection to the projected income statement and cash flow statement, liquidity ratios and financial solvency is very well.

Financial Evaluation

Financial Indicator	Value
Net Present Value (NPV)- In 000 Rp.	239,421,526
Internal Rate of Return (IRR)	36,37%
Payback Period (PP)	4.75 years

6.6. Analysis of Project Financial Ratios

Ratio	Value	Remark
Liquidity Ratio (Current Ratios)	369%	Strong And Above Average/standard
Leverage Ratio (Debt To Total Assets)	49,37%	Strong And Above Average/standard
Profitability Ratio (Net Profit Margin)	25.57%	Highly Profitability

Chapter 7.

SWOT



SWOT analysis (alternatively SWOT Matrix) is a structured planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or in a business venture.

It is very important to predict and foresee the extent to which management companies can survive and thrive both today and in the future.

Following is SB Con's strengths, weaknesses, opportunities and threats:

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Strategic location <ol style="list-style-type: none"> a. Raw materials nearby are abundant, especially limestone and silica sand which makes up more than 60%. b. SB Con also has silica sand mine in Blora and Rembang (both in Central Java too), driving production cost even lower. c. Located in port area and close to main highway. 2. Highly experienced management, especially through Mr. Adriaan Nafarin (President Director) and Rusdianto Hidayat (Commissioner) with vast experience in various industries. 3. Lower production cost <ol style="list-style-type: none"> a. SB Con has its own silica sand mine b. SB Con makes use of fly ash c. SB Con is located in Central Java, with much lower minimum wage (42% lower than Surabaya and 54% lower than Jakarta) 	<p>High project cost, due to intensive use of modern and high technology. On the other hand, this also serves as a barrier of entry for newcomers, which is actually an advantage for SB Con.</p>
Opportunities	Threats
<ol style="list-style-type: none"> 1. Demand of AAC bricks far exceeds the supply, due to rapid growth in infrastructure and property business. 2. Even with SB Con's expanded capacity, supply still can't meet demand. 3. Silica sand is limited. SB Con has its own silica sand mine. 4. More and more people switch to AAC bricks in constructing buildings due to the advantages that AAC bricks offer. 5. As people have more purchasing power, they seek higher quality housing that use AAC bricks to build. 	<ol style="list-style-type: none"> 1. There are many new competitors in this business. There are 10 new plants being built in Java, all using Chinese machines. However, even with all of them combined, supply is still insufficient to meet the growing demand. 2. SB Con sets itself apart from the competition by installing European machines, in order to produce better quality products and have an edge in the marketing strategy.

Chapter 8.

Conclusion

8.1. Background

Economic growth in Indonesia in the last decade has been very stable and positive. Growth was caused by many factors, including improvement in the investment climate, tax breaks, interest rate policy and political stability.

In increasing construction of infrastructure, such as roads, ports and electricity, there is an increasing demand for property developments. In addition to housing, the demand also includes offices, apartments, hotels and industries. This in turn increases in demand of building materials, and one of the most commonly used building material is the AAC brick.

For this reason, PT. SB Con Pratama plans to install another production line producing AAC bricks in the same factory area.

Management

SB Con practices professional and experienced management. SB Con recruits employees with experience and skills in AAC bricks manufacturing. This is vital to ensure production sustainability and operational efficiency.

The founders are very experienced industrialists with very good reputation in the business; they have been successful in their respective ventures. Their track records ensures their management expertise is well applied in SB Con.

Marketing

High demand for building materials, especially for AAC bricks, makes it the best time at this moment to invest in a new AAC brick manufacturing line.

Demand of AAC bricks in 2016 is forecast to reach 7,000,000 m³/year, while supply from all manufacturers put together will only reach 5,000,000 m³ that year. Therefore, SB Con seizes this opportunity to grab a significant market share of AAC bricks in Indonesia.

Technical

The project is to install a new AAC brick manufacturing line with a capacity of 600,000 m³ per year.

SB Con owns a mine site located in a strategic area not far from the factory. The ownership of the mine is a big advantage for the company as it will ensure supply of key raw material at a stable price. Moreover, its strategic location ensures efficient transportation cost and production rate, which in turn will enhance the strong competitiveness of the company's products on the market.

Technology used to produce AAC bricks will be supplied from The Netherlands with German technology. This machine supplier is the world's number one player in the supply of AAC technology and manufacturing machines.

Production cost for the company is one of the lowest in the industry because the company can reduce raw material costs as it has its own silica sand mine and fly ash contractual concession. Furthermore, the company's strategic location ensures the low cost transportation. Hence, this will lead to a competitive advantage when there is a price war in an increasingly competitive market.

Finance

SB Con is profitable with strong growth. From the financial analysis, it is projected that this project has an attractive ROI, Profit Margin, NPV and payback period. This investment will lead to high profits. In the long run, with the right execution, it will make the company into a major player and market leader.

Recommendation

1. Right time to invest
With very sustainable development and conducive investment climate in Indonesia, as well as a stable government, investors are more confident than ever to invest in Indonesia.
2. Strong market demand
Demand of AAC bricks in 2016 is forecast to reach 7,000,000 m³/year, while supply from all manufacturers put together will only reach 5,000,000 m³ that year.
3. Strategic location
SB Con is located near sources of abundant raw materials, also near the sea port and close to the main provincial highway.
4. Supportive government
SB Con enjoys excellent support from both the district and central government to expand and contribute to the development of Indonesia.

Finally, it can be concluded that:

The expansion project of Autoclaved Aerated Concrete (AAC bricks) of PT. SB Con Pratama from the existing capacity of 200,000 m³/year to 600,000 m³/year, is **very feasible**, and its undertaking should **start as soon as possible**.