
AN IPMI GROUP FIELD PROJECT
CONDUCTED FOR **PT KONEBA** (PERSERO)

Defining Robust Strategies for PT KONEBA (Persero) to Survive and Excel in A Rapidly Changing Environment

A Scenario Planning Approach

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Executive Summary

The current Indonesian economic condition is characterized by having tremendous influences from the political situation as well as economic condition in the region. The above circumstances will unavoidably, directly or indirectly, impact the business of PT KONEBA. In order to survive in any kind of situation, favorable or unfavorable to PT KONEBA, a robust strategy needs to be developed. For that reason, a field study was conducted with the purpose of defining a robust strategy for PT KONEBA to survive and excel in rapidly changing environment.

A series of interviews were conducted by a group of IPMI students involving most of the key managers and staffs of PT KONEBA for the purpose of gathering required information to be analyzed later.

As the result of the interviews, the group was systematically able to identify major issues and concerns faced by PT KONEBA. The issues and concerns were then grouped together according to their characteristic such as corporate strategy, people, marketing, organization, project, HRD, finance, technology, environment, government relation, government policy, economic condition, and social. A set of focus questions was also prepared to provide directions in analyzing the issues and preparing the robust strategies for PT KONEBA to survive in the market.

The process was then followed by a one-day workshop for scenario planning purpose, conducted by the IPMI students and participated by PT KONEBA's senior executives, managers and staffs. During this session, the issues and concerns were listed and grouped together into controllable and uncontrollable ones. The controllable issues were further categorized as portfolio or main issues and supporting issues.

On the other hand, the uncontrollable issues were further selected and used as the key driving forces that would be considered in the process of answering the strategic focus questions. The selection and prioritization process was performed by the executives and managers of PT KONEBA considering those having the most substantial impacts to the business of the company.

The two most crucial uncontrollable issues which were "Government Policy" and "Economic Condition" were then referred as the "primary key drivers" where each

of the key drivers was viewed as a continuum from one state to the other i.e. good to bad.

With those two axis crossed together we then can have four quadrant and each of them resembles the particular scenario resulting in four different scenarios:

1. Scenario-1, characterized by booming Indonesian economy and favorable government policy towards the business of PT KONEBA where the environment is quite favorable to PT KONEBA. This scenario was then referred as "Winds from Heaven" or "Angin Sorga".
2. Scenario-2, characterized by booming Indonesian economy and unfavorable government policy towards the business of PT KONEBA where the environment is highly competitive. This scenario was then referred as "Swaying Coconut Leaves" or "Nyiur Melambai".
3. Scenario-3, characterized by busting Indonesian economy and unfavorable government policy towards the business of PT KONEBA where the environment is quite tough. This scenario was then referred as "Bleak Future" or "Madesu".
4. Scenario-4, characterized by busting Indonesian economy and favorable government policy towards the business of PT KONEBA where the environment is neither favorable nor unfavorable. This scenario was then referred as "La Niña".

The situation in each scenario was then described explaining major aspects such as political condition, economic condition, government policy, infrastructure, technology and environmental issues on energy.

To see how PT KONEBA will perform in the circumstances described in all scenarios, a win tunneling exercise was conducted. The result showed that using the existing strategies and resources, PT KONEBA would only be able to survive in the market if the condition persists as stated in scenario-1.

For each scenario a series of implications was determined as a result of the condition described in there. Strategies to face the implications were also developed accordingly.

The strategies in the four different scenarios were then reviewed to find out common elements, which would work in any scenario. These would later become core strategies. Some strategies that would only work in 1 of 2 scenarios were

then listed as scenario-specific strategies. Several key strategic elements out of these scenario specific strategies were selected and put as contingent strategies.

Finally the strategies were used as a base for the group to develop conclusions and recommendations.

Based on our findings we were able to develop primary conclusion. Our interviews with PT KONEBA and its customers revealed some relevant issues and concerns. The areas that we feel require improvement are:

- Company strategy, vision, mission, goals and objectives,
- Delegation of authority and empowerment including human resource development,
- Making optimum use of the marketing force,
- Productivity and professionalism among the staff members, and
- Company image as a result of product and service quality offered which is reflected in the customer satisfaction.

The low energy price is also a major concern for PT KONEBA which substantially lower the awareness for energy conservation in the community.

Being a state owned enterprise and getting some privilege from the government is one of the strengths that PT KONEBA posses besides having quite a number of experienced people to perform the service offered.

As a final part, strategic recommendation is also given to address the issues and concerns faced by PT KONEBA. Clearly defined corporate strategy, mission, vision, goal and objectives are crucial matters that need to be addressed and well communicated to the employees.

A related diversification to potential opportunities available in the market is also recommended during the "low season" period.

In the sales and marketing area attention should greatly be paid to customer satisfaction by means of improving professionalism of the field people. The driving force behind this is an appropriate reward system in order to motivate the people.

Organization structure should also be aligned with market demand by having a project-based matrix organization structure without neglecting key-account coverage. Internal bureaucracy should also be minimized when necessary to slash low productivity.

In the human resource area, a quality hiring is imperative while the qualified people should be maintained in the organization. The release of non-performers should be done when necessitates.

A good skill of project management is mandatory to ensure projects are well managed and up to standard.

A company name we believe should resemble its business and sound representative, attractive and easy to remember. For that reason a change in the company name should be considered.

We understand that implementing the directed recommendations is solely at the discretion of PT KONEBA but it is advisable that the implementation be prioritized and carried out accordingly.

Chapter 1 Introduction

PT KONEBA (Persero) is an Indonesian state-owned company established as a quasi-private industrial energy conservation corporation in 1987. The company has experienced different highs and lows in its operations since then. After the 1997-98 big economic crisis that hit most of Asia including Indonesia, the company has to look for alternative solutions to survive and succeed in the bad economic situation. In performing the study, a scenario-based planning approach is used.

1.1. Objective of the Study

The objective of this study is to assist PT. KONEBA (Persero) in identifying the implications of the rapid changes in current business and environmental conditions on the company business and to seek robust strategies for the company to survive in such conditions, considering its corporate and marketing strategies, and all its support functions.

1.2. Scope of Study and Research Methodology

This scenario-base planning study is aimed at:

1. Business environment analysis - macro & micro
2. Marketing strategies in different scenarios
3. Business development and diversification

Analysis Method

In anticipating the uncertainties in the future business environment of PT KONEBA, a scenario-based planning approach is used in this study. This method minimizes the over-influence of historical data normally used by conventional strategic planning analysis method.

The technique involves developing several different scenarios and yet possible future worlds. These worlds represent different ways in which current trends and influences could move. Here, the scenarios are used to help the process of creating the ideas about future sources of competitive advantage in three

consecutive ways.

First, the scenario worlds are used to help focus attention on further analysis of the opportunities and to judge what the competitors are likely to do. Secondly, the scenarios are used to compare company's list of strategies against each scenario and see whether they will perform successfully in each of them. Thirdly, the scenarios are used to generate different ways of adding value under different scenarios. The scenarios give directions for either expansion of the companies (through different types of diversification) or divestitures and downsizing.

Method of Study

Data gathering and problem identifications were conducted through a series of interviews, discussions, field surveys, and a workshop attended by PT KONEBA Managers.

Data analyses and inferences were performed using both induction and deduction approaches utilizing qualitative and quantitative studies.

The study involves the assessment of PT KONEBA's (Persero) corporate strategy, marketing, project, organization, management, financing, and technology acquisition.

Output

The output of this study is the scenarios and strategies that cover different worlds as the business environment changes. The output of this study is a set of strategic recommendations that consists of long and short-term strategies for PT KONEBA to cope with the current and different future environment.

Chapter 2 **Current Situation**

2.1. Country's Highlighted Profile

2.1.1. The political scene

Mr Habibie establishes an identity

Two months since his unexpected rise to the presidency, Bacharuddin Jusuf Habibie was almost looking secure. His own growing confidence was evident by mid-July when he refused to rule out standing for a second term. Mr Habibie had been Suharto's protégé since childhood and owed his election as vice president in March not to his power base (which was tiny) but to his mentor. He became president in May only because it was constitutionally required once Suharto stepped down.

Since taking over from Suharto on May 21st Mr Habibie has plainly recognized that his political survival depends on his ability to play to the diverse constituencies that forced Suharto to step down and now dominate the political landscape. These constituencies are:

- the military high command, led by the defense minister and armed forces commander, General Wiranto,
- the economic policymakers in the cabinet, among whom the co-ordinating minister for economic, financial and industrial affairs, Ginanjar Kartasasmita, the most prominent, both in terms of his present job and his political ambitions,
- the various strains of political Islam,
- the markets, the multilateral financial institutions and the governments of leading donor countries,
- the loose opposition of politicians, students and non-governmental organizations (NGOs) whose pressure toppled Suharto and whose constituent parts have now gone in their own directions.

The main political forces are in no hurry to take over

The various domestic constituencies that make up the new political landscape either do not see it as in their interests to challenge Mr Habibie for now, or do not have the clout to do so. For that reason the fact that Mr Habibie's attempts at reassurance have not really satisfied them probably do not really matter. The two forces crucial

to Mr Habibie's survival in power are the armed forces and the cabinet technocrats led by co-ordinating minister to economic, financial and industry affairs, Ginanjar Kartasasmita. The military chiefs will tolerate him as long as he holds the line against policies they will not stomach, in particular against a tilt towards political Islam that would offend the secular forces that now dominate the upper ranks of the armed forces (and expose them to embarrassing investigations of the past cases involving the military suppression of Moslem). Mr Habibie will not suffer the withdrawal of support from the economic policymakers in his cabinet that proved fatal to Suharto, as long as he continues to support the policies agreed with the IMF. In the face of the emergency now facing the economy he has little choice but to accept these policies.

Two political blocs are emerging as the main contenders for power

The mainstream opposition will not challenge Mr Habibie's timetable. It might have preferred the presidential election to be held sooner than under Mr Habibie's plan, but the constituents of this opposition no longer see the few months that distinguish Mr Habibie's timetable from their own as evidence of time-wasting and bad faith on the part of the new president. Moreover, after years of government interference and suppression the opposition needs to build up its organization and cements alliances. It now seems probable that two or three blocs will be the main contenders for power in the general election to be held in mid-1999. Although both will contain sectarian strands, in neither will these be dominant. They will be:

- a Java-based nationalist alliance based on PDI Perjuangan, the version of the Partai Demokrasi Indonesia run by Megawati Sukarnoputri (former president Sukarno's daughter); and the Partai Kebangkitan Bangsa (National Awakening Party, PKB), a new party formed by members of the country's largest Moslem social organization, Nahdlatul Ulama (Awakening of Moslem Scholars, NU);
- Partai Amanat Nasional (People's Mandate Party, PAN) a new party led by the Moslem modernist, Amien Rais, also involving secular politicians and intellectuals and based on non-sectarian principles, possibly allied with modernist elements from the Suharto-era Moslem party, Partai Persatuan Pembangunan (Moslem United Development Party, PPP), and the newly formed modernist party, the Partai Bulan Bintang (PBB).

Assuming these alliances win the largest shares of the votes in the general election

they are also likely to provide the two main contenders for the presidency later in the year. Under this scenario the presidential contest would pit Megawati against Mr Rais. An arrangement under which the two blocs enter into coalition, with the larger one taking the presidency and smaller one the vice-presidency with cabinet post allocated on the basis of parliamentary strength, would be in the consensual spirit of the times.

Mr Habibie's chances of winning a second term - a situation he no longer completely rules out - rests with the Golongan Karya (Golkar), which won 74% of the votes in the last general election. In the coming election Golkar will no longer enjoy the institutionalized support of the armed forces and bureaucracy, which was essential to its massive electoral victories during the Suharto era. Furthermore, the amendments to political parties and electoral laws will end the discriminatory treatment that was the other foundation of its electoral strength.

2.1.2. The economic situation

The economy will stay in a critical state

The current level of political uncertainty and the fear that things could get a lot worse are important reasons why international confidence in Indonesia is still low. The clearest manifestation of this is the weak rupiah, which is hovering at around 80% below its pre-crisis level. The continued insistence by the IMF on handing out its disbursements in monthly installments is taken as a vote of no confidence in the new government. Even an extra \$6bn in IMF-sponsored funds and nearly \$8bn in quick-disbursing program assistance from Indonesia's aid consortium has barely moved the markets. The EIU (Economist Intelligence Unit) assumes that these capital inflows will strengthen the rupiah over the next two years, but essentially the economy will remain in a critical condition during the forecast period. The latest IMF program is an emergency program that sanctions a budget deficit equivalent to 8.5% of GDP to pay for an enormously increased subsidy bills. This is to meet the needs of an economy in which poverty is already back to the levels of the mid-1970s and the unemployment rate is approaching 20%.

The economy is in for at least two years of contradiction. GDP is now expected to fall by 15% in 1998, and by 2.3% in 1999. Preliminary production-based GDP data show a decline in output of 12.2% in the first half of 1998 compared with the same

period of 1997. After accelerating from 7.9% in the first quarter of 1997 to 16.5% in the third, the rate of decline is expected to hit its low point in the third quarter of 1998 before moderating in the fourth as the basis of comparison becomes the already-stagnant fourth quarter of 1997. On a production basis, manufacturing, construction, trade and financial services will continue to suffer the most serious declines.

Agriculture will prove relatively resilient, but by no means immune to the crisis. This year rice output has been affected by the drought related to the El Nino weather phenomenon, but has also been hit by such crisis-related phenomena as low procurement prices and lack of access to credit for the purchase of inputs.

Indonesia's recovery from its last major economic crisis in the mid-1960s was rapid for several reasons. One was its large agricultural sector and its tiny manufacturing base. Another was a change of government that created foreign confidence and led quite quickly to large inflows of foreign direct investment (FDI) and aid. A third was that it was a tiny economy in which financial institutions were rudimentary. None of these conditions now apply; the manufacturing and financial services sectors have broken down and will not be quickly restored, FDI will be scarce over the next two years, and aid will be for emergency rather than productive purposes.

The 8.5% budget deficit is now on paper more than fully funded by foreign aid. Some of the assumptions made by the government-that previously off-budget funds can be incorporated into the budget, that \$1.5bn can be raised in privatization receipt and that state enterprise revenues can be boosted-look vulnerable. There will also be a sharp increase in the rupiah cost of servicing government domestic debt, and high inflation could well push the subsidy bills further up. Moreover the most important component of its revenue - non-oil and gas domestic receipts - is collapsing as a result of the severe recession.

Rapid monetary growth will keep inflationary pressure high

Inflationary forces will remain strong whatever happens. The depreciation of the rupiah, the problems of agriculture and the breakdown of the distribution system have already ensured an average inflation rate approaching 80% this year. Some relief in all these areas is likely over the next year. However, inflationary pressures will remain strong. Money supply has been growing rapidly as the authorities channel funds into the ailing banks and into subsidies. High nominal interests have

not been sufficient to mop up these funds through open market operations. (Indeed, by raising costs, high interest rates may actually be fuelling inflation). Large inflows of official capital to fund rupiah-financed budget spending on subsidies and other areas will keep inflationary pressure from money-supply growth high over the next year.

Forecast summary

(\$ bn unless otherwise indicated)

	1996 ^a	1997 ^b	1998 ^c	1999 ^c
Real GDP growth (%)	8.0	4.6	-15.0	-2.3
Consumer price inflation (av; %)	8.0	7.5	74.0	15.9
Exports fob	50.2	56.3	52.3	51.8
Import fob	44.2	46.2	39.6	37.9
Current-account balance	-7.7	-4.8	1.9	3.1
Exchange rate (av; Rp:\$)	2,342	2,909 ^a	10,655	9,500

^a Actual. ^b EIU and official estimates. ^c EIU forecasts.

These capital inflows will eventually help stabilize the rupiah, as will the surplus on the current account. Demand growth in two of its main markets, Japan and the Association of South-East Asian Nations (ASEAN), will contract in 1998 and will be flat at best in 1999. Partly because of the Asian crisis, GDP growth in the US, Indonesia's third main market, will slow over the next two years. Weak world demand will translate into slower world trade growth. Reflecting this slowdown, prices of Indonesia's leading exports will be weak. There will be sharp falls in the prices of soft commodities and industrial raw materials this year, which will not be made up by the modest improvement in prices expected in 1999. The oil price is expected to show a similar pattern: after falling by more than 18% in 1998, it is expected to increase by 7% next year, but at around \$17/barrel it will stay well below mid-1990s levels. The dollar price of manufactured exports will also be weak, reflecting weak demand, currency realignments and other downward pressures on costs in Asia and elsewhere.

Any hope of an export-led recovery rests on achieving healthy volume growth. But that is precluded by the unhealthy state of the productive base and shortages of

working capital and trade finance, and an export-led recovery will therefore be slow in coming.

2.1.3. Energy

Despite the long-term prospect of oil imports, Indonesia's oil-and-gas export sector has received some good news. The number of wildcat and appraisal wells drilled in 1996 rose to 100 after falling for five straight years to 75 in 1995. What was even more impressive was the jump in development wells from 609 in 1995 to 952 in 1996. Activity was due to continuing to increase in 1997.

Indonesia's Natuna gas field, said to be the biggest in Asia, gained an important potential buyer in May when the state-owned Petroleum Authority of Thailand signed a memorandum of understanding for future purchases.

Indonesia's other big undeveloped offshore gas field, Wiriagar, may be even larger than first estimated. The field will prove to be one of the best exploration finds the industry has made in recent years.

2.2. Indonesia's Emerging Energy-Efficiency Market

Indonesia is a potentially enormous market for energy efficiency products and services. The economy was growing steadily, by six to seven percent annually, with matching growth in overall energy demand. But demand for electricity was growing much faster - at 15 to 17 percent per year - and would necessitate estimated investments in electricity capacity of \$5 billion annually through the year 2002. The Indonesian government is encouraging foreign investment and private-sector competition to sustain the robust economic growth into the next century. As has been the case with other Asian nations, the structure of the Indonesian economy has changed dramatically in the past twenty years. In 1970, 35-percent of gross domestic product was generated by agriculture; in 1991, this sector accounted for less than 20-percent, while industry had emerged as the most important source of GDP.

Although the recent economic turmoil has depreciated the Rupiah value which automatically slashed down the GDP significantly but it is expected that the Indonesian economy will start to recover in early 2000.

Several studies by international and Indonesian groups have identified a high potential for conservation of all forms of energy in each sector of the Indonesian economy, as shown below:

Table 1: Energy Use and Savings Potential by Sector

Sector	Percent of Final Energy Consumption	Energy savings Potential
Industrial	34 %	15 – 30 %
Resident/communication	24 %	10 – 30 %
Transport	33 %	25 %

The fourth most populous country in the world – after China, India, and the United States – Indonesia currently has a population of 205 million. At present, only about 38 percent of Indonesian homes are electrified, but the growing middle-class (estimated to be about 28 million people) is demanding home appliances like refrigerators, television sets, and air conditioners. On Java, for example, only 40 percent of the 9.4 million residential electric customers have refrigerators, and refrigerator sales are increasing by nearly 20 percent annually. There is also a boom of commercial building in the major cities, which is creating a vast demand for air-conditioning, lighting, and building control systems. Government policies encouraging privatization and foreign investment are causing increased awareness of the role of energy in industrial competitiveness and are helping to drive the market for high-efficiency equipment.

Several reports have also outlined specific programs to capture the energy savings. While little of this potential has been realized so far, the cost of new electricity supply, the demands of international competition, and an emerging policy framework that supports energy efficiency should increase the activities in Indonesia's energy-efficiency market during the next five years. For companies that sell energy-efficient equipment and support services, Indonesia represents a high-growth market.

The industrial sector consumes about 37 percent of the output of the state-owned electricity company, PLN (Perusahaan Listrik Negara). The most energy-intensive

industries are iron and steel, fertilizer, cement, mining, pulp and paper, and food processing. Many industries also generate their own power; industrial self-generation now amounts to more than 8,000 MW. Motors and compressors account for roughly 70 percent of electricity consumption. Indonesia's major industries use 20 to 30 percent more energy per unit of output than comparable industries in Japan, Western Europe, or the United States.

The commercial building sector is growing rapidly in all major cities in Indonesia, particularly in Jakarta. About 55-70 percent of total electricity consumption in commercial buildings is for air-conditioning.

Lighting is the next largest end-use, accounting for roughly 25 percent. The most important barriers to improving building energy efficiency are the higher first-cost of high-efficiency equipment, and a lack of equipment standards and building codes.

The residential sector consumes about one-third of all electricity sold in Indonesia. About 76 percent of PLN's residential customers are in the lower rate classes, with less than 2.2 kVA electricity service. For low-income households, the most important electricity end-uses are lighting, refrigeration, television, and water pumping. Among PLN's 238,000 higher-income customers, air-conditioning is the largest end-use, accounting for 35 percent or more of total electricity use. Although the saturation of refrigerators and air conditioners in Indonesia is still low, demand is growing faster than the rate of overall economic growth.

2.2.1. Key Technologies

Following are the key technologies contributing to high energy usage which are also potential for energy conservation program.

Electric Motors

In 1994, imports of electric AC motors to Indonesia were US\$45 million and exports were US\$11 million. On average, electric motors and drives use about 65 percent of electricity in the industrial sector. The energy cost of a motor over its lifetime is typically fifty to one hundred times its purchase price.

In Indonesia today, most motors are standard of efficiency. However, the market for high-efficiency motors is growing rapidly in both the industrial and commercial

sectors. Indonesian motor companies are beginning to introduce imported, high-efficiency motors, particularly for their larger industrial customers. Foreign motor companies can help develop the Indonesian market by partnering with Indonesian firms and by educating customers about the performance, reliability, and efficiency benefits of high-efficiency motors. Motor companies can also train industrial managers to calculate the life-cycle cost of motors, and to establish motor replacement programs that specify high-efficiency motors.

Air Conditioners

Air-conditioner production has increased steadily, and output is now approaching 200,000 units annually. Imports are roughly 10-15 percent of domestic sales. Exports have been negligible but have the potential to grow dramatically to supply the growing demand in Asia and the Middle East. Most of the smaller units are assembled locally, and probably have fairly low efficiencies – though there are a lack of efficiency test data to confirm this. As Indonesian consumers increase their buying power, it is expected that demand for home air conditioners will grow more quickly than the economy as a whole. The Demand for central air conditioners is also expected to keep pace with the rapid growth of the commercial building sector. Most central air systems are assembled from imported parts, and several firms import larger cooling systems (chillers) from Japan and the U.S. The local production of central air-conditioning systems and high-efficiency chillers for large commercial buildings represents a strong market opportunity.

Lighting

The total supply of electric lamps in Indonesia nearly doubled between 1989 and 1993, reflecting a rapid increase in the number of electric customers, along with the economic growth that raised consumers' purchasing power and spurred development of the commercial building sector. In 1993, Indonesia produced almost 360 million electric lamps domestically, imported 14 million lamps, and exported 86 million lamps.

Domestic production of electric lamps has been increasing at an average pace of 25 percent annually over the past five years. All of the major lamp manufacturers are expanding their production capacity in Indonesia. Robust growth in the market for electric lamps signals opportunities for other lighting components, including high-

efficiency magnetic and electronic ballasts, high-efficiency fixtures, and controls. Energy-efficient compact fluorescent lamps represent one of the fastest-growing segments of the lighting market: sales are currently 4 million lamps annually and are growing by 30 to 40 percent per year.

Refrigerators

There are now several million refrigerators in Indonesia, and domestic sales exceed 300,000 units annually. The overall supply of refrigerators in Indonesia increased by an average of 17 percent per year.

The value of refrigerator production has been increasing faster, at a rate of more than 40 percent. Japanese joint-venture firms currently dominate the refrigerator market. The future trend in the residential sector will be toward an increased proportion of larger, two-door refrigerators. Recently, imports of this class of refrigerators have begun to rise significantly. There may be significant potential for firms to produce high-quality, energy-efficient units for export as well as for sale to upper-income Indonesians.

These technologies will therefore be the major contributors to increased residential electricity demand over the next decade.

2.2.2. Key players in the industry

There are some major players in the energy conservation industry in Indonesia, as listed below:

PT KONEBA Persero

PT KONEBA Persero is one of the major key players in the energy conservation arena.

Energy Conservation Division in the Ministry of Mines and Energy disseminates information to the public about saving energy; provides technical assistance to state-owned companies; develops and manages demonstration projects; formulates regulations such as equipment standards and labeling; and conducts research on energy use in all sectors. The division also presents an annual energy-efficiency award to Indonesian companies.

The Energy Technology Laboratory (LSDE) in the Ministry for the Assessment and Application of Technology (BPPT), has been conducting energy audits on industrial facilities since 1989. LSDE has collected extensive data on energy use, and has recommended sound measures for improving efficiency. However, the implementation of the recommended measures has been hampered by persistence reluctance among industrial companies to invest in energy-efficiency improvements and by a lack of awareness of energy-efficiency opportunities.

2.3. Profile of PT KONEBA (Persero)

P.T. Konservasi Energi Abadi (the Indonesian Energy Conservation Corporation or KONEBA) was established as a quasi-private industrial energy conservation corporation in 1987. The establishment of PT KONEBA was initiated by Indonesia's largest government-owned fertilizer company, PT PUSRI, and was intended to be a profit-making venture.

GOI negotiated a World Bank loan for the expansion of its fertilizer business. GOI added \$4.5 million onto the loan request to fund the PT KONEBA concept. To leverage this loan, the government created a board with representatives from five fertilizer producing companies, including PT PUSRI. These companies jointly matched the World Bank loan amount, increasing the initial capitalization of PT KONEBA to \$9 million. Once established, PT PUSRI supplied most of the staff members. It was believed that these staff members have very little energy conservation experience, which was unfavorable in fulfilling PT KONEBA's original mission. PT KONEBA was established as an income-generating company that would raise funding to pay back the World Bank loan. With this in mind, PT KONEBA focused on income-generating services at the expense of more traditional energy center roles such as education, promotion, policy analysis, and training activities. PT KONEBA instead acted more like a for-profit energy service company, concentrating most of its efforts on large industrial customers who have the ability to make energy conservation investments. Typical services offered by PT KONEBA included energy audits of facilities, detailed engineering designs, and in rare cases, financing complete with shared-savings arrangements.

In 1991, the Company was far from generating sufficient income to cover its loan repayment installments. As a result, one year before the end of the loan grace

period, the Indonesian government assumed control of PT KONEBA and its debt obligations. Failing its original mission, PT KONEBA was radically transformed and internalized within the Indonesian government. PT KONEBA was then a company under the supervision or coordination of the Ministry of Mines and Energy and primarily focused on serving facilities owned and operated by the Ministry.

As of 1998 PT KONEBA has been put under Ministry of Empowerment of State-owned Enterprises. Recent projects include power plant efficiency improvements, analyses of efficiency potentials of state-owned refineries, and retrofits of the district offices of Indonesia's generation utility with electronic ballasts. While PT KONEBA's original capital budget was \$9 million, today the Center requires approximately \$500,000 per year to cover its operating costs and to provide institutional energy efficiency services to the Indonesian government.

2.4. Strengths and Weaknesses

Some of the strengths and weaknesses of PT KONEBA are as stated below:

Strengths

- PT KONEBA is the only state owned enterprise (BUMN) providing energy conservation services and consequently getting some favorable treatment/privilege from the government.
- Has relatively experienced people to perform low and medium complexity of the services offered.

Weaknesses

- PT KONEBA is lacking the recognition from the main sectors it serves which are industrial and property.
- PT KONEBA is lacking the skill/experience to perform high complexity services.

2.5. General Concern

As the business environment changes from time to time, PT KONEBA needs to position itself so that it will still survive in the volatile business world.

2.5.1. Rapidly Changing Environment

Since Indonesia declared its Independence in 1945, the movements of its economics can be divided into three major grouping as detailed below.

1. 1945 to 1965 (Old Era)

In this period Indonesia economic condition was fall under situation where the government of Indonesia was only concerned with all expenditures related with military, politics and all other 'Ivory-tower' or 'mercu-suar' projects. The development made by the government at that time was only concentrated in several major cities in Java Island.

In the eastern part of Indonesia, the government was not really interested to spend the budget to improve the infrastructure as well as educational sector. This situation caused the economic condition very bad, the inflation rate rocketed to the sky, the economic growth was zero percent and toward to negative. All the above conditions caused social unrest, which destroyed the economic sector.

2. 1966 to May 1998 (New Order)

During the 1966-1998, the strategies used by the Indonesian government for their economic development was not effective way and not clear in direction. The strategy used by the Indonesian government during that time was stabilization and rehabilitation policy.

This period was then followed by The Five Years Plan (REPELITA), where the economic developments strategy in Indonesia was focused on justice (equal prosperity), alleviate poverty, and also providing justice and equal prosperity among provinces in Indonesia.

To achieve the above, the government imposed several policies such as:

- The increasing central government subsidy to the provinces (local government) to finance labor-intensive projects.
- The government policy in providing loan for small scale business (KIK/KMK)
- Special attention to cooperatives especially to KUD (Koperasi Unit Desa).

The economic development strategies then were consistently supported by economic policies in the REPELITA, and in each REPELITA the government determined the targets or focus.

Even though the government of Indonesia through the Pembangunan (Development) Cabinet tried to run the country with their best effort, the economic condition was still not favorable. We could tell this by looking at the bad experience such as IDR devaluation in the years of 1978, 1985, and 1986.

3. May 1998 onward (Reformation Era)

After 32 years of rapid growth, stability and poverty reduction, Indonesia is now near economic collapse. Within the space of one year, Indonesia has seen its currency to fall in value by 80 percent, inflation to soar to over 50 percent, the economy to swing from rapid growth to even more rapid contraction, unemployment to climb rapidly, and stock exchange to lose much of its value. Foreign creditors have withdrawn, investors have retreated, and capital and entrepreneurs have fled. The long-standing defects in governance, earlier camouflaged by rapid growth, have now been unmasked and fatal flaws. Unfortunately, the crisis hit when Indonesia was experiencing its worst drought in fifty years, and the international oil price was registering a sharp decline. Social unrest has erupted and shaken to its very core the political stability of the nation. Years of development and poverty reduction are at risk.

No country in recent history, let alone one the size of Indonesia has ever suffered such dramatic reversal of fortune. The next years will be difficult and uncertain. The economy is expected to contract this year by 10-15 percent, inflation could exceed 80 percent, and the number of poor people could well double. And as an addition, Indonesia, as the world's fourth largest country, has to be able to pull through without irreversible economic damage, to make the stability in East Asia. With the recent economic condition in the region, recovering from this desperate situation will be slow and difficult. Much will depend on whether the nation can achieve the necessary political stability for implementing a difficult and complex agenda of economic reforms, and whether it will receive the necessary financial support from the international community.

Indonesia's economic situation has always been influenced by outside factors specially the regional environment. This caused the Indonesian economic environment changing rapidly.

2.5.2. Company Stance

PT KONEBA today serves its purpose as an energy conservation consultant company in Indonesia. Its typical services are energy audits of facilities, detailed designs and in rare cases, financing complete with shared-savings arrangements.

In its day-to-day operation, PT KONEBA, as a state owned company now under Ministry of Empowerment of State Enterprises, receives quite favorable treatment from the government especially in terms of its access to offer products and services to the other state owned companies (BUMN).

Business opportunities today are more generated through the use of good relationship and privilege treatment from the government as opposed to a more professional marketing approach.

Advertising and promotion roles are not yet getting proper acceptance in the company while it is believed that those activities could have favorable impact on sales.

Being in the economic turbulence atmosphere nowadays where most of the companies prefer a low cost investment, PT KONEBA now more focuses on selling its energy audit training services.

Although no quantitative market share information is available it is sensed that PT KONEBA's presence in the market is not significant.

From a financial point of view, more of the income today is generated from non operating activities (interest income) rather than from the operating activities.

People have been the most valuable asset for PT KONEBA. With quite vast skill and experiences of the field people, PT KONEBA feels confident to perform the services it provides.

Chapter 3 PT KONEBA Scenario Planning

PT KONEBA is currently faced with a wide range of issues and concerns related to its company image, performance, and relationships with the internal and external constituencies. The company is also faced with several difficult questions, such as towards which direction should the company go and prepare its strategies.

With the assistance of a group of IPMI MBA students performing their Group Field Project, PT KONEBA has performed the scenario planning exercise. This scenario planning has been intended for improving the company performance in the short-term, and for gaining the most benefit of the business environment in the 10-year term. The project was carried out from June to the end of 1998. The work involved interviews with PT KONEBA employees as well as the customers, research on industry and environmental condition, and workshop with 15 managers, as well as senior executives from PT KONEBA. All these works led to the scenarios, implications, and a set of robust strategies, set out in later parts of this report. As a background, a brief review on the Scenario Planning process – adopted customarily for PT KONEBA case – is presented in Exhibit 3.

PT KONEBA scenario planning process started with the formulation of strategic questions, which was then followed with the exploration of the issues and concerns. To think about the various possible outcomes of the uncertainties in a systematic way, IPMI students in this Group Field Project worked together with the Executives and Managers of PT KONEBA in creating scenarios that would expand the range of thinking in doing business.

3.1. Time Period and Focus Questions

The scenario was prepared for a specific time period, i.e. for the following 12-year long term (1999 to 2010). To keep the discussion focused on the most important issues for PT KONEBA over the time period considered, strategic "focus questions" were defined in the workshop to which the participants could refer back as the discussions and analyses progressed. After extensive discussions, the following questions were chosen:

1. How should PT KONEBA improve company performance in terms of:
 - sustaining profitability,
 - increasing market share and creating new segments,
 - creating new product,
 - improving product quality, and
 - maintaining customer satisfaction?
2. What should PT KONEBA do to improve:
 - human resources quality, and
 - employee satisfaction?
3. What should PT KONEBA do to generate customer awareness on the energy saving needs?
4. What should PT KONEBA do to get optimum value after the completion of Indonesian reforms and the upcoming globalization?

3.2. Issues and Concerns

In digging up all possible information regarding the current situation of PT KONEBA, more than 20 interviews were conducted with more than 90% of PT KONEBA managers, and a list of past and existing customers, ranging from Government related officials to industrial customers. In addition, several researches were also performed on these specific industries through various sources of information.

3.2.1. Grouping of Issues and Concerns

Upon completion of all the above works, issues and concerns were listed, discussed in two special meetings with Managers of PT KONEBA, and categorized into two main groups. Controllable issues, of which PT KONEBA's can control, were separated from the uncontrollable ones, or the uncertainties. Under these two main groups, the issues and concerns were further categorized into more major areas of concerns, considering the functionality and the importance of the issues and concerns. In general, the issues are listed as the following page.

Controllable Issues:

- Portfolio:
 - Corporate Strategy
 - People
 - Marketing
 - Organization & Management
 - Projects
- Supporting:
 - HRD
 - Finance
 - Technology
 - Environment
 - Government relation

Uncontrollable Issues/Uncertainties:

- Government Policy
- Economic Condition
- Social
- Environment

3.2.2. Detailed List and Description of Issues and Concerns*Corporate Strategy*

- **Robust strategy, mission and vision**

It is believed that strategy, mission, and vision need to be articulated and communicated well to all levels in the company.

- **Performance measures**

Performance measures are perceived to be lacking the clarity especially for the marketing force.

- **Long range plan**

Long range plan does not seem to exist.

- **Clear goals and targets**

Clear goals and targets are expected to be in place and communicated well to all levels in the organization.

- **Forecasting**

It is perceived that forecasting needs to be enforced and be exercised in a

more professional way

- **Internal reporting system**

Reporting system in the organization needs to be institutionalized and standardized.

- **Additional investment/equity**

It is believed that lack of investment/equity is hindering the company business.

- **Company image**

It is perceived that there is still room for improving company image.

People and Human Resource Development

- **Empowerment**

It is perceived that not enough empowerment is exercised in the organization. Empowerment is one way of improving sense of belonging.

- **Delegation of authority**

Delegation of authority is perceived to be lacking the organization. "Top down" approach seems to dominate the operation.

- **Motivation and pro-activity**

It is felt that to improve productivity level employees have to be highly motivated which will also improve pro-activity.

- **Rewards system**

Some improvement is apparently required in the current reward system to accommodate the employees needs.

- **Training**

Training for employees especially for field people needs to be improved in quantity as well as quality.

- **Job descriptions and job analyses**

Job description is expected to be in place and formalized for each and every employee to provide clear direction on what one should do and how performance is measured. To ensure consistency in the rewards system, job analysis also needs to be implemented.

- **Incentive in marketing function**

Marketing force feels that the incentive paid is not attractive enough to motivate them.

- **Project manager – scope of responsibility**

The role and scope of responsibility of a project manager needs to be well

defined.

- **Sense of belonging**

Employees are believed to be lacking the sense of belonging.

Marketing

- **Promotion and advertising**

It is believed that promotion and advertising are not performed adequately.

- **Brand image**

Brand image of PT KONEBA does not seem to be well recognized in the industry. This could be partially caused by lack of promotion and advertising.

- **Product segmentation**

It appears that product segmentation is not defined clearly. A clear product segmentation can help PT KONEBA put more or less focus on particular segments.

- **Competitiveness – broad product knowledge**

The quite broad skill that PT KONEBA has, impedes maintaining competitiveness in a very deep skill area.

- **Customer satisfaction**

Though in general customer satisfaction is believed to be favorable enough, but there is still enough room for improvement in this area.

- **Customer profile analyses**

Profiles of customers/prospects are not readily available. The information is believed to be quite helpful for the marketing team to observe the needs of a particular customer.

- **Opportunity coverage**

The responsiveness of the marketing force towards opportunity is perceived as weak.

- **Marketing budget**

Budget for marketing related activities is perceived as too tight which unfavorably impacts the marketing activities. Facilities associated with marketing activities such as equipment, information, manuals, magazines etc. are not adequate to perform the activities.

Organization and Management

- **Professionalism in management**

It is perceived that professionalism in management team is still low.

- **Participative management**
Lack of involvement of middle management in decision making process.
- **Interdepartmental communication**
It is imperative that good interdepartmental communication is in place as it will have positive impact on company's productivity. Improvement is needed in this area.
- **Internal policy**
Internal policy is perceived to be too rigid, so that flexibility is required in order for PT KONEBA to be more competitive in the market.

Project related

- **Project management**
Project management capability needs improvement in order to have satisfactory completion of all aspects of project management.
- **Project proposal – standardization/guideline**
A standardization of terms and conditions applicable to most of the proposals does not exist. It would help improve productivity as well as maintain consistency.

Finance

- **Planning and budgeting**
The process of Planning and budgeting needs to be done thoroughly and accurately.
- **Financial performance review**
The performance review needs to be done regularly and analyzed properly in order to anticipate/resolve any issues.

Technology

- **Knowledge of latest technology**
Lack of knowledge and experience of latest appropriate technology hinder competitiveness of PT KONEBA especially against foreign and private companies.
- **Appropriate technology**
The use of appropriate technology in energy conservation project.
- **Laboratory**
The availability of an energy conservation laboratory is needed to enhance skill

of the technical staffs.

- **Portable instrumentation**

Most of the instrumentation is not portable ones. It is believed that portable instrumentation will improve mobility of the field people.

- **Networking – information and knowledge sharing**

Limited access to Internet is perceived to hinder awareness of latest technology available.

Government policy and political conditions

- **Low energy price**

Low energy price due to subsidy from the government is perceived as one of the inhibitors to sell energy conservation product and/or services.

- **Presidential/ministerial decrees on preferences**

These decrees are believed to have favorable outcome to KONEBA but at the same time mitigate PT KONEBA's maturity to be able to stand on its own feet.

- **Too rigid government regulation**

Government regulations limit the area of business KONEBA can pursue.

- **National energy conservation policy**

The national energy conservation policy does not seem to be well defined. To date the energy conservation implementation is not a mandatory item.

- **Foreign investment for technical services**

Foreign investment in this area has made PT KONEBA to have to compete harder. In many cases foreign experts outperform PT KONEBA's due to their international exposure in the market.

- **Foreign aids**

Foreign aids to Indonesian companies for energy conservation has unfavorable impact towards PT KONEBA's business as they are used for subsidizing the companies.

- **Clean energy policy**

If a clean energy policy is implemented it will necessitate companies embracing energy conservation program which is quite favorable for PT KONEBA's business.

Economic

- **Recovery of the Indonesian, regional and world economy**

Recovery of the Indonesian economy plays important role in PT KONEBA's

business. With unfavorable economic condition, companies tend to prioritize on more important tasks having higher economic value rather than applying energy conservation. Regional as well as world economy, though to a lesser extent, contribute to the success of PT KONEBA's business.

Social

- **Role of the company in helping government institutionalize energy conservation program**

It appears that PT KONEBA can play more proactive roles in institutionalizing government energy conservation program.

- **Attitude/awareness towards energy conservation**

The less conducive attitude/awareness of the society towards energy conservation program impede the sales of PT KONEBA's product and services

Environmental

- **Role/involvement of the company in environmental issues and in the business of environmental assessment**

Proactive role to associate PT KONEBA with institutions related to environmental issues is felt to be lacking of.

3.3. Key Driving Forces

From the above extensive list of issues, the uncertainties (or the uncontrollable issues) were selected further to be used as the key driving forces that would be considered in the process of answering the strategic focus questions. As mentioned earlier, selection and prioritization of the issues was performed by the Executives and Managers of PT KONEBA, considering those having the most substantial impacts on the business of the company. The discussion resulted in the following list of importance:

- Government Policy (10 votes)
- Economic Condition (10 votes)
- Social (2 votes)
- Environment (2 votes)

The two most important groups of issues, i.e. Government Policy and Economic Condition, were then referred to as the "primary key drivers." Each of the key

drivers was then viewed as a continuum from one state to another.

For Government Policy, the continuum runs from "favorable" to the business of PT KONEBA to "unfavorable". This clearly includes a mix of factors that will be brought out as we develop the scenarios.



For economic condition, the continuum runs from "bust" to "boom". This applies primarily to the Indonesian economy, but it relates strongly to the economic condition of the region, especially the Far-Eastern countries and ASEAN.



The other groupings were retained in the discussion as "secondary drivers." The secondary drivers included social and environmental conditions in Indonesia, especially those related to the use of energy.

3.4. The Matrix

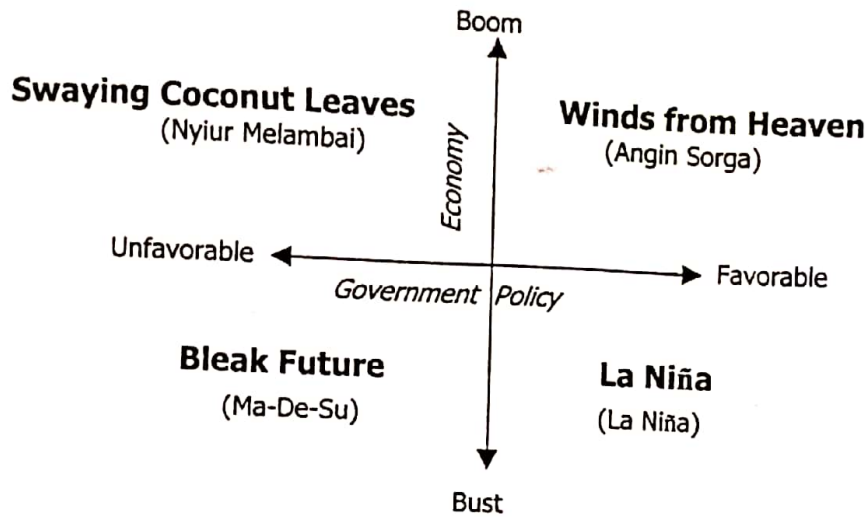
The two continuum lines, produced by the two key drivers, can then be crossed at right angles to form a 2 x 2 matrix. Each quadrant will be roughly defined by the end points of the adjacent matrix lines. For example, the upper right hand quadrant is a world where the Indonesian economy is booming and the Indonesian government policy is favorable towards the business of PT KONEBA. The lower left-hand quadrant is a world where the Indonesian economy is weak or stagnant while government policy is unfavorable to the business of PT KONEBA.

Each quadrant was then given a name to closely describe the situation of that quadrant.

To help complete the picture, the secondary driving factors mentioned above will be included in an internally consistent manner in the story of each world. Clearly, each quadrant represents a very different world with different strategic implications to PT KONEBA.

Working as a full group and in break-out groups, PT KONEBA and IPMI team then fleshed out the story of each world in some details and created the scenarios presented in Chapter 4 of this GFP report. It is important to note that these are

not stories written by IPMI and handed over to PT KONEBA. Each scenario grew out of extensive discussions amongst the middle management of PT KONEBA, with IPMI serving a facilitator role. They are, in the end, PT KONEBA's own scenarios.



Chapter 4 The Scenarios on the Futures of PT KONEBA

After the matrix was established, as described in the previous chapter, the team of PT KONEBA Managers and IPMI MBA student group prepared the scenario for each quadrant. The scenarios cover major aspects of the business environment over the next decade that would strongly give effects to the business success of PT KONEBA. Each scenario describes the following aspects:

- political condition,
- government policy,
- Indonesian and regional economic condition,
- local infrastructure,
- energy policy, pricing, supply, and demand,
- technology development, and
- environmental issues on energy.

4.1. Scenario-1 – Winds from Heaven (Angin Sorga)

- **Government Policy: Favorable to PT KONEBA**
- **Indonesian Economy: Boom**

1999 – 2010 characteristics of occasions

Political Condition:

- Coalition of parties with strong sense of bureaucracy wins the 1999 election. This leads to almost the same type government as in ORBA (New Order) era, although the new government has a lesser degree of corruption and collusion. A new strong president is elected in office, and he is strongly supported by almost all parties.
- The same coalition of parties wins the next elections in 2004 and 2009, and the same political system continues. Though the president only takes charge in office for only 2 periods, the following successor continues the same spirit and strategies.

- Indonesian population reaches around 270 million by the end of the decade.

Government Policy:

- The government basically continues the same type of regulations that the previous government adopted.
- In foreign investment policy, the government still has a strong grip over the ownership of the companies operating in Indonesia. Limitations are given in terms of percentage of equity and the number of expatriates working in projects. The policy obliges the foreign investors to share the equity with local investors, and it only allows them to work on projects of certain values. These limitations give adequate opportunities for local companies to operate.
- Besides, the government still passes the preferences for state-owned companies (BUMN) to obtain government's projects under certain ministries. This situation goes on until the end of the period.

Indonesian and Regional Economic Condition:

- Indonesian economy starts improving in 1999 with the resumption of the activities of most of the industries, as well as the banking sectors. Manufacturing, chemical, mining, and agricultural industries are back on track and keep booming during the period. Services also increase as the economy gets better. Economic growth is back to the previous average rate of 5%. GDP also increases to normal as the Rupiah exchange rate is stabilized at 5,000 to 6,000 Rp/US\$ range. The economic stability is maintained until the end of the period.
- Regional economy also recovers as Japan, South Korea, China, and ASEAN nations start their economic stability by the year 1999 and maintain a stable growth throughout the rest of the years in the first decade of the 21st century.
- World economy in general, particularly the western countries, also maintains a steady growth during the period, allowing those developed countries in the West to continue assisting the developing countries in Southeast Asian region, including Indonesia, in terms of both economy and technology.
- Special economic aids in the field of energy, whether they are from government to government, or from and to non-governmental organizations continue to happen. The aids are mostly dedicated to assist the construction of small-scale energy-related projects in remote areas.

Local Infrastructure:

- The government continues efforts to distribute electricity to all villages all over the country. By the year 2010, almost 99% of the villages in Indonesia will have enjoyed electricity.
- Public transportation improves significantly during the period, especially after the introduction of several mass rapid transfer systems. Buses and trains are encouraged to use natural gas as its main fuel to support the clean energy campaign.
- The tunnel connecting Java to Sumatra, as well as the bridges connecting Java to Madura, and Java to Bali are constructed during the period, and are mostly completed by the end of the period. These inter-island connectors, combined with the substantial additions, lengthening, and widening of roads and highways, make transportation an easy task, which finally boost tremendous growth in the industries and tourism.
- In big cities, natural gas is piped to the houses, replacing kerosene and LPG. Construction of city gas piping is performed during the ten-year period and the plan is to continue building the pipeline network in other major cities in Indonesia. Design permit for piping and stove or water heater in houses has been one of the needs for making sure that safety is maintained in using the natural gas.

Energy Policy, Pricing, Supply, and Demand:

- As the economy is getting better, the government gradually lifts the subsidy on fuel during the first five years of the decade and lets the fuel price afloat and be determined by the market. This situation leads to an increasing public awareness of the need for energy conservation as energy becomes more and more significant component of production cost. As the economy is booming, the demand for energy increases substantially over the time. This increasing energy demand happens not only in domestic market, but also in the region.
- The shift to the use of natural gas for domestic fuel is increasingly intensified as Indonesia becomes the net importer of liquid hydrocarbon.
- In institutionalizing energy conservation, the government passes the regulation to conduct the assessment on energy usage on buildings and plants that utilize energy above a certain level. In return, the government also passes various incentive policies for the companies that consistently show energy savings.

Incentives are also given for the importation of the energy saving equipment.

- The government passes the regulations for the energy saving certification, including eco-labeling. The government also successfully completes and passes the Indonesian energy standards, which apply for the exploiting, the distribution, and the use of energy.
- By the end of the ten-year period, Indonesia still basically has an abundant supply of fuel, but mostly in the form of solid (coal) and gaseous fuel (natural gas). Exploration in the deeper seas, as well as in the frontier areas reveals tremendous amount of proven natural gas reserves, while coal mining is intensified in Kalimantan and Sumatra. Export of LNG and coal to the neighboring countries in the region, such as Japan, South Korea, and China is constantly increasing.

Technology Development:

- There has been tremendous improvement in the energy saving technology. The use of energy saving equipment becomes widely recognized in the country.
- Superconductor technology is also getting close to becoming commercial. This technology can shape up the energy-saving features, as electrical generations and distributions are becoming more efficient.
- The developed nations, such as Japan has successfully invented a commercially clean coal technology used to generate electricity.

Environmental Issues on Energy:

- As the economy is getting better – not only locally, but also overall in the region – public awareness on the environmental issues is getting higher. The preference towards the use of clean energy is getting more and more supports in most of the Far-Eastern countries including Japan, South Korea, Taiwan, and most of the ASEAN countries.
- The government also passes the requirement for environmental assessment on energy-related projects to ensure the quality of the environment is maintained as the projects are running.

4.2. Scenario-2 – Swaying Coconut Leaves (Nyiur Melambai)

- **Government Policy: Unfavorable to PT KONEBA**
- **Indonesian Economy: Boom**

1999 – 2010 characteristics of occasions

Political condition:

- The winning party after the election is characterized by being democratic and liberal.
- The political situation is expected to be unlikely stable initially for about 2 years after the election due to "weak" government who tries to accommodate people's aspirations. Parties compete against each other to strive for power. As economic condition gets better and government gains credibility, political stability recovers.
- Corruption, collusion, cronyism and nepotism diminish over time and become substantially less than as they were under Suharto's regime.
- The same political system continues to be in power in the decade.
- Indonesian population reaches around 270 million by the end of the decade

Government policy

- Any kind of protectionism policy in any area is gradually repealed.
- Open door policy for foreign investment makes local expertise/investors having to reveal their competitive advantages in order to exist in the market.
- Government emphasizes free competition among industries.
- In foreign investment policy the government allows full foreign ownership.

Indonesian and regional economy condition

- Currency value strengthens as part of the political stability, lowering inflation and interest rates.
- AFTA (ASEAN Free Trade Association) starts to be implemented in 2002.
- The economy starts to get more liberalized.
- GDP grows and reaches or exceeds the level it was before the economic turmoil by the end of the decade.
- Companies try various ways to improve their efficiency and productivity level in order to remain competitive in the market.

- Surplus of trade balance as local goods and services become more competitive.
- Unemployment rate diminishes gradually as the economic improvement provides more jobs.
- Single digit inflation rate is achieved in the year of 2000 and remains stable onwards.
- Interest rate level goes below 20% by the year 2000 resulting in the business to revitalize.
- Regional economic condition recovers as countries find their own ways to get out of the slump. IMF plays a more important role in stabilizing the economy in the region.

Local infrastructure

- Growing infrastructure constructions due to growing economy lead towards the increase of the energy demand.
- Electricity and telecommunication coverage across the country increases in line with GDP growth.
- Public transportation facility improves over time and more people have the demand to commute as part of their activities.

Energy policy, pricing, supply and demand

- Government subsidy for energy remains intact over the first 2 years after the election in 1999 to win public sympathy. Consequently energy conservation priority lowers.
- Demand for energy soars due to economic growth.
- Energy subsidy eventually is lifted in the second half of the decade.
- Devices that use fuel need to be certified as energy efficient.
- Government encourages the use of alternative energy sources besides oil such as gas and coal.

Technology development

- Worldwide pressure to have energy efficient technology.
- New technology is applied to energy efficiency programs.
- New technology is invented to enable the use of solar energy in much easier and efficient way to partially replace oil generated energy.

Environmental issues on energy

- Growing public awareness and concerns of environmental condition which also drive towards energy efficiency program.

4.3. Scenario-3 – Bleak Future (MaDeSu)

- **Government Policy: Unfavorable to PT KONEBA**
- **Indonesian Economy: Bust**

1999 – 2010 characteristics of occasions*Political Condition*

- In the 1999 general election, numerous new political parties contest the election, resulting in no clear winner. This situation forces the ruling party to perform a coalition government among the major political parties. The coalition government proves to be ineffective, as none of the parties within the coalition is willing to concede their own interest. Past rivalries and hairline principle differences begin to emerge and the parties find that they have trouble working together. The coalition, which begins with the shared goals of working for the betterment of the people, becomes very weak and ineffective as it is faced with continued internal bickering and political maneuvers. Power struggles erupt within and between the coalition parties and it is soon obvious that there is no longer an effective, functioning central government. In the provinces and major towns, military leaders are quick to fill the political vacuum, seizing power and establishing themselves as a modern day "warlords". All the above conditions make the political condition unstable.
- The fragmentation of the country spawns increasing rebel activities in the provinces of East Timor, Irian Jaya, and Aceh. In these provinces, the activists from the respective separatist movements seize control of the provinces and issue declarations of independence. All the above conditions will create a new federalist form of government in Indonesia.
- The same coalition of the parties wins the next elections in 2004 and 2009, and the same political system continues. Though the president only takes charge in office for only 2 (two) periods, the following successor continues the same spirit and strategies.
- Indonesian population reaches 270 million by the end of the decade.

Government Policy:

- In order to increase Foreign Direct Investment, the coalition government will lead the Indonesian economic condition to the liberalization era, where they deregulate taxation and eliminate the fuel subsidy.
- The government also issues a regulation on anti monopolistic in all sectors.

Indonesian and Regional Economic Condition:

- The economy of Indonesia does not recover despite the implementation of IMF recovery package. This is because the economies of the other Asian nations, in particular Japan and Korea enter into prolonged recession, cutting off any potential for an export-led recovery. The Indonesian economy collapses, and the country heads into a deep and protracted recession. Unemployment mushrooms, famine, disease, and deprivation are widespread.
- Banks and financial institutions fail in rapid succession, causing foreign investors to flee the country, triggering a disintegration of the stock market and collapse of the currency. The rupiah sinks to the new lows, interest soar and unemployment escalates. All the above conditions cause the inflation rate rockets to sky and the level of industry development growth is negative. This also causes the level of energy demand to reduce significantly. All these fuel increasing social unrest (fragile).
- With the low value of rupiah, the level of goods imported from overseas reduces drastically, and the only sector remains in good condition is export oriented industries.
- In Asia, the collapse of the Japanese Yen hurts all Asian countries. This condition causes the economy of the major countries such as Japan, Korea, and China to continue their downward spiral. Initial confidence in the economy evaporates, as it becomes clear that the whole of Asia is now headed towards a protracted recession.
- In the rest of the world, the U.S. and Europeans have enjoyed a long period of relative prosperity and have become isolationist, predominantly focusing their investments in safer domestic markets, or growing markets closer to home, such as South America and Eastern Europe.

Local Infrastructure:

- In this messy economic condition, the whole infrastructure in Indonesia has fallen into stagnation stage, where there is no addition and minimum budget

for maintenance. Hotels and city office blocks have become ruins, and are largely occupied by families of squatters.

- Mass transportation is very messy due to high maintenance cost, and this causes-pollution in all country.

Education:

- With this economic situation only a few people are still able to have good education. Most of the people could not get the opportunities to go to universities due to limited seats available in the state education facilities. They just go to the low entry-level school of 9 years program provided by government.

Technology:

- All sectors in the industries are not concerned with the technology due to high cost in equipment with advanced technology (most of the new equipment should be imported from abroad).

Environment:

- No one cares for the environmental issues since there is no tight control from the government.

4.4. **Scenario-4 – La Niña**

- **Government Policy: Favorable to PT KONEBA**
- **Indonesian Economy: Bust**

1999 – 2010 characteristics of occasions

Political Conditions:

- The 1999 general election reveals a new government that is supported by almost all community, which finally results in reasonable political stability. Although, there are strikes and demonstrations during the reform era, as part of the political transition and the weakening economic condition, the overall situation is still under control.
- The level of corruption and collusion gradually decline, but cronyism is somewhat maintained which allows the state-owned companies to operate under special treatment.
- This type of government continues to gain power in the 2004 and 2009

elections.

- The Indonesian population increases to 270 million by the end of the decade.

Government policy:

- The government proceeds to enforce the applications and revise the regulations and decrees on energy conservation programs.
- The government also passes some limitations on foreign investment to favor the local companies and investors working on energy conservation.
- As the economy worsens, unemployed workers are transferred to labor-intensive projects, such as in the agricultural sector. The government policies during this era are then emphasized towards the development of agricultural sector as well as other industrial sectors that support agriculture.

Indonesian and region economic condition:

- Indonesian economy continues to be volatile. The economic crisis brings about declining purchasing power.
- Production output of industries decreases substantially as demand goes down drastically. Many of these industries can not stand surviving. This situation leads to significant unemployment and the number of people living below the poverty line rises.
- Considerable brain drains of professional labors occur due to the difficulty of finding suitable jobs at home.
- The unskilled and less educated Indonesian labors that go abroad also increase in number as the level of unemployment in Indonesia soars by the end of 1999.
- GDP falls considerably to below US\$ 500 as the Rupiah exchange rate continues to be weak.
- Regional economies in Asia are not fully recovered, but there come more attractive opportunities in Vietnam and Cambodia for foreign investments.
- Meanwhile, the central government continues to subsidize the local provincial governments in providing funds to finance labor-intensive projects.
- Troubles in the banking sectors cause the interest rate to remain high with very low or even negative economic growth.
- As Indonesia is re-categorized as underdeveloped country, it is expected that the country will receive grant /donation and soft loans from other countries with very low or even 0 % interest.

Local Infrastructure:

- There is a very minimum development in infrastructure as most parties emphasize in maintaining the existing ones.

Energy Policy, Pricing, Supply, and Demand:

- The use of oil as fuel does not increase, as substitute products such as coal begin to get wide public acceptance.
- The energy price worldwide tends to decline. As the government lowers the fuel subsidy, the price of coal looks cheaper.
- The export of fuel increases, not only because of declining domestic demand, but also due to its bringing about the country's highest export revenue.
- Domestic fuel demand and consumption decrease as more and more companies and industries are concerned with energy conservation.

Technology Development:

- The technology advancement reaches stagnancy in most areas as there are very limited amount of funds dedicated to R&D.
- The price of high technology equipment for energy conservation becomes almost unaffordable.

Environmental Issues on Energy:

- Decreasing awareness in environmental concerns due to non-selective usage of less expensive fuel.

4.5. Wind-tunneling Existing Strategies through Different Scenarios

As a preliminary exercise for preparing robust strategies to face different worlds described in scenarios, the existing strategies were initially tested through each scenario. When the strategy works fine in a scenario, a +1 score is given, whereas a -1 score is given when the strategy does not work, fails, or even results in a loss. When it results in neither profit nor loss, a zero (0) score is given.

Existing/past strategies on PT KONEBA's business component:	Scenario			
	1	2	3	4
Energy consultant and audit service: <ul style="list-style-type: none"> • Studies & surveys • Energy conservation: assistance in implementation • Training in energy management • Energy promotion and information services • Program implementation monitoring • Energy audit and feasibility study 	+1	-1	-1	0
Design, specify, procurement, and installation of energy saving equipment	+1	-1	-1	0
Environmental assessment for energy-related projects	+1	0	-1	0
Co-generation	0	0	-1	-1
Total Score	+3	-2	-4	-1

This exercise shows that the existing strategy would only give a good result in a world where the situation resembles Scenario-1. Had the world changed to a different scenario, PT KONEBA would have hardly survived. Therefore, a new set of robust strategies that will work in all or almost all of the scenarios must be prepared in order for PT KONEBA to survive in the changing business environments.

Chapter 5 Key Strategic Elements

Following the list of issues and concerns discussed in Chapter 3, the controllable ones were further classified into the portfolio group (related directly to revenue generation), and the support group (as the main compliment to the portfolio). The list is as follows:

Portfolio:

- Corporate Strategy
- People
- Marketing
- Organization & Management
- Projects

Supporting:

- HRD
- Finance
- Technology
- Environment
- Government relation

Chapter 6 Implications of Each Scenario, and Development of Related Strategies

For each scenario, a series of implications was determined as a result of the condition stated in it. The implications were focused on items related to the key strategic elements as described in Chapter 5. These implications were then followed up in the form of strategic actions that would be the most appropriate in each scenario.

6.1. Scenario-1 – Winds from Heaven (Angin Sorga)

- Government Policy: Favorable to PT KONEBA
- Indonesian Economy: Boom

6.1.1. Implications of Scenario-1

- Many business opportunities are available for PT KONEBA.
- More projects to run.
- The need for additional capital for PT KONEBA to expand the business.
- Increasing Government's share of investment.
- PT KONEBA becomes the Government's preferred partner.
- More lobbying towards the Government – Government relation becomes very important.
- Increasing needs for lobbying towards non-governmental customers.
- Increasing role of the personnel in the company.
- More training opportunities exist for the personnel.
- Increasing offer and scholarship for post graduate schools.
- Vivid, with more opportunities for opening branch offices, for diversification, as well as for joint venture.
- More certainties and accuracy in budgeting.
- Faster and easier transfer of new technology.
- More awareness towards clean environment – clean energy is preferred.

6.1.2. Strategies for Scenario-1

Key Strategic Elements	Strategy
Portfolio	
• Corporate Strategy	<ul style="list-style-type: none"> - Improve business orientation, including a review of mission, vision, and goals. - Highlight good relationships with the Government. - Increase Government's portion of equity and investment.
• Project	<ul style="list-style-type: none"> - Significantly improve multi-project management capability.
• Marketing	<ul style="list-style-type: none"> - Substantially improve marketing strategy. Provide best-in-class customer service, to the government bodies, as well as to non-government customers.
• People	<ul style="list-style-type: none"> - Substantially improve people professionalism to improve and boost company image. - Create a culture of using very pro-active approach amongst the personnel in working with customers, as well as the Government. - Improve rewards and penalty system to significantly enhance the employee morale.
• Organization & Management	<ul style="list-style-type: none"> - Prepare and implement a cohesive management and organization structure, having a market-oriented view, with a strong Government-relation capability. - More delegation of authority.

Key Strategic Elements	Strategy
Support	
• Finance	<ul style="list-style-type: none"> - Improve the budgeting and forecasting system and procedures, accommodating detailed bottom-up proposals, emphasizing more accuracy and certainties. - Prepare at least a 5-year long-range planning system.
• HR Development	<ul style="list-style-type: none"> - Use all possible opportunities for developing human resources. - Selective recruitment. - Strategic alliance in expertise and human resources.
• Government Relation	<ul style="list-style-type: none"> - Proactively work with the government on the proposals and improvements on policies regarding energy conservation, certifications, and standardization.

Key Strategic Elements	Strategy
• Technology	<ul style="list-style-type: none"> - Proactively seek acquire information on new technology in energy sectors by applying effective knowledge base and network system. - Proactively adopt and select new cost-effective technology in energy conservation and lead the implementation efforts for Government and customers. - Proactively form strategic alliances with local partners for technology competitiveness. - Improve the quality and capacity of working equipment in relation to the most recent technology. - Develop an R&D center within the company, or as a joint venture with other institutions.
• Environment	<ul style="list-style-type: none"> - Proactively work with Government on policies towards the use and standardization of environmentally friendly energy. - Play active role in environmental assessment of energy-related projects, including certifications, and standardization. - Work with customers in supporting government policies and assist customers with cost-effective solutions.

6.2. Scenario-2 – Swaying Coconut Leaves (Nyiur Melambai)

- **Government Policy: Unfavorable to PT KONEBA**
- **Indonesian Economy: Boom**

6.2.1. Implications for Scenario-2

- Business opportunities open widely.
- The market tends to be dynamic and challenging.
- Strong competition among companies, causing growing difficulties in winning the bid for a project.
- There are higher demands for quality products and services. Company image becomes very critical. Clear targets and goals become more and more important in order to set clear direction.
- There is a significantly growing degree of complexity which demands:
 - Highly motivated, qualified, and skillful personnel, with a 'can do' attitude,

- Professional and highly motivated sales people,
- Organization and management responsiveness to market needs,
- High quality project management,
- Attractive project financing.
- Fast progressing technology in energy conservation with a substantial growth in customer awareness towards the use of it.
- Growing awareness towards environmental issues.
- No formal relation with the government.

6.2.2. Strategies for Scenario-2

Key Strategic Elements	Strategy
Portfolio	
• Corporate Strategy	<ul style="list-style-type: none"> - Increase efficiency and productivity level. - Set up clear mission and vision, and communicate through all levels. - Improve company image through high quality product and services. - Set up alliance with other reputable companies.
• Project	<ul style="list-style-type: none"> - Pursue with appropriate project management in terms of schedule, quality, progress report, coordination and budgeting. - Seek project financing with attractive terms for customers.
• Marketing	<ul style="list-style-type: none"> - Provide quality product and services with competitive price. - Perform adequate market research. - Address the most profitable market segment. - Pursue with aggressive advertising and promotion. - Provide adequate budget for marketing force operation. - Search feedback from clients.
People	<ul style="list-style-type: none"> - Provide more empowerment to field people. - Set up motivational programs for sales people.
Organization & Management	<ul style="list-style-type: none"> - Set up organization with adequate level of flexibility that can support market needs. - Practice the right man on the right place policy. - Solicit good communication across all levels in the company. - Minimize internal bureaucracy.

Key Strategic Elements	Strategy
Support	
• Finance	- Establish alliances with financial institutions.
• HR Development	- Provide adequate training and education. - Proceed with quality hiring. - Provide motivating rewards system. - Set up appropriate career planning in place. - Set up clear job description and performance planning.
• Government Relation	- Approach government institutions emphasizing professionalism.
• Technology	- Emphasize use of equipment and methodology with current technology. - Promote technology awareness among the staffs. - Form alliance with leading technology companies.
• Environment	- Promote the use of environmentally friendly product and methodology. - Approach government bodies to participate in environmentally friendly energy programs.

6.3. Scenario-3 – Bleak Future (MaDeSu)

- **Government Policy: Unfavorable to PT KONEBA**
- **Indonesian Economy: Bust**

6.3.1. Implications for Scenario-3

- Business in some areas deteriorates.
- Relationship with warlords becomes critical.
- Workers deal with insecure and unsafe circumstances.
- Segregation of powers into many political parties, each focusing on its own vested interest.
- Cost leadership becomes critical.
- New investments do not look attractive enough due to social, political, and economical instability.

6.3.2. Strategies for Scenario-3

Key Strategic Elements	Strategy
Portfolio <ul style="list-style-type: none"> Corporate Strategy 	<ul style="list-style-type: none"> - Develop an efficient and highly productive organization by focusing on sales training, technical and other skill development training, and build technical superiority perceptions among energy conservation communities. - Drive out costs by reducing cost and organization size to a minimum level to increase flexibility. - Develop clear goal, objective and communicate with employee. - Remain low profile, and while maintaining neutrality by not associating with any political party or leader.
<ul style="list-style-type: none"> Project 	<ul style="list-style-type: none"> - Proceed with more appropriate management. - Focus more on benefited core competence, and on quick yielding, liquid projects. - Avoid working in multi-area projects.
<ul style="list-style-type: none"> Marketing 	<ul style="list-style-type: none"> - Develop a good alternative plan in difficult areas where business deteriorates. - Maintain training & services business segment. - Focus on export-oriented industries, agribusiness, and mining, as well as the quick yielding projects. - Avoid working in multi-area projects. - Maintain brand loyalty by keeping in touch with existing customers, and indulging in effective promotion, such as publishing articles, co-operative workshops, and superior competitive services. - Maintain competitive price level. - Increase service level by intensifying sales & marketing in the export-oriented industries – horizontally & vertically, through interesting incentives and effective promotion (special package for new clients). Also improving sales & marketing system through quick response to customer's need, and build customer satisfaction through after sales service (customer service), and customer approach (sales/marketing).
People	<ul style="list-style-type: none"> - Improve skills and professionalism. - Develop good safety and security plans for workers.

Key Strategic Elements	Strategy
<ul style="list-style-type: none"> Organization & Management 	<ul style="list-style-type: none"> Restructure the organization emphasizing on cost effectiveness and less hierarchy. Reduce organization size and cost to a minimum to increase flexibility.
Key Strategic Elements	Strategy
Support <ul style="list-style-type: none"> Finance 	<ul style="list-style-type: none"> Seek low cost funds. Pursue with properly controlled budgeting by involving key-personnel, and performing regular review. Minimize future capital investments, and procrastinate low priority projects as necessary.
<ul style="list-style-type: none"> HR Development 	<ul style="list-style-type: none"> Provide adequate training and formal education to improve professionalism. Retain quality personnel and release the mediocre and dead wood. Develop a transparent and attractive reward system and performance appraisal.
<ul style="list-style-type: none"> Government Relation 	<ul style="list-style-type: none"> Build cohesive relationships with local governments, but maintain neutrality by not associating with any political party.
<ul style="list-style-type: none"> Technology 	<ul style="list-style-type: none"> Put selected future investments by preventing high cost technology. Maximize the use of low-cost technology by the use of existing equipment through selective modifications.
<ul style="list-style-type: none"> Environment 	<ul style="list-style-type: none"> Intensify works on environmental issues (joint activity with other organizations).

6.4. Scenario-4 – La Niña

- Government Policy: Favorable to PT KONEBA
- Indonesian Economy: Bust

6.4.1. Implications for Scenario-4

- Capital investment halts and almost reaches zero increase.
- Energy conservation programs become highly dependent upon the government

regulations and decrees. However, number of projects in energy conservation grows quite moderately.

- Adaptability to current condition becomes critical.
- There is an increasing difficulty in setting up accurate budget as the funds are limited and projects are more difficult to ascertain.
- New technology is more difficult to adopt as it becomes less affordable.
- Number of environmental related projects decreases as public awareness in environmental issues worsens.

6.4.2. Strategies for Scenario-4

Key Strategic Elements	Strategy
Portfolio <ul style="list-style-type: none"> • Corporate Strategy 	<ul style="list-style-type: none"> - Develop a contingent long-range plan, as well as goals and objectives that are more accommodative and adaptable to the particular environment. - Nourish a conducive relationship with the government. - Increase cost-effectiveness in both operating and capital expenditures, and focus on most profit and quick-yielding projects. - Develop clear communication, both internal and external.
<ul style="list-style-type: none"> • Project 	<ul style="list-style-type: none"> - Significantly improve project management system and capability to maximize efficiency in possibly marginal profit. - Standardize procedures and system for handling the projects (proposals, contracts, reports, etc.)
<ul style="list-style-type: none"> • Marketing 	<ul style="list-style-type: none"> - Maintain, and if possible increase, good relations with customers, especially those of government-related bodies. - Assist the government in preparing Planned Project List (DIP = Daftar Isian Proyek).
<ul style="list-style-type: none"> • People 	<ul style="list-style-type: none"> - Improve cost and productivity consciousness among the staffs. - Develop highly pro-active staffs with sound professionalism, and create completed staff work culture. - Develop and implement an attractive reward system as well as a clearly-defined performance appraisal system that would enable selection of employees in case early termination is required.

Key Strategic Elements	Strategy
<ul style="list-style-type: none"> Organization & Management 	<ul style="list-style-type: none"> Restructure organization to match with the environment emphasizing cost efficiency, while catering good relationship with the government. Improve management system to be more efficient, open, and transparent.

Key Strategic Elements	Strategy
Support	
<ul style="list-style-type: none"> Finance 	<ul style="list-style-type: none"> Seek grants and soft loans for funding the projects. Carefully manage funds to maintain positive cash flow. Develop conservative forecasting and budgeting.
<ul style="list-style-type: none"> HR Development 	<ul style="list-style-type: none"> Develop in-house training programs for staffs that stress on the use of low-cost technology for energy conservation. Seek scholarships and joint activities with foreign bodies for personnel development.
<ul style="list-style-type: none"> Government Relation 	<ul style="list-style-type: none"> Maintain coherent relationship with the government. Intensify lobbying with the government to assure the alignment of energy policies.
<ul style="list-style-type: none"> Technology 	<ul style="list-style-type: none"> Continuously seek alternative and efficient technology while carefully select suitable low-cost technology to cater the low economy market. Maintain and maximize the use of existing equipment to minimize the need for capital investment in acquiring new equipment.
<ul style="list-style-type: none"> Environment 	<ul style="list-style-type: none"> Emphasize on the use of less expensive but proper technology and fuel, as selection criteria shift from an environmentally friendly issue to a cost conscious orientation.

Chapter 7 Defining Core and Contingent Strategies

Strategies in the four different scenarios were then reviewed to look for common elements, which would work in any scenario. These would later become core strategies. Some strategies that would only work in 1 or 2 scenarios were then listed as scenario-specific strategies. Several key strategic elements out of these scenario specific strategies were selected and put as contingent strategies.

7.1. Common Elements and Core Strategies

Common strategic elements are strategies that are robust and expected to excel in any scenario. These common actions should be taken in any case.

Corporate Strategy

- Develop an efficient and highly productive organization, emphasizing sales and technical forces.
- Build technical superiority perceptions among energy conservation communities.
- Improve business consciousness, by conducting a review on mission, vision and goals and communicate to all level.
- Prioritize on most profitable and quick-yielding projects.

Marketing

- Provide best-in-class customer service encompassing pre- and post-sales by:
 - Being responsive to customer's need,
 - Delivering quality products & services at competitive price,
 - Maintaining brand loyalty.
- Stay competitive in the market by:
 - Continuously conducting necessary market research,
 - Searching feedback from clients,
 - Providing adequate sales & marketing budget.

Project

- Improve project management system and capability to maximize efficiency by:
 - Standardizing procedures,

- Improving capability in managing multi-projects.
- Proactively seek project financing with attractive terms for customers

Organizations & Management

- Restructure the organization using project based approach, and key account coverage.
- Minimize internal bureaucracy, proceed with more delegation of authority and improve management style to be more open and transparent.
- Build excellent networking with both national and international organizations.

People

- Substantially improve professionalism; including enhancement in cost and productivity consciousness, motivation, and pro-activity.
- Create completed-staff-work culture.
- Implement performance appraisal and attractive reward system.
- Adopt 'The right man on the right place' approach.

Finance

- Maintain positive cash-flow and substantial net-income.
- Improve the budgeting and forecasting system and procedures, accommodating detailed bottom-up proposals and enforcing accountability.
- Generate long-range plan (3-5 years).
- Establish alliances with financial institution for projects financing.

HR Development

- Provide opportunities for adequate training or formal education.
- Set up a transparent & motivating reward system as well clearly define performance appraisal system.
- Set up clear career planning and job analysis.
- Perform quality hiring, retain quality personnel, and release non-performers.
- Set up strategic alliances in expertise and human resource with well-recognized institutions.

Technology

- Proactively seek and acquire information on new technology in energy conservation and apply an effective knowledge base.
- Select and adopt new cost-effective technology in energy conservation and lead

the implementation effort with customers.

- Set up alliances with leading technology companies in energy conservation area.

Environment

- Proactively work with related institutions on policies towards the use and standardization of environmentally-friendly energy.
- Play active role in environmental assessment of energy-related projects, including the certifications and standardization.

Government Relation

- Maintain a good relationship with government institutions and intensify lobbying to ensure the alignment of energy policies.

7.2. Selectively Detailed Core Strategies

Several points in the core strategies were perceived to need more detailed elaboration. Detailed explanations of these selected strategies comprise of key tactic points.

- Develop an efficient and highly productive organization, emphasizing sales and technical forces.
 - As people are the most valuable assets for PT KONEBA being a service oriented company, their ability and skills are very crucial to the success of PT KONEBA. Training and education are ways of improving skills and professionalism of PT KONEBA staffs. By doing this it is expected that PT KONEBA can gain a better perception among the energy conservation communities.
- Improve business consciousness, by conducting a review on mission, vision and goals and communicate them to all levels.
 - Mission, vision and goals are very critical items, and need to be communicated to all levels in the company. By setting aligned mission, vision and goals PT KONEBA will be able to clearly identify their destination and verify their position in order to develop and implement the right strategy.
- Provide best-in-class customer service encompassing pre- and post-sales activities.

- During pre-sales period the following traits should be stressed out:
 - ✓ Being responsive, having positive attitude,
 - ✓ Being proactive, professional and skillful, and
 - ✓ Understanding the needs and wants of the clients.
- During post-sales period the following traits should be stressed out:
 - ✓ Seeking feedback from the clients, and
 - ✓ Providing good post-sales service.
- Maintain brand loyalty through:
 - Advertising, and article writings,
 - Public relation,
 - Seminars and workshops,
 - Sponsorship to events related to energy conservation, and
 - Launching customer retention programs.
- Stay competitive in the market by:
 - Continuously conducting necessary market research,
 - Providing adequate sales and marketing budget,
 - Increasing service level to clients,
 - Intensifying sales and marketing activities horizontally and vertically, and
 - Setting up alliances with reputable institutions and enterprises.
- Improve project management system and capability to maximize efficiency by:
 - Improving project management skills of field people,
 - Institutionalizing project reporting system and procedures internally.
- Restructure the organization using project based approach and key account coverage
- Minimize internal bureaucracy and proceed with more delegation of authority.
- Improve management style to be more open and transparent.
- Build excellent networking with national and international organizations.
 - Apply membership to national and international energy conservation associations.
 - Build alliances with reputable energy conservation consultant companies.
- Perform quality hiring, retain quality personnel, and release non-performers.
 - Develop a selective hiring system emphasizing on quality of the applicants and to retain qualified people, an attractive rewards system should be in place. The non-performers should be released in order to improve people

productivity.

- Improve the budgeting and forecasting system and procedures, accommodating detailed bottom-up proposal and enforcing accountability.
- Select and adopt new cost-effective technology in energy conservation and lead the implementation effort with customers.
- Maintain a good relationship with government institutions and intensify lobbying to ensure the alignment of energy policies in line with PT KONEBA strategy.

7.3. Scenario-Specific Strategies

Another list was made of actions that were desirable in one or two cases but would be undesirable in the others. This list provides contradictory elements of strategies.

Scenario-1 – Winds from Heaven (Angin Surga)

- Nourish a conducive relationship with the Government, through:
 - Increasing Government's portion of equity and investment, and
 - Restructuring organization to cater good relationship with the government.

Scenario-2 – Swaying Coconut Leaves (Nyiur Melambai)

- Increase competitiveness.

Scenario-3 – Bleak Future (MaDeSu)

- Reduce cost and organization size to a minimum level.
- Remain low profile, and maintain neutrality by not associating with any political or leader.
- Focus on export-oriented industries (such as agribusiness and mining) and quick return projects.
- Avoid working in multi-area projects.
- Develop good safety and security plans for workers.
- Minimize future capital investment, and procrastinate low priority projects as necessary.
- Seek grants and soft loans for funding the projects.
- Develop conservative forecasting and budgeting.
- Make selected future investments by preventing high cost technology.
- Continuously seek alternative and efficient technology while carefully select suitable low-cost technology to cater the low economy market.

- Maintain and maximize the use of existing equipment to minimize the need for capital investment in acquiring new equipment.
- Emphasize on the use of less expensive but proper technology and fuel, as selection criteria shift from an environmentally-friendly issue to a cost conscious orientation.

Scenario-4 – La Niña

- Reduce cost and organization size to a minimum level.
- Nourish a conducive relationship with the Government through:
 - Aligning organization to cater relationship with government,
 - Increasing Government's portion of equity and investment,
 - Maintaining good relationship with government-related customers,
 - Assisting Government in preparing Planned Project List (DIP)
- Focus on export-oriented industries (such as agribusiness and mining) and quick return projects.
- Avoid working in multi-area projects.
- Develop good safety and security plans for workers.
- Minimize future capital investment, and postpone low priority projects as necessary.
- Seek grants and soft loans for funding the projects.
- Develop conservative forecasting and budgeting.
- Make selected future investments by preventing high cost technology.
- Continuously seek alternative and efficient technology while carefully select suitable low-cost technology to cater the low economy market.
- Maintain and maximize the use of existing equipment to minimize the need for capital investment in acquiring new equipment.
- Emphasize on the use of less expensive but proper technology and fuel, as selection criteria shift from an environmentally-friendly issue to a cost conscious orientation.

7.4. Contingent Strategies

The factors in the contradictory element list clearly cannot all be carried out at once. This highlights how scenarios can ultimately be used in the process of creating a strategy that involves discrete decisions. One cannot be in both a divestiture and acquisition mode for assets at the same time. Nor can a company

decide that it will spend a lot and a little on exploration. In fact, a strategy will be chosen that is largely oriented towards a certain view of the future.

What scenarios are meant to do is to make the decision-maker aware that the world could very quickly turn out to be different than expected. The consequences of this should be considered in advance through the use of the scenarios. So, for instance, PT KONEBA may be in a mode of building a competitive organization but it should simultaneously have a good plan to reverse that mode by reducing the size of the organization on very short notice if the early warning signals clearly indicate that the world is about to change.

Things to consider when contingency occurs:

- Generate a contingent long-range plan, as well as goals and objectives that are more accommodative and adaptable to the particular environment. Develop conservative forecasting and budgeting.
- Develop sustainable alternative plan in difficult areas where business deteriorates.
- Reduce organization size and cost to a minimum to increase flexibility.
- Focus on export-oriented industries such as agribusiness, and mining as well as the quick yielding projects.
- Avoid working in multi area projects with high complexity.
- Minimize future capital investment and postpone performing low priority projects as necessary and invest in selected areas with low technology cost.
- Maintain and maximize the use of existing equipment to minimize the need for capital investment in acquiring new equipment.

Chapter 8 Early Warning Intelligence

Early warning intelligence is an activity of primarily monitoring the early warning indicators, the signs in the environment that point to the possible futures described in the four scenarios. If effectively monitored by PT KONEBA, early indicators can play a vital role in creating an on going strategic conversation and enable a longer-term use of the scenario results. Moreover, careful monitoring of early indicators can provide PT KONEBA with a source of competitive advantage. A lead time of even six months in understanding the implications of a crucial development can make all the difference.

The best indicators are not necessarily the most obvious ones, things that appear in a newspaper headline or in a business magazine. By then it is probably too late — evidence that one is already in that given scenario without much warning at all. Instead, the best indicators are ones that think well ahead of developments and identify the little signs of big changes on the horizon.

Finding a useful set of early indicators is an art rather than a mechanical process, requiring a thorough understanding of the underlying core logics, assumptions, big changes and turning points in each of the scenarios. Based on the matrix and scenarios, the following items are a suggested set of indicators for PT KONEBA. It is important to keep the list down to a manageable number, so that we recommend approximately 8 items per axis. Otherwise, this process tends to overwhelm the monitors. Once PT KONEBA scenario team agree on what to monitor, these early warning indicators should be revised and updated on a periodic and continuous basis.

Government Policy Axis

- Political parties in power: changes of political parties in-power impact the government policies imposed, which in turn influence the macro economic condition.
- Leadership power-plays: rhetoric and activities of ABRI, religious groups, political parties.
- Changes in government institution under which PT KONEBA belongs.
- Withdrawal of fuel subsidy: gradually or at once.

- Fuel price changes: globally and nationally.
- Changes in government regulation regarding environmental issues.
- Social attitudes and unrest: number and location of social disturbances, opinions of the 'man on the street', activity of on-line discussions at the fringe, the content of underground newspapers.
- Attitudes towards foreign investment: welcoming gestures and incentives or increased barriers, changes in the rule of the games.

National Economy Axis

- Misery index: distribution of wealth, availability of food, number of homeless, health and disease, unemployment rate.
- Banking sector reform: evidence of increased transparency and credibility.
- Interest rate and inflation rate fluctuation.
- Rupiah exchange rate fluctuation.
- GNP and CPI (Consumer Price Index): the figures and the changes.
- Trade balance and foreign reserves.
- Key regional organizations: ASEAN, APEC, AFTA (Asian Free Trade Association), and their changes in policy.
- National energy demand: rising or falling; increased protectionism or liberalization.
- Infrastructure development: property, public utilities, etc.

Chapter 9 Conclusion and Strategic Recommendations

9.1. Conclusion

Our study and analyses finally lead to the following conclusions:

1. Based on the results of short surveys that we did through a series of interviews with Managers of PT KONEBA, as well as several previous and existing customers, following is a list of key issues and concerns summarized from chapter 4, where PT KONEBA needs to enhance:
 - Well defined and properly communicated company strategy, mission and vision, goals and objectives,
 - Existence of clear empowerment, reward system, and performance appraisals for employees, especially marketing staffs,
 - Sufficient delegation of authority to the right staffs,
 - Company image and awareness in the market, competitiveness, customer satisfaction, and aggressive sales and marketing,
 - Under-utilized marketing force, and less apparent advertising and promotion as tools to boost marketing,
 - High dependency on government institutions in terms of marketing its products and services,
 - Productivity and professionalism among the staffs, including organization and management effectiveness, technical skills, and efficient project management,
 - Sufficient budget allocation for effective operations, sales and marketing, as well as for future expansion,
 - Accurate planning and budgeting, with continuous financial performance measurement and review,
 - Well defined internal policies and procedures for project handling and reporting, and
 - Sustained low energy price and continuous government subsidy, which hindered energy conservation awareness.
2. We noticed that PT KONEBA has the following strengths:
 - PT KONEBA is the only state owned enterprise (BUMN) providing energy

conservation services and consequently getting some favorable treatment and privileges from the government.

- PT KONEBA has quite a number of relatively experienced people to perform low and medium complexity of the services offered.

Based on the two strength points that PT KONEBA has at this moment, we concluded that:

- PT KONEBA should be able to get privileges in providing service to other state-owned companies, forming strategic alliances with other state-owned service institutions, companies, and contractors, and working on financing agreements with many state-owned financial institutions, such as national banks.
- There is a chance for the company to expand or shift the business through a related-type diversification, especially when the current businesses do not generate profits because of the environment condition.

3. In building the scenarios, a 12-year timeframe, from 1999 to 2010, was chosen to perform the analysis and prepare the corresponding strategies. A set of focus questions was also prepared to give directions in analyzing the issues and preparing the robust strategies for PT KONEBA to survive in the future business environment. Two key driving forces were elected as the primary drivers to the success of the business of PT KONEBA, i.e. Indonesian economic condition, and the Indonesian government policies in favor of PT KONEBA. A matrix was formed based on these two key driving forces, resulting in 4 different scenarios, called:

- Scenario-1, characterized by booming Indonesian economy and favorable government policy to the business of PT KONEBA, where the environment is so favorable for PT KONEBA,
- Scenario-2, characterized by booming Indonesian economy and unfavorable government policy towards the business of PT KONEBA, where the environment is so intense in competition, both in market and resources,
- Scenario-3, characterized by busting Indonesian economy and unfavorable government policy towards the business of PT KONEBA, where the environment is extremely difficult for PT KONEBA, as well as other industries to survive, and
- Scenario-4, characterized by busting Indonesian economy and favorable

government policy towards the business of PT KONEBA, where the environment is considered half done for PT KONEBA to succeed in the business.

4. The wind-tunneling exercise, conducted after the completion of scenario building, showed that PT KONEBA would only be able to survive in the market using the existing strategy and resources if the condition persists as stated in scenario-1.
5. Based on the exercises in preparing the core strategies of PT KONEBA that would work in the four scenarios, we concluded that emphasis should be given to the following items:
 - Corporate strategy,
 - Sales and marketing,
 - People and human resources development,
 - Organization and management,
 - Project and financial management, including budgeting and long range planning, and
 - Technology acquisition.
6. As the environment condition changes from time to time, the scenario also shifts from one to another. Several contingent strategies were prepared to cope with specific situations entitled to a certain scenario, as described in chapter 7.

To anticipate the changes in the environment and act as early as possible, a set of key early warning indicators were listed in chapter 8, covering the two key driving forces. Continuous monitoring of the early warning indicators and taking early action against the changes will become a key factor for the success of scenario planning implementation.

9.2. Strategic Recommendations

Based on the analyses and with reference to the above conclusion, followings are the key strategic recommendations.

Corporate strategy:

Clearly defined corporate strategy, mission, vision, goal and objectives are crucial matters that need to be addressed, re-visited and updated, as well as communicated openly to all employees. These series of actions are applicable for all scenarios.

As mentioned in the conclusion, a business-related type diversification is recommended as a temporary (or probably permanent) shift in times when the existing businesses do not generate profits. Examples of business diversification suitable for the scenarios with bad economic situation include:

- Conducting maintenance of energy related equipment in the customers' plant to keep the equipment in good condition while the system is not utilized due to long shutdown.
- Starting an 'energy equipment salvage and trade-in program' by seeking the buyers and sellers of the unused equipment. In times of economic difficulty, companies that are still alive will look for quality second-hand alternatives when acquiring equipment for either their new short-term investment or maintenance programs. On the other hand, several companies can no longer survive in this environment and would like to trade some of their valuable energy-related equipment and instrument for cash.
- Selling a turn-key package of 'combined energy saving and security monitoring' system using less expensive technology. During this time of economic difficulty, both energy cost and security becomes a big concern for small to middle class businesses, such as those operating staple food storage or shops, shrimp and fish ponds, and many others. A simple system may be fabricated utilizing older versions of personal computers, which are relatively affordable at this time.
- Forming an alliance with certain institutions (including non-governmental organizations) to seek funds and work on critical public utility projects in

rural areas, including the building of low technology water turbines for generating electricity.

Sales and Marketing:

Sales and marketing is one of the most important fields in the success of PT KONEBA's business operation that requires significant enhancements. The main points cover customer satisfaction, company awareness and brand loyalty, as well as competitiveness.

Attention should greatly be paid to customer satisfaction as one of the important key success factors for PT KONEBA. To earn a favorable customer satisfaction several remedies are recommended:

- Improve professionalism of the marketing force and the technical staffs in particular and all other supporting staffs in general, and
- Provide best-in-class customer service encompassing pre- and post-sales activities.

The above two points may only work successfully if sufficient rewards are clearly tied to individual performance, which should finally become official measures in appraising staffs business success.

During pre-sales period, the following traits should be stressed out:

- Being responsive, having positive attitude,
- Proactive, professional and skilful, and
- Understanding the needs and wants of the clients.

During post-sales period, the following traits should be stressed out:

- Seek continuous feedback from the clients, and
- Provide good post-sales service.

PT KONEBA should develop sufficient company awareness and maintain brand loyalty through:

- Aggressive advertising in different energy-related media,
- Published articles in various technical and energy magazines,
- Intensified public relation,
- Active participation in energy related seminars and workshops,
- Sponsorship to events related to energy conservation, and
- Launch customer retention programs.

Besides, whenever possible, it is recommended to change the company name to something more easily recognized, energy-sound, and more global, as the current business tendency is towards globalization. Followings are several suggestions, only to give some illustrations on the idea:

- EnerCon (stands for Energy Conservation),
- Energia Integrita (stands for Energy Integration).

In order to be competitive in the market there are several actions that PT KONEBA should consider to take, such as:

- Continuously conducting necessary market research,
- Setting up and continuously doing the competitor intelligence analysis,
- Providing adequate sales and marketing budget,
- Increasing service level to clients,
- Intensifying sales and marketing activities horizontally and vertically, and
- Setting up alliances with reputable institutions and enterprises.

In time of economic difficulties while government preference is still enjoyed by PT KONEBA, a pro-active networking and alliance with other state-owned companies or institutions would become crucial. Meanwhile, customer emphasis shall be based on the implications of the scenario conditions of the environment. As mentioned in Corporate Strategy part, several concerns arise as a result of the economic difficulty, such as:

- Customers' looking for alternative maintenance and short term investment solutions, and
- Growing concerns on security.

Therefore, marketing efforts shall be focused temporarily on giving solutions to those concerns as part of being responsive to customer needs.

People and human resources development:

People are the most valuable asset for PT KONEBA as a service-oriented company. Quality hiring is necessary in order to get qualified human resources. Existing qualified personnel should be retained through a series of attractive reward system. On the other hand, releasing non-performers is regarded as unavoidable in order to maintain or improve productivity.

Organization and management:

Considering the existing organization structure that lacks of agility in order to serve the market, it is recommended that PT KONEBA restructure the organization using project-based approach and key account coverage.

The recommended project based organization is established on a project base, where an experienced person should take the lead in a project team. The project basically drives the organization type and its staffing, where the each organization team consists of members coming from different background who are assigned with their respective responsibilities and accountabilities. In this matrix type of organization, functionally a person has a dotted reporting line to a project leader, while structurally he or she also reports to a career manager.

Key accounts coverage should also be taken into great consideration by assigning somebody accountable for a certain group of similar account(s). This practice will improve the special technical skills and capabilities of a person since he or she will be dealing with the same tasks and area of expertise.

In general, PT KONEBA should develop an efficient and highly productive project-based and key account organizations, emphasizing sales and technical forces. In addition, internal bureaucracy should be minimized, and delegation of authority should be encouraged as necessary to increase productivity.

Project and financial management:

As summarized in the Core Strategy section of Chapter 7, several steps need to be taken to improve the effectiveness and efficiency of the project and financial management system. Followings are key points for the recommendations:

In order to provide attractive project financing it is advisable to set up alliances with financial institutions. Alliances with state-owned financial institutions (such as banks, etc.) should be started out immediately.

To maximize efficiency in handling the projects, several measures should be

done to improve project management system and capability. These include efforts to substantially improve management skills of the field personnel, and institutionalize internal reporting systems and procedures.

In terms of prioritizing projects we believe that emphasis should be given to the most profitable and quick yielding projects.

Appropriate budgeting and long-range planning (LRP) shall be conducted every fiscal year. The budget and LRP shall be closely tied into the performance contract agreements so that the person will be held accountable for the proposed and approved budget and LRP.

Technology acquisitions:

Technical superiority perception among the energy conservation communities is also something that PT KONEBA should be aiming at. This includes acquisition, selection, and adoption of new cost-effective technology in energy conservation through pro-active knowledge base update, and follow up with initiatives for implementing the efforts with the customers.

Early warning intelligence:

As mentioned in the conclusion, the success of implementing the scenario-based planning technique relies on the commitment of PT KONEBA in pursuing with the early warning intelligence program. It is recommended that PT KONEBA assign a team of staffs to consistently and continuously perform this early warning intelligence program, using parameters described in chapter 8. Various sources of information should be used to get the idea of what has happened as early as possible.

The following actions are recommended to be used in conducting the program:

- Setting up a knowledge base system that is programmed to give analytical output of the changing parameters,
- Conducting regular meeting among the intelligence team, and with Management to discuss the situation and be prepared for the next actions.

References

1. Badan Koordinasi Energi Nasional (BAKOREN), Rencana Induk Konservasi Energi Nasional (RIKEN), 1st edition, Tim Tetap Konservasi Energi Nasional, 1995
2. Fahey, Liam and Randal, Robert M., "Learning from The Future – Competitive Foresight Scenarios", John Willey & Sons, Inc., 1998
3. Glass, Harold E., "Handbook of Business Strategy", 2nd edition, Warren, Gorham & Lamont, 1991
4. Goold, Michael and Campbell, Andrew and Alexander, Marcus, "Corporate Level Strategy – Creating Value in the Multi Business Company", John Willey & Sons, Inc., 1994
5. Kotter, John P., "Leading Change", Harvard Business School Press, 1996
6. Porter, Michael E., "Competitive Strategy - Techniques for Analyzing Industries and Competitors", A Division of Macmillan Publishing Co., Inc., 1980
7. The Economist Intelligence Unit, Country Report 'Indonesia' 3rd quarter 1998
8. The Energy Data and Modeling Center, "Handbook of Energy & Economic Statistics in Japan", The Energy Conservation Center, 1998
9. Rumsey, Peter and Flanigan, Ted, Asian Energy Efficiency Success Stories, GEEI/Publications, 1995
10. Van der Heijden, Kees, "Scenarios : The Art of Strategic Conversation", John Wiley & Sons Inc., 1996
11. Website : <http://www.iiec.org/pubs/7.html>

Exhibits

1. PT KONEBA Balance Sheet, 1993 – 1998
2. PT KONEBA Income Statement, 1993 – 1998
3. Introduction to Scenario Planning for Developing Strategies of PT KONEBA
4. PT KONEBA Scenario Planning Team
5. PT KONEBA Scenario Planning Workshop Programs

PT. KONEBA (Persero)
Balance Sheet 1993 - 1998

	1993		1994		1995		1996		1997		1998
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
Assets											
Current Assets	4,431,435	3,444,088	7,881,627	5,803,356	8,162,792	6,493,593	9,050,020	5,890,128	5,786,006	6,061,274	5,241,393
Fixed Assets	219,882	177,184	364,616	382,827	440,783	458,948	455,297	436,649	449,728	385,957	6,637,635
Other Assets	469,252	2,419,264	391,044	349,387	529,146	284,007	592,126	358,780	690,288	730,071	92,878
Total Assets	5,120,569	6,040,536	8,637,287	6,535,570	9,132,721	7,236,548	10,097,453	6,685,557	6,926,022	7,177,302	11,971,906
Liabilities & Equity											
Current Liabilities	129,714	888,787	130,357	1,276,955	103,457	1,466,863	277,331	957,011	897,872	958,172	251,702
Long Term Liabilities	-	-	-	-	-	-	-	-	-	-	-
Total Liabilities	129,714	888,787	130,357	1,276,955	103,457	1,466,863	277,331	957,011	897,872	958,172	251,702
Equity											
Share Capital	5,657,845	5,600,000	9,157,945	5,600,000	9,100,000	5,600,000	9,100,000	5,600,000	5,600,000	5,600,000	11,300,000
Retained Earnings	-	-	-	-	-	-	-	-	-	-	-
Other Equity	(666,990)	(448,251)	(671,585)	(448,251)	(437,311)	(341,385)	99,091	84,907	157,977	128,545	152,104
Total Equity	(666,990)	(448,251)	(671,585)	(448,251)	(437,311)	(341,385)	99,091	84,907	157,977	128,545	152,104
Total Liabilities & Equity	5,120,569	6,040,536	8,637,287	6,535,570	9,132,721	7,236,548	10,097,453	6,685,558	6,926,022	7,177,302	11,971,906

PT. KONEBA (Persero)

Income Statement 1993 - 1998

	1993		1994		1995		1996		1997		1998
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
Revenue	1,185,983	1,144,066	4,114,000	2,339,923	5,249,296	3,139,301	4,582,883	2,564,083	3,620,300	2,285,785	4,607,062
Cost of Sales	573,902	573,873	2,618,072	1,334,418	3,240,055	1,523,291	2,050,650	1,344,277	1,555,464	1,422,366	2,259,410
Gross Profit	1,318,411	1,132,050	1,478,810	1,288,269	1,557,338	1,368,564	1,804,083	1,541,891	1,764,298	1,268,267	1,973,924
Operating Expenses	82,452	73,309	118,240	77,062	135,441	113,772	219,742	131,809	187,571	133,144	201,469
Operating Income	78,208	69,887	78,208	69,887	69,887	69,887	137,377	69,877	92,794	69,877	69,877
Other Income	2,052,873	1,849,219	4,293,330	2,769,627	5,002,721	3,075,504	4,211,852	3,087,854	3,600,127	2,893,654	4,504,680
Income Before Tax	(866,990)	(705,153)	(179,330)	(429,704)	246,575	63,797	371,031	(523,771)	20,173	(607,869)	102,382
Income Tax	200,000	256,902	200,000	536,570	120,000	447,273	250,000	598,843	250,000	1,183,274	350,000
Net Income	(666,990)	(448,251)	20,670	106,866	366,575	511,070	621,031	75,072	270,173	575,405	452,382
Other Income	-	-	-	-	-	-	-	31,432	-	84,820	184,282
Total Net Income	(666,990)	(448,251)	20,670	106,866	366,575	511,070	621,031	43,640	270,173	490,585	268,100

Exhibit 3

Introduction to Scenario Planning for Developing Strategies of PT KONEBA

Most organizations have a success formula, a core strategy that enhances or maintains their competitive position. But will the formula work in various possible future environment? Scenarios can be used to test the current formula and derive contingent strategies. In the concluding section of the chapter, a number of specialized uses of scenarios are also briefly described.

Though future sight is usually murky in most industries at most times, conventional strategic-planning techniques implicitly assume that the future is governed by some sort of success equation that is knowable. Most companies' success equation or formula was pursued with a single-minded focus. When the times are right, such equations seem to be as unchangeable.

Even when the good times begin to go bad, most executives do not consider a variety of alternative futures. Instead, challenges to assumptions in the plan typically result in the organization modifying just one or two of the variables in its time-honored equation. As a result, many companies have floundered in the past 20 years when they were not prepared for disruptions in the fundamental cause-and-effect relationships of their business.

One problem is that conventional strategy techniques are so rigid that they do not permit the exercise of intuition or useful speculation. They do not pose the penetrating question, in what alternative future business environments could the organization's old model for success be irrelevant. They do not ask, what alternative futures might come to be and how might they evolve.

Since the conventional approaches to strategy are too limiting, the scenarios will help and treat the future as a boundary issue by systematically identifying the range of uncertainty in the broad factors that will define the business environment in which an organization will have to operate. The scenarios help managers to rehearse a variety of futures, so that when new conditions that are included in one of the scenarios comes to pass, they will be able to react more nimbly than their competitors. Alternative scenarios provide a tool to probe a number of plausible futures and to test combinations of factors that could be important. When prepared well, a group of scenarios will cover the full range of issues that could threaten or open opportunities for a firm.

By using a set of different scenarios, managers can create a range of virtual business environments to test their current and potential strategies. When the goal is to create competitive advantage, the role of scenarios is to increase the relevance of a strategy. The scenarios include the full range of threats and opportunities that may be encountered as events combine to change the future in unsuspected ways.

Scenarios are structured specifically to probe areas of uncertainty. They provide an excellent testing ground for strategies in a broad range of possible situations, so those that prove to be robust – that is successful in widely different circumstances – can be quickly implemented with greater confidence. Moreover, managers are not easily surprised by dramatic turnarounds in their markets because they have “lived” in a number of such situations during the scenario exercises.

Process of Building Scenarios to Develop Strategies

The process of building scenarios used here has the main objective of developing robust strategies for PT KONEBA. The process is designed to produce a highly customized, macro-level backdrops for strategic visioning and planning. The process basically includes the following steps:

- 1) Exploring Strategic Focus Questions
- 2) Identifying Business Issues and Concerns
- 3) Classifying Uncontrollable Issues (or Uncertainties)
- 4) Prioritizing Two Most Leveraging as Primary Key Drivers for Scenario Matrix
- 5) Using the Remaining as Secondary Key Drivers for Additional Uncertainties or Parts of Key Strategic Elements
- 6) Using the Controllable Issues as part of Key Strategic Element
- 7) Building Scenarios
- 8) Analyzing the Implications of the Scenarios to the Key Strategic Elements
- 9) Developing Scenario-Specific Strategies
- 10) Defining Robust Core Strategies
- 11) Defining Contingency Elements
- 12) Preparing Early Warning Intelligence and Monitoring Plan

Exploring Strategic Focus Questions

In delineating the scope of the project, we determined that there were four defining issues to consider. The project should:

- Deal explicitly and effectively with the full range of uncertainty in the long-term future,
- Take account of future corporate, competitive, and technological conditions,
- Be compatible with existing planning and management culture, and
- Be capable of developing a range of plausible technology strategy options.

With these issues in mind, we framed the decision-focus questions. This listing then led us to identify key decision factors that the scenarios would have to address and project trends for.

Identifying Business Issues and Concerns

The first step is to identify on which strategic decision and the issues should provide the focus for the scenarios. This crucial task establishes the scenario process as a means to help executives make better strategic decisions. Also, by specifying which decisions are to be made, it effectively links the scenarios to specific planning needs. By aiming the scenarios toward making one or two specific decisions, you can prevent the process from straying off into overly broad generalizations about the future of society or global economy.

Usually, the right decisions on which to focus the scenarios are strategic rather than tactical. This is because scenarios deal more with longer-term trends and uncertainties (often with a 5- to 10-year time horizon) rather than shorter-term developments.

Classifying Uncontrollable Issues (or Uncertainties)

- Prioritizing Two Most Leveraging as Primary Key Drivers for Scenario Matrix
- Using the Remaining as Secondary Key Drivers for Additional Uncertainties or Parts of Key Strategic Elements

Building Scenarios

The scenario team collects the basic data from which the new scenarios are constructed, and the structure is put into these by clustering and categorizing, and by a search for trends and underlying causal structure. The next step is to create a limited number of scenarios in which the insights gained can be reflected. The purpose is to develop a number of internally consistent story lines, which project as much as possible of the learning obtained in the project.

Building individual scenarios proceeds through the following four stages:

- Develop a complete list of drivers that will be treated in the scenarios
- Analyze the interrelationship among the drivers
- Find dimensions that embrace the areas of greatest uncertainty so that the scenarios can be spread over the broadest plausible range
- Write the scenarios

A group of managers can quickly develop individual drivers of success for the company. The intent is to generate a listing of individual drivers without specific reference to their interrelationships or relative importance in explaining any particular change. These individual drivers emerge as managers and others identify the forces they believe are important in the current environment or that might change it in the future.

The scenario team then explores the interrelationships among the individual drivers and identifies groups that cluster around common themes. It requires much iteration before a small number of themes can be found that includes all of the most important drivers. It will be more helpful if people representing several disciplines, such as economics, political science, and some relevant field of technology, are represented on the team. These are used to define the broad characteristics of the future business environments that could occur, and then to select the four or five that will include among them the broadest set of challenges.

Analyzing the Implications of the Scenarios to the Key Strategic Elements

This exercise enables decision-makers to turn scenarios into strategy. The

scenarios is being analyzed in detail and the following fundamental questions will be raised:

- What are the strategic implications of the scenarios for the particular decision selected at the outset of this process? and,
- What options do the scenarios suggest to us?

The development of an effective robust strategy requires far more than scenarios. Other elements are a strategic vision, goals and objectives, competitive analysis, and assessment of core competencies, to name a few. In this process some initial and valuable strategic insights can be developed. The needs of each organization for strategic insights will differ somewhat.

Developing Scenario-Specific Strategies

At the end of the process in developing strategy of scenarios, there will be as many sets of strategies as there are scenarios. There will inevitably be areas of overlap across the sets, but there will also be areas of striking difference.

For each scenario, implications are assembled to develop strategies that are specific to the circumstances and conditions in each scenario world. It is essential, that a policy-level executive lead each team to assure ownership of the strategies. The team can include managers from the various functions, such as planning, sales, marketing, engineering/technology, and finance that would usually contribute to strategy. It is helpful if the team members have some participation in the selection and preparation of the scenarios. Each of these groups develops a set of strategies that would optimize results if their world actually occurred.

By assigning separate teams to each scenario, their focus is kept to creating a strategy to maximize the benefit to their organization, given that scenario.

Defining Robust Core Strategies

The central challenge is to identify a set of core strategies that are considered robust ones, suitable for a wide variety of possible futures-that contribute to competitive advantage. All the strategies are tested in each world to ascertain which will work in the full variety of business environments. Strategies from each

scenario world are inserted into the rest of the worlds to see if they are appropriate in other situations; or if, though required to respond to peculiarities of one world, they would be inappropriate or even damaging in other situations.

Defining Contingency Elements

More than the core strategy is required to run the business, a lesson that can sometimes become painfully clear when the business environment changes suddenly. Scenarios help companies think the unthinkable, and prepare contingency plans so respond.

The core strategy is only about half of what is needed to success; contingent strategies will also be necessary to deal with specific challenges.

Preparing Early Warning Intelligence and Monitoring Plan

Once a contingent strategy has been developed, it is important to know when to use them. If the company has a business intelligence capability, early warning triggers should be a focus of some of their external environment scanning and monitoring programs. The early warning triggers must be tied to the appropriate contingent strategies. An early watch program was necessary to assure a quick response to conditions that would imperil the investments.

Exhibit 4 PT KONEBA Scenario Planning Team

Group 1: Ir. Rabindra Siregar (Group Leader)
Ir. Raffles
Ir. Dicky Edwin Hindarto
Dra. Endah Solihah
Ir. Fritson Tinambunan

with Nasir Advani and Russel Tambunan from IPMI as facilitators for Scenario-2.

Group 2: Ir. Paulus Pulungan (Group Leader)
H. Achmad Fardie, BBA
Ir. Budi Arni Marbun
Ir. Iwan Rustandi
Ir. Gunawan Wibisono

with Muhamad Ismala and Anni Tan from IPMI as facilitators for Scenario-3.

Group 3: Ir. Magda Tumbol (Group Leader)
Ir. Julia Indrayani Puar
Drs. Paladen R. Simanjuntak
Ir. Satijo Adji
Ir. Mochammad Gani Arifin

with Achmad Muliadiredja and Henny Hariyani as facilitators for Scenario-4.

Exhibit 5

PT KONEBA Scenario Planning Workshop Program

Pre-workshop program (2.5 hours – October 22, 1998)

1. Introduction to Scenario Planning
2. Defining the Focus Questions
3. Discussing Issues and Concerns Gathered from the Interviews

1-Day Workshop Program – (12 hours – October 28, 1998)

1. Opening Speech
2. Gathering Additional Issues & Concerns
3. Grouping Issues & Concerns
4. Prioritization of Groups of Issues
5. Matrix Preparation/Building incl. Explanation
6. Building Scenario for Quadrant-1
7. Building Scenarios for 3 Other Quadrants by 3 Groups
8. Presentations of Scenarios by Groups
9. Test Focus Questions & Current Strategies in Each Quadrant
10. Key Strategies Elements
11. Draft Strategies for Quadrant-1
12. Draft Strategies for Other 3 Quadrants by 3 Groups
13. Presentations of Strategies by Groups