

DESIGNING PUBLIC-PRIVATE PARTNERSHIP FOR BONTANG INDUSTRIAL ESTATE

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Abstract: Bontang Local Government has planned Bontang Industrial Estate (BIE) to accommodate oil, gas, condensate and other industries. The estate will need investment for about IDR. 2.27 Trillion while the total annual local government budget is near to IDR 2 Trillion. Moreover, the estate has to be operated in a business manner while the local government officers have a culture in non-profit organisation as part of bureaucracy. However, the BIE feasibility study 2013 has determined that the estate will generate economic multipliers boosting the city development. Therefore, a partnership among government and private parties should be determined and accommodated in a proper cooperation arrangement. To design the partnership, we review literature, interview related private parties and confirm opinions of the private parties to the governments. A content analysis was used to assess information from the interviews. Considering the final outputs, BIE should be organised by a pure private enterprise or Ltd. to ensure the economic viable of the estate. The Ltd. is a partnership among the government and private parties via shareholders. The government can still hold a majority share with special arrangement in investment scheme. For the initial investments, the government can use its assets valued as 51% of total share while private parties can inject cash money equal to 49% of the total. With this capital arrangement, the estate can be operated with initial investment for about IDR. 267.11 Billion on 244.97 Ha land. This initial investment can be profitable with IDR. 650 Billion NPV, 19.93% IRR and 13.95 year PP.

Keywords: Industrial Estate, Organization, PPP, Investment, Development

Introduction

Bontang City is well known as an oil and gas city hosting the two big national companies in oil, gas and condensate (Pupuk Kaltim and Badak NGL Enterprises) since 1970s. The discovery of Bontang LNG Plant has initiated economic development including other related industries to oil and gas. Those companies' multipliers have boosted the development of Bontang City up to now. In 2009, the oil and gas sector has contributed 86.44% of the total Bontang GDP. This contribution remains similar up to 2013 by 82.07% contribution (Central Bureau of Statistics, 2014).

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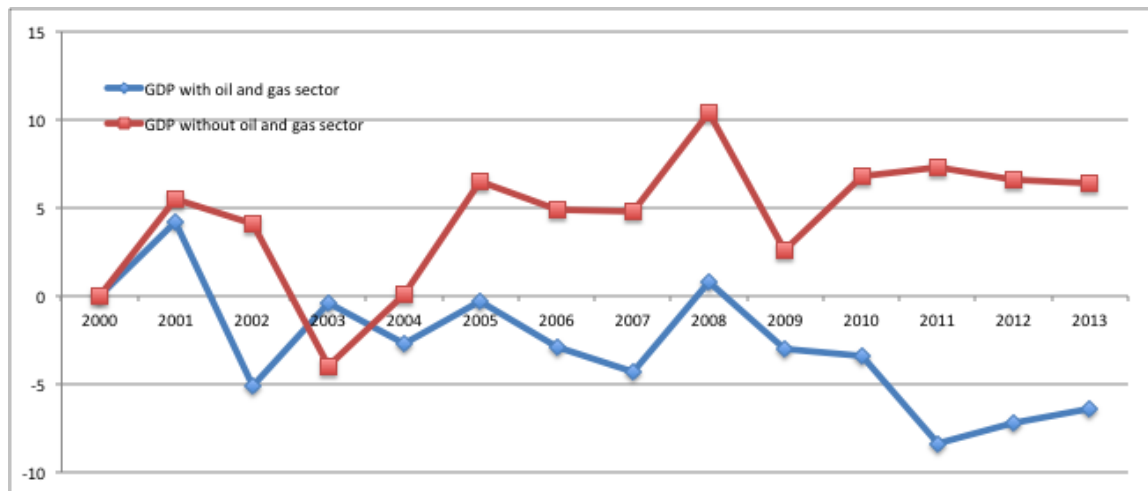
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The city dependency to oil and gas industry has been in an alarming stage for its sustainability. The decline pattern of mining industry in terms of growth rate (-77.51% and -55.30% in 2012 and 2013 respectively) has considered a need on city economic diversification. Diversification strategy has been quite successful by indicating a positive growth on GDP without oil and gas production. In contrast, the economic growth with oil and gas sector has a declined pattern since 2000 up to 2013 (Figure 1). Therefore, the new plan of Bontang City Government on Bontang Industrial Estate (BIE) is part of the city key strategies to sustain its steady economic growth.



Source: Central Bureau of Statistics, 2014

Figure 1 EconomicGrowthPerformance in Bontang City 2000-2013

Based on Pamungkas et al., (2014), the feasibility study on the site selection has appointed Segendis Bay as a feasible area for Bontang Industrial Estate (BIE)(Figure 2).The estate is expected to accommodate oil, gas, condensate, fisheries and maritime industries. The estate is zoned around 422 ha with 16% of them (67.49 ha) has been owned by the government in a ready to build land. Bontang Industrial Estate is expected to become a new economic prime mover in Bontang, as cited in various planning documents such as Bontang Long-term Development Plans, Bontang Medium-term Development Plans 2011-2016 and Bontang Regional Planning 2012

From the feasibility study (Pamungkas et al., 2014), a partnership among government and private parties is needed. High investment costs is the main reason for inviting private parties to run the business. In the meantime, the government has a potential to increase its income by allocating its assets as part of the shareholders. The involvement of government can also ensure that the industrial estate will significantly contribute to the city development. Consequently, the institution arrangement among government and private parties should be properly designed via Public-Private Partnership (PPP) scheme. Therefore, this study was conducted to determine the organisation model in managing Bontang Industrial Estate.

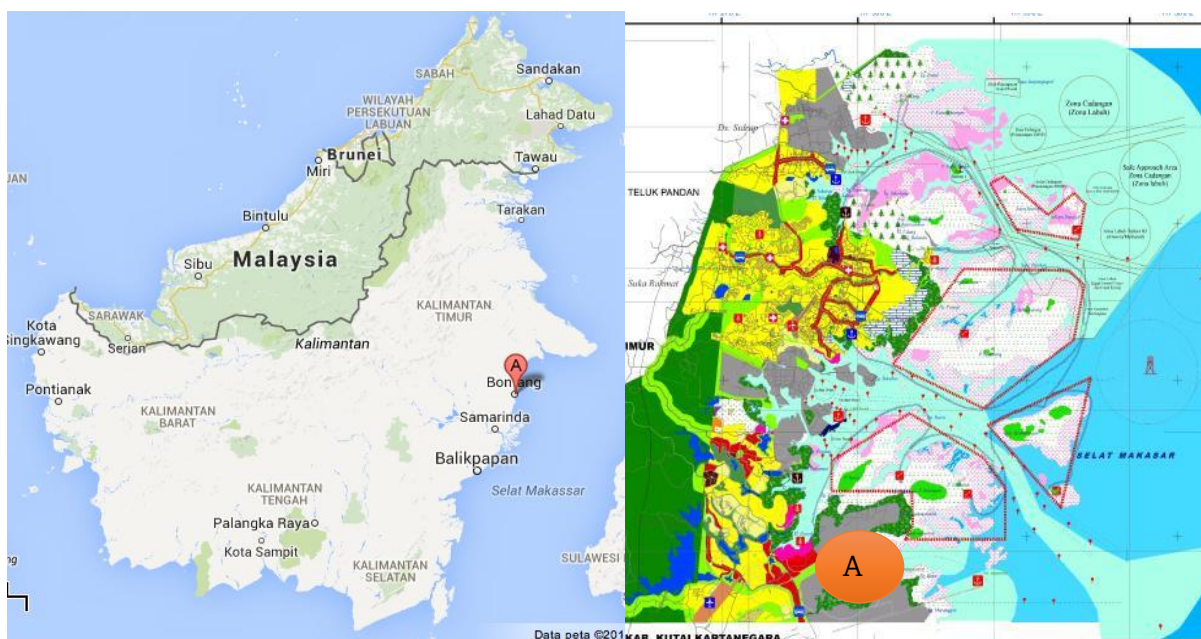


Figure 2. A is indicating the proposed location for Bontang Industrial Estate

Methods

PPP scheme in BIE is designed via three main steps that are defining estate development strategy, managing organisation and investment strategy. Designing PPP scheme is completed by interviewing 19 stakeholders to confirm the outputs from literature study on those three steps. An in-depth interview aims to collect complex information consisting opinions, attitudes, and personal experience (Sulistyo, 2006). This information will be then analysed using content analysis. From the history of Content Analysis, Krippendorff (1980) suggests that a content analysis can capture the symbolic meaning of the messages. The symbolic meaning of the messages expressed from data found in the outputs of interviews. In understanding symbolic meaning of the messages, we use both of quantitative and qualitative content analysis. Both of them are known as part of the application for content analysis (Baxter, 2009). The key difference method in this paper is the arrangement of interviewing process. We interview private parties first to response and enrich ideas from the literature. Afterwards, we confirm the ideas to the government as the government has less flexibility on the regulation than private parties. To solidify the ideas, related government agencies are invited in a focus group model to agree, comment and reformulate the ideas. This arrangement has considerably important not only to design the PPP scheme but also to build commitments among government agencies. This arrangement is also part of advancement for content analysis technique.

Results and Discussion

Industrial Estate Development Strategy

Industrial activities are considered as processing raw materials into finished or semi-finished goods (Dumairy, 1996). In Indonesia, the industrial estate has to follow Presidential

Decree No. 41/1996. According to the Decree, the industrial estate is an area equipped with supporting infrastructures, developed and managed by the industrial estate company. Development the estate should also follow regulation from Industry and Trade Ministry No. 35/2010. The regulation focuses on technical guidelines for the industrial estate. In determining development strategy, certain activities in establishing industrial estate are confirmed by stakeholders.

Table 1. Agreed Development Activities Based On Interview Results

NO	Development activities based on literature	Stakeholders opinion		Selected quotes from interviews to support stakeholders opinion
		Agree	Disagree	
1	Feasibility Study	8	10	"We have to prepare a feasibility study in advance and determine the feasibility of industrial Estate Development" (Sub division Head of Industry, Trade and Koperasi Agency)
2	Environmental Impact Assessment	13	5	" <i>Firstly, we should make an environmental impact assessment. If the assessment is not prepared, then the environmental permit will not be granted. So that, the construction would be post phoned</i> " (Sub division Head of Industry, Trade and Koperasi Agency)
3	Environmental Permit	8	10	" <i>Master plan is completed to determine all stages in development plan</i> " (General Manager of Pasuruan Industrial Estate Rembang (GM PIER))
4	Master Plan	4	14	" <i>Principle permit, location permit, other regulations (including business license and building permits) on land acquisition...</i> " (General Manager, Surabaya Industrial Estate Rungkut (GM SIER))
5	Principle Permit	9	9	" <i>The industrial area which has been planned should have special legal institutions. So that, all necessary permits such as principal license, location, permanent business license and building permit have to be completed</i> " (Head of Budget, Department of Revenue, and asset management PIER)
6	Location Permit	6	12	
7	Permanent Business License	2	16	"Land acquisition can be conducted after all permits have been completed" (GM SIER)
8	Building Permit	3	15	" <i>Site plan can be done when master plan completed</i> " (Marketing Director, Gresik Industrial Estate)
9	Land acquisition	14	4	" <i>Land clearing turns a bare land into land that ready to be built</i> " (Bagyo, National Land Board)
10	Site planning	14	4	" <i>It (land acquisition) should have been done before infrastructure development. If the infrastructure has been built, the land prices will be rose</i> " (Marketing Director, Yamaha Company)
11	Land clearing	14	4	" <i>Yes</i> " (Marketing Director, Gresik Industrial Estate)
12	Infrastructures plans and development	14	4	" <i>Promote industrial sites to every potential tenants (industry owners)</i> " (Director of Marketing, Gresik Industrial Estate)
13	Industrial Regulations	14	4	" <i>Managing organisation begin to take over management in Industrial Estate</i> " (Marketing Director, Gresik Industrial Estate)
14	Industrial Land Marketing	14	4	
15	Provision, and services	14	4	

All the activities agreed by stakeholders are then grouped into three main stages that are planning, development and operational stages. Figure 3 describes the activities

composition in every stage. For the planning stage, most of the activities will involve with government affairs. Consequently, the government involvement is highly important to fasten the process. A strong partnership among government and private parties are required specifically in development stages particularly in land acquisition activities. The last stage will require a more business manner organisation than government bureaucracy to ensure the efficiency and effectiveness of industrial estate services. Therefore, PPP is the key solution for having a proper managing organisation for BIE through out the three stages.

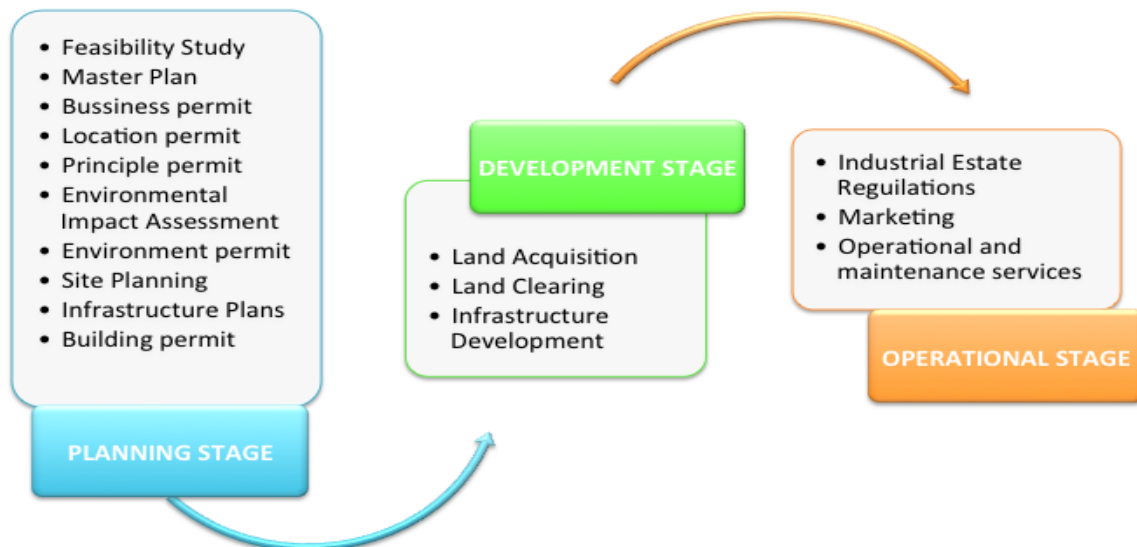


Figure 3 Stages and activities in DevelopmentStrategy for BIE

Organisation Format for Public Private Partnership

In public private partnership, there are many organisation formats for cooperation among government and private parties. In particular for the private business, there are three relevant organisation formats under the Indonesian law (Government Regulation No. 24/2009; Private Company Act No. 1/1995) that are: state company, private company (Ltd.) and local government owned company. Both of the parties agree on Ltd. as an appropriate organisation format for BIE with four main reasons that are; professionalism, transparent, flexibility and investment values. Table 2 describes various reasons from both parties.

Table 2 Interview Transcripts Regarding Institutional Forms

Private Party	Government
"Better in the form of a Ltd. because it is a professional (managed). (It is also) due to free access to determine the business (with) not too much strict regulations. And Ltd. can be both (private or government parties) hold majority share" (Account Executive, National Gas Ltd.)	"The government is only as a facilitator. If you choose to form a local government owned company then it depends on politics. So it is not easy to develop. If the form of Ltd., it is more flexible. (It is) more suitable in a Ltd. (than in local government owned company) because the government does not have the (big amount of) funds to be a majority shareholder." (Head of the Review and Legal Documents, Legal Regional

Private Party	Government
"Ltd.is very transparent (auditors are able to audit the financial statements (external and internal)), dividends distribution is also easier (than local government owned company)" (Director, Yamaha)	Secretariat) "There must be cooperation with the private sector. The majority of shareholder should come from the private sector because the government have limited capital. The government can only provide infrastructure and land while the private sector can manage the industrial estate." (Head of Science, Industry and Trade agency)

To have cooperation among the government and private parties, both of parties have suggested eight major principles that are: easiness in permit; correspondence vision; clear government procedures; consistent policy from government; fair, honesty and transparent government; infrastructure availability; land availability and easiness in investment. Table 3 describes respondents' arguments in supporting those principles for cooperation.

Table 3 Interview Transcriptson Principles for Cooperation

Principles of Cooperation	Private Parties	The government
Easiness in permits (Kusnadi, 2002; Edralin, 1997; Tarigan, 2005)	"Private want everything fast while the government must follow the bureaucratic rules. Therefore, the government must be able to provide an easiness of administering licensing" (Director of Marketing, Industrial Area Gresik)	"Business permit, property rights permit. We have to use one-gate system to simplify and reduce the time for permit processing" (Head of Budget, Department of Revenue, and asset management)
Correspondence vision (Edralin, 1997)	"Have the same willingness to cooperate and gives benefits to both parties" (Kaltim Industrial Estate (KIE))	"We could connect our vision and mission to the private parties. For example, KIE can also synchronise with us and make synergies such as in CSR program" (Head of Promotion, Office of Capital and Investment)
Clear government procedures (Winarso, 2002; Edralin, 1997)	"The government must have a clear procedure in regulation" (Director, Yamaha)	"Could be. Good communication. For example: socialisation on condensate industrial regulation to PT Badak" (Head of Science, Industry and Trade Agency)
Consistent policy from government (Kusnadi, 2002; Tarigan, 2005)	"Private sector cooperation with government depends on the city mayor. (Because) if the current local mayor agreed to develop the estate and then the next leader has different policy, we will have a big problem. The next government policies will gives difficulties to the tenant" (Director of Marketing, Industrial Area Gresik)	"Usually the industrial estate development is approved by regional legislation, not the mayor decree. So that the legislation cannot be replaced easily" (Head of Science, Industry and Trade Agency)
Fair, honesty and transparent government (Winarso, 2002; Edralin, 1997)	"The government should be transparent and fair in many aspects to tenants. Fairness means the government must treat all parties equally" (Account Executive, PT. PGN)	"Efforts have been made. Such as transparency in the data" (Head of Budget, Department of Revenue, and asset management)
Infrastructure availability (Robinson,1990; Moria, 2002; Martina, 1995; Cahyono, 2010; Isaksson, 2009;	(Positive value of government support) is the government willingness to provide easiness on licensing, including taxes, infrastructures, transportation and security (HRD General Affairs, MCWI)	"Now, the Portland company will build infrastructures. So that the connections will also be easier. We also have gas, electricity from Badak Ltd., water from PDAM. (Head of Budget, Department of Revenue, and asset management)
Land availability(Bahri, 2007)	"The government must be able to provide the land that are ready to be built" (General Manager, PIER)	"The land area of 64 hectares is ready to be built. If the 67,4891 hectares of land has been fully constructed, we can develop industrial areas to surroundings. Depends on the

Principles of Cooperation	Private Parties	The government
Easiness on investment (Munnel, 1992; Mahmudah, 2003)	"The government must be able to provide easiness to invests primarily by providing easiness in licensing" (Account Executive, PT. PGN)	agreement" (Head of Science, Industry and Trade Agency) "Easiness on investment has become a priority in Bontang" (Head of the Review and Legal Documents, Legal Regional Secretariat)

Investment Strategy

Investment strategy will depend on the financial ability of the government and potential investors. Since BIE initiative from the government, we value government response as one of the key instruments to have a successful industrial estate. Moreover, discussing the estate to private parties should also develop a market response to BIE. Proposed investment strategy from private parties can indicate this market response and also direct the investment strategy for BIE. Therefore, we interview both of private parties and confirm the interview’s outputs to the government in formulating investment strategy.

Figure 4 illustrates opinions from private parties and its confirmation from the government. A Ltd. type company is preferable with majority shares from private parties. This suggestion is equally supported both from government and private parties.

Considering the interviews’ outputs, private parties and the government are agree to have Ltd. company with majority shares from private in different reasons. Most of the reasons from private parties are flexibility in organising the company, private parties capital ability and inadequate the government budget as the key reasons to have private parties as majority share. In the meantime, the government consider high investments, limited government budget ability and culture in bureaucracy as non-profit organisation. In short, both parties highlight that the government financial ability becomes a major reason for having private majority share.

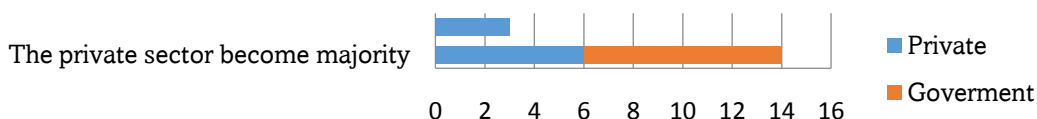


Figure 4 Opinions on Share Composition

Table 4 Transcript Interviews Regarding Share Composition

Private Parties Opinions	Government Response
"Share percentage could be 49% private and 51% government. (Because) the government can hold a full control. Government can help facilitate permits application. (Because) they would automatically support the industrial estate" (HR Manager, PQ Industry)	"Our financial condition is very limited and we still have many other expenses. (If) we operate it (the estate), it (would) be very difficult. But, If there is cooperation (PPP), we can be only minority (in term shareholders). We are merely providing infrastructure, land, regulation and licensing " (Head of Budget, Department of Revenue, and asset management)
"The government can only have 15 to 20% (shares). But private parties and government must involve and cooperate. The government can only just be a golden share. And all of them (share arrangement) depends on the strength of each party"	"The important thing is the existence of investors who want to cooperate. The current reality is limited capital owned by the government" (Head of City Development, Spatial Planning)

Private Parties Opinions	Government Response
<p>(General Manager, PIER) "Depend on the interest of private parties to invest in there (BIE)? The estate has to be attractive (for investments). In principle, we have to make it adequate for investors in fulfilling their needs. Ltd. is better since it is flexible. Ltd. with private parties as majority, the government can enjoy its multiplier effect.</p> <p>(General Manager, Surabaya Industrial Estate Rungkut)</p>	<p>"The most important thing are increases on people's welfare and commitment from both parties" (Head of Promotion, Office of Capital and Investment) "Yes, we should involve the private parties. If we see the government ability, we can only support for about 30% of the total shares " (Head of Physical Sub-Division, Bontang Regional Planning Agency) "Depending on what type of industries. If it is a strategic industry, the government should hold the majority. (It's better to share with the provincial government level. As in Samarinda, there is a IDR 250 billion project withdrawn by the local government because they do not have sufficient funds. If no cooperation with the provincial government, we might be able to use the Build Operate and Transfer system (BOT) with private parties. Private parties build the estate but later given back to the government. The most important thing is professionalism of private parties" (National Land Agency)</p>

Based on the interview, the main reason for the government not to be a majority share is limited capital availability. From secondary data collected, the government has assets relevant to the BIE around IDR 136.23 Billion. These assets can be used as initial investments for BIE. If the government want to be a majority share, the total assets should be valued as 51%. Consequently, private parties should invest IDR 130.88 Billion as 49% of share. Therefore, the investment strategy has to be recalculated to accommodate a new strategy with different assumption as on the BIE feasibility study (Pamungkas *et al.*, 2014).

Since the government's assets are in the forms of land and paperwork, private parties should provide investment in cash money form. Therefore, the construction process in the land owned by the government can be funded without loan. This initial investment can also buy additional land for about 177.48 Ha (Table 5). Therefore, there will be 244.97 Ha for the initial development. Table 5 illustrates investment strategy to operate BIE with the government as the majority shareholder. Having this strategy, BIE is still believed to be a successful industrial estate through three key micro economic indicator such as: IDR 650.56 Billion NPV, 19.93% IRR and 13.95 year PP in 20 years. In addition, if we divide those indicators in terms of shareholders, the government with 51% shares will have cost of fund 7.6%. Therefore, the government will have IDR 453.4 Billion NPV, 19.03% IRR and 11.14 PP. On the other hand, private parties with 49% share will have IDR 85.66 Billion NPV, 19.03% IRR and 15.46 PP. As a result, the idea of government majority share can still be realistic. The FGD (focus group discussion) on 10th November 2014 among government agencies confirmed government as majority in shareholders via this investment strategy.

Table 5 Initial Investment Strategies

Component	Value	Unit
Land ready to be built owned by the government	674,891	m ²
Land prices for land ready to be built	200,000	IDR / m ²
Total government assets	134,978,200,000	IDR
Capital shares	-	IDR
Intangible Cost		
<i>Master plan document</i>	500,000,000	IDR
<i>FS document</i>	500,000,000	IDR

Component	Value	Unit
<i>Study on Managing organisation</i>	250,000,000	IDR
Total Government share	136,228,200,000	IDR
<i>Share value</i>	51.00%	
Cash from investors	130,885,917,647	IDR
<i>Share value</i>	49.00%	
<i>Cash available</i>	130,885,917,647	IDR
Cash allocation		
Land acquisition	82,500,000,000	
<i>Land areas</i>	1,100,000	m ²
<i>Land price</i>	75,000	IDR / m ²
Operational cost and construction on infrastructures	48,385,917,647	IDR
Average land prices in five years	122,530	IDR / m ²
Initial Land acquisition	1,774,891	m ²
Total land in the first five years	2,449,782	m ²

Conclusion

This paper proposes that BIE has to be developed via cooperation among Bontang City Government and private parties. Under the PPP (public private partnership) scheme, Ltd. is agreed to be the most suitable organisation format for BIE both from the government and private parties' perspectives. Both parties can share responsibility on the three main stages of BIE development (planning, development and operational stages). The government can dominantly contribute in the planning stages while private parties can work fully in the other two stages. Even though the government has limited financial ability, modification on initial investment strategy has proved that BIE can still be a profitable investment. The ownership on government assets (67.48 Ha land and other intangible assets) is the key shares for government to be the majority. Therefore, the Ltd. with government as a major shareholder is a final proposed format for PPP in BIE.

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References

- Bahri, S., (2007). Evaluasi Lokasi Lahan Industri di Kota Kragilan Kabupaten Serang. Semarang: Universitas Diponegoro
- Baxter, J., (2009). Content Analysis, University of Western Ontario, London, ON, Canada, Elsevier Ltd. All rights reserved.
- Cahyono, E. F., (2010). Analisis Pengaruh Infrastruktur Publik Terhadap Produk Domestik Bruto Perkapita di Indonesia, Fakultas Ekonomi. Malang. Universitas Brawijaya
- Central Bureau of Statistics. (2014). Bontang in Figures 2014. Bontang: Central Bureau of Statistics
- Dumairy. (1996). Perekonomian Indonesia. Jakarta : Erlangga
- Edralin, J.S. (1997). The new local governance and capacity building: A strategic approach. Dalam Regional Development Studies, Vol. 3.
- Isaksson, Anders (2009). Energy Infrastructure and Industrial Development. RST Staff Working Paper, 12/2009, Vienna: UNIDO.

- Kusnadi, HMA. (2002). *Problems, Cooperation, Conflict and Performance*. Malang: Taroda
- Krippendorff. (1980). *Content Analysis an Introduction to Its Methodology*. Beverly Hills, California: Sage Publicaton
- Mahmudah, 2003. *Kesesuaian Lahan Untuk Kawasn Industri primer Di Kecamatan Prambanan*. Skripsi. Perpustakaan Fakultas Geografi Universitas Gadjah Mada. Yogyakarta
- Martina, P.R.C. (1995). *Industrial Location and Public Infrastructure*. *Journal of International Economics* 39
- Munnell, A. H. (1992), "Policy Watch: Infrastructure Investment and Economic Growth," *Journal of Economic Perspectives*, Vol. 6(4), pp. 189-98.
- Moria, T and Nishikimib K. (2002). *Economies of Transport Density and Industrial Agglomeration Regional Science and Urban Economics*.
- Pamungkas, A., Krisdianto, J., Iranata, D., and Sodiq, M., (2014), *A Prospect for the New Industrial Estate in Segendis Bay, Bontang*, Paper was presented at October 24-26th 2014 Martec 2014: *The Strategic Role of Blue Technology in the Global Economic Shift*, Surabaya.
- Robbins, S.P. 1990. *Organization Theory: Structure, Desain and Applications (Third Edition)*. Englewood Cliffs, NJ.: Prentice Hall, Inc.
- Sulistyo B., (2006). *Metode Penelitian*. Jakarta: Wedatama Widya Sastra dan Fakultas Ilmu Pengetahuan Budaya Universitas Indonesia.
- Tarigan Robinson. (2005). *Ekonomi Regional Teori dan Aplikasi*, Penerbit: CV Aksara.
- Winarso et.al (ed). (2002). *Thought and Practice of Planning in an Era of Transformation in Indonesia*. Bandung: Environment Engineering Department ITB