

# Private Sector Participation in the Green Open Space Provision Program Batam Municipality, Indonesia

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## 1. Introduction

Green open space (GOS) is an important component of an urban ecosystem, which significantly contributes to environmental, ecological, cultural and economic life.<sup>1)</sup> Most Indonesian metropolitan and large cities suffer from a lack of public GOS which averages less than 10% of all urban areas.<sup>2)</sup> The GOS in Batam Municipality, shown by the red lined area in **Fig. 1**, has been decreasing due to urban development. To overcome this problem, the municipality started a program to involve the private sector in the GOS provision program.

The private sector is expected by law to make various contributions, called Corporate Social Responsibility (CSR), to the surrounding humans and environment. This research aims to investigate the roles of government and the private sector in the provision of GOS, the correlation of the existence of the CSR with the participation of private companies in the GOS program, and the private sector's motivation actually to participate in the GOS program.



**Fig. 1. Study Area –Batam Municipality in Indonesia**

## 2. Public and Private Sector Roles for GOS in Indonesian Spatial Planning

**Fig. 2** shows the roles of the public and private sectors for GOS in Indonesian Spatial Planning Law No.26/2007. The law governs the national, provincial and regency/municipal spatial plans, including general and detailed spatial plans.<sup>3)</sup> The provision and utilization of GOS are parts of general and detailed spatial plans as shown in the figure.

The law and related regulations/policies, such as Instruction of Minister of Home Affairs No.1/2007 and the Regulation of Minister of Public Work No.05/PRT/M/2008, clearly explain that GOS consists of public and private GOSs. Public GOS is owned and managed by local governments, while private GOS is owned by the private sector, which consists of private companies and communities. In urban regions, local government must define GOS at 30% of urban areas.<sup>5)</sup> Of that amount, the public must provide at least 20% of the GOS, while the private sector must provide at least 10% as shown in the right part of **Fig. 2**. Furthermore, the regulation provides that the government is responsible for establishing the vision and mission, planning, construction, utilization and control of GOS. The role of the private sector is to participate in creating the vision and mission, planning, construction, utilization and controlling.<sup>4)</sup> Government provides incentives to the private sector for their participation in the provision of GOS. Such incentives include, for example, easing permit procedures and relief from land and building taxes. Additionally, the private sector can contribute to financing the GOS program.<sup>5)</sup>

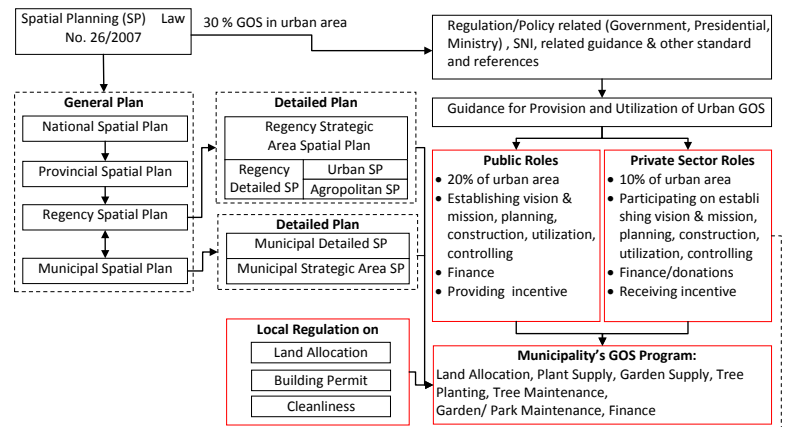
According to the Batam Municipality Regulation on Cleanliness No.05/2007, the private sector has an obligation to provide and maintain plants within private properties. Moreover, according to the Batam Municipality Regulation on Building No.02/2002, the private sector must provide a green area plan within private properties to get a building permit.

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## 3. Green Open Space (GOS) in Batam Municipality

Batam Municipality is an island city in Riau Island Province, which is located east of Sumatera Island and near Singapore as shown in **Fig. 1**. It has a territorial area of 108,265 (ha). During the period from 2000 through 2010, the population increased at an annual average of 7.57%. Currently, 1,168,741 citizens live in Batam Municipality. Population density has increased from 600 people/km<sup>2</sup> in 2009 to 641 people/km<sup>2</sup> in 2010. The urban area of the municipality has increased to 86,115 (ha)(79.54% of territorial area).

**Table 1** shows the area of GOS provided by the local government and the private sector in Batam Municipality in 2011. The GOS area is 23.75% of the urban area. The public and private sectors provide GOS at 15.81% and 7.94%, respectively, which is less than the minimum requirements of 20% and 10%, respectively. The contributions of the public, private companies and the community are 66.58%, 24.77% and 8.66%, respectively. The contributions of private companies are larger than those of the community. It is necessary that the role of private companies in GOS provision be increased, since their contribution to GOS is larger than the community's.



Sources: (Interpretation) Instruction of Minister of Home Affairs No.1/2007, and Regulation of Minister of Public Work No.05/PRT/M/2008

**Fig. 2. Public and Private Sector Roles for GOS in Indonesian Spatial Planning**

#### 4. Private Company Participation in the GOS Program

There are seven activities in the GOS program for private companies: land allocation, plant supply, garden supply, tree planting, tree maintenance, garden/park maintenance and donation/finance. They are evaluated by two kind participations that are participation inside the companies' land and in the public land in Batam Municipality.

To examine the participation of a private company in the government program, a questionnaire survey was conducted for ten private companies chosen from different kinds of industry. The questions asked about their knowledge of the GOS program offered by the government, the implementation of CSR, the presence of the GOS provision program in the CSR, and their participation in the GOS program. **Table 2** shows the questionnaire results. Eight companies knew about the GOS program, and two companies did not. Nine companies have CSR. At least six companies have participated in the GOS program inside their own lands. Interestingly, eight companies contributed to a GOS program in the public land for plant supply and tree planting. However, no company participated in land allocation, tree maintenance or garden/park maintenance. Most of the companies that knew about the government GOS program participated in more activities both in their own lands and in the public land.

The motivations for private companies to participate in the GOS program in the public land was also examined to determine the most popular motivation among them. Based on the information, the next action can be formulated to increase the level of participation of the companies in the GOS program. **Fig. 3** shows the motivation of the private companies to participate in the GOS program in the public land. Ten companies were asked to choose from nine options of motivation for participating in the GOS program in the public land and were allowed to choose more than one option. The numbers in parentheses are the company numbers in **Table 2**. All of the companies have the sense of being responsible toward the environment. Next, five companies indicated that they have a sense of belonging to the city and wish to enhance their corporate images. Further, four companies chose the sense of being involved by government, voluntary, and to obey laws and regulations. Lastly, two companies chose the sense to reduce the burden of government costs, to avoid sanctions of law and government, and to attract other companies for the business. The sense of being responsible toward the environment was the most popular motivation of the companies to participate in the GOS program. To increase the level of participation of private companies in the GOS program, it is necessary to increase the sense of being responsible toward the environment through such efforts as environmental education among companies regarding the promotion of the GOS program.

#### 5. Summary

The roles of government and the private sector with regard to the GOS program in Batam Municipality are determined by regulation and by the program. A correlation can be seen between the existence of the private company program of CSR and the participation of private companies in the government program of GOS. Responsibility toward the environment is the most popular motivation of companies to participate in the GOS program in the public land.

#### References

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**Table 1. GOS and the Contribution by Sector In Batam Municipality, 2011**

NO	Type of GOS	GOS (ha)	% in Urban Area	Sub Total (ha)	Proportion (%)
<b>A</b>	<b>Public GOS</b>	<b>13,615</b>	<b>15.81</b>		
1	Urban forest	6,450	7.49	13,615 by Public Sector	66.58%
2	Green path city	1,900	2.21		
3	City park	1,250	1.45		
4	Neighborhood park	600	0.70		
5	Buffer zone	1,500	1.74		
6	Cemetery park	200	0.23		
7	Sport field	50	0.06		
8	Coast border	1,030	1.20		
9	River border	205	0.24		
10	Lake border	430	0.50		
<b>B</b>	<b>Private GOS</b>	<b>6,835</b>	<b>7.94</b>		
1	Golf field	600	0.70	5,065 by Private Companies	24.77%
2	Industrial area GOS	1,310	1.52		
3	Tourist area GOS	2,535	2.94		
4	Commercial and trade GOS	280	0.33		
5	Transportation area GOS	340	0.39		
6	Residential area GOS	1,770	2.06	1,770 by Community	8.66%
<b>Total A+B</b>		<b>20,450</b>	<b>23.75%</b>	<b>20,450</b>	<b>100%</b>
<b>Urban Area in Batam</b>		<b>86,115</b>	<b>100%</b>		

Source: Planning and Development Agency of Batam, 2011

**Table 2. Private Company's Awareness and Participation In Government Program of GOS**

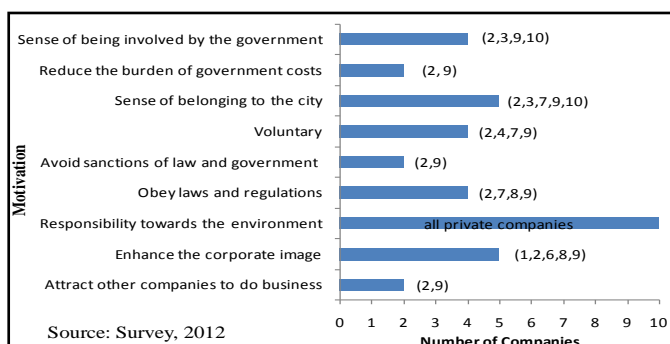
No	Private Company	Knowing Gov' Program	CSR		Activities of Private Company in GOS													
			Avail ability	Incl. GOS	inside company land							in public land						
					1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	PT. Aker Solution	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	Y	N	Y	N	N	Y
2	PT Appipa Indonesia	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y
3	PT McDermott	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y
4	PT. Tec Indonesia	N	Y	N	N	N	N	N	N	N	Y	N	N	N	N	N	N	Y
5	PT. Niaga Karya	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	N	N	N
6	BRI	Y	Y	Y	Y	N	N	N	N	N	Y	N	Y	Y	Y	N	N	Y
7	PT. PLN Batam	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	N	N	Y
8	PT. ATB	Y	Y	Y	Y	N	N	N	N	N	Y	N	Y	N	Y	N	N	Y
9	PT. NPP	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
10	PT. Kabil Citra Nusa	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	Y

Y = Yes  
N = No

Code	Activities
1	Land Allocation
2	Plant Supply
3	Garden Supply
4	Tree Planting

Code	Activities
5	Tree Maintenance
6	Garden/Park Maintenance
7	Donation/Finance

Source: Survey, 2012



Source: Survey, 2012

**Fig.3. Companies' Motivation to Participate in the GOS Program in Public Land**