



# U.S. Waste Biogas & Organic Fertilizer Production Project

**200 tonnes/day – Economic Analysis**



**DHM Global Inc**

*Ver2025*

# 1. Construction cost (200 tons/day)

(Unit :US\$)

Category		Amount (US\$)	Remarks
<b>construction costs</b>	1. Civil engineering	21,600,000	
	2. Architecture and landscaping	14,400,000	
	3. Installation of Recycling Screening Station	13,200,000	
	4. Biogas Plant Installation Work	31,200,000	
	5. Installation of Liquid Fertilizer Production Facility	9,600,000	
	6. Installation of Solid Fertilizer Production Facility	10,800,000	
	7. Power and electrical control installation work	12,360,000	
	<b>Sub Total</b>		<b>113,160,000</b>
<b>incidental expenses</b>	1. Basic and implementation design costs	4,800,000	
	2. Commissioning cost	1,800,000	
	3. Incidental expenses	240,000	
	<b>Sub Total</b>		<b>6,840,000</b>
<b>Sum</b>		<b>120,000,000</b>	KOREA BUSAN FOB

The above calculation details are subject to change depending on the basic and implementation design conditions.

## 2. Annual maintenance fee (200 tons/day)

(Unit :US\$)

Category		Amount	Remarks
<b>Fixed Cost</b>	personnel expense	720,000	• Operation Personnel 20 (Collection 1, management 4, Facility Operator 16)
	Administration cost	72,000	• Labor Cost X 10%
	Maintenance/depreciation	457,800	• Construction, Civil & Buildings X0.2%, Machinery X0.5%
	<b>Sub Total</b>	<b>1,249,800</b>	
<b>Variable Cost(Operating Expenses)</b>	Electricity cost	1,062,300	• Base Rate:1,000kw x \$6.4/Kw x 12months=\$76,800 • Fee:18,000kw/days x 0.15\$/Kw x 365days= \$985,500
	Chemical & Catalyst	36,000	• Odor Treatment, Desulfurization Equipment: \$3,000 / Month X 12 Months
	Waterproofing	2,850	• 3,000tons/year x \$0.95
	Purchase of Sawdust, etc.	198,000	• 12tons/day X 330days =3,960 tons/year X \$50/ton
	Financial Bank Interest	9,600,000	• Project cost \$120,000,000 X 8%
	<b>Sub Total</b>	<b>10,899,150</b>	
<b>Sum</b>	<b>12,148,950</b>		

The above calculation details are subject to change depending on the basic and implementation design conditions.

### 3. Economic Analysis (200 tons/day)

(Unit :US\$)

	Category	Amount	Remarks
<b>Project cost (input)</b>	Design / Supervision	6,840,000	
	construction	113,160,000	
	<b>Sub Total</b>	<b>120,000,000</b>	•Total Facility Business Expense
<b>A- Revenue</b>	Electricity Selling	1,365,100	•22,000KW/days x 365 = 8,030,500 kw /days x \$0.17/kw
	food waste disposal costs	7,300,000	•200ton/days x 365days = 73,000ton/year x \$100
	waste heat energy	0	•6,622,000kcal/days x 365days = 2,417,030,000kcal/year x \$0
	CDM (Carbon Rights)	1,820,547	•97,8co <sup>2</sup> ,ton/days x 365days = 35,697co <sup>2</sup> ,ton/year x \$51
	Liquid Fertilizer Selling	20,790,000	• 140ton/days x 330days =46,200ton/year x \$450
	Compost Selling	5,280,000	• 40ton/days x 330days =13,200ton/year x \$400
	<b>Sub Total</b>	<b>36,555,647</b>	
<b>B- Expense</b>	Fixed	1,249,800	• Labor Cost, Management fee
	Variable	10,899,150	• Power ratio, Drug Cost,
	<b>Sub Total</b>	<b>12,148,950</b>	
<b>C-Annual Net Profit (C=A-B)</b>		<b>24,406,697</b>	Recovery period of investment expenses: <b>about 4.9</b> years (business expenses/year net profit)

The above calculation details are subject to change depending on the basic and implementation design conditions.

It's about the American people and the environment  
I will become a company specializing in environmental energy.

Thank you.



**DHM Global Inc**