



**Apa Idemu dan Ini Ideku...**

# **Ecofriendly School: PVC Compost Maker and Recycle Corner**

**By  
Gunawan**

**Immanuel Senior High School  
Pontianak-KalBar-Indonesia**



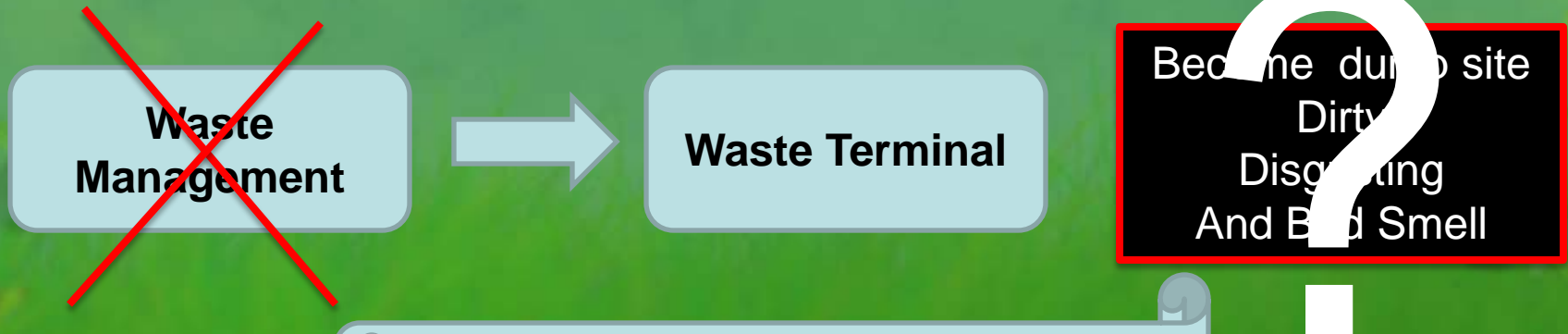


# Waste Terminal in Indonesia





# Background



No Awareness within society  
No Waste Categorization  
The rotten organic Waste

Environmental problem is not a  
personal problem alone.





# Action Plan





# PVC Compost Maker Program

**Segregation Trash Bin**

**Compost Making**

**Recycling Corner**

**Exhibition**





# Scheme Work

**Ecofriendly School**

**School Permission**

**Pilot Project**

Establish new  
students  
organization or  
extracurricular

Start with student  
Board (20 students)  
+ Some students  
interesting with

**Segregation**

**Compost**

**Recycling**

**Fund**

Used Paper  
Cardboard  
Used bottle

Pilot project community act as  
the company  
Students; Teacher and staff act  
as community



# Segregation Trash Bin

Organic  
Waste

Compost  
material

Inorganic  
Waste

Recycle

Reuse

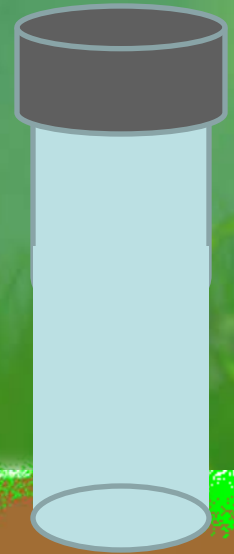




# Compost Making

Organic

Inorganic







# Target Location







# Involving the Community

**Applied in the School  
with Students from  
Science Club**



**Documentation and  
Compost**



**Other Students**

**Teachers and  
Staff**

**Parents**



**Exhibition and Seminar**





# Exhibition

Students  
Teachers and Staff  
Parents







# Seminar

Students  
Teachers  
Parents







# The Benefits

- **Students**

- # Reward

- # Score

First motivation purpose only

- **Teacher, Staff and Parents**

- # A good and healthy environment in the city

- # No need to think, where they should throw their organic waste that easily rotten

- # Will get a compost or fertile soil because of the composting



# Techno Economic Analysis

- 0.001 m<sup>3</sup> of organic waste from each person every day
- PVC compost maker capacity

| Diameter (inch) | Height (m) | Capacity (m <sup>3</sup> ) | Efficiency |
|-----------------|------------|----------------------------|------------|
| 3               | 1          | 0.005                      | 5 x        |
| 4               | 1          | 0.008                      | 8 x        |
| 5               | 1          | 0.013                      | 13 x       |
| 6               | 1          | 0.018                      | 18 x       |
| 7               | 1          | 0.025                      | 25 x       |





# Techno economic analysis

- The cost to make PVC Compost Maker

| Diameter (inch) | Height (m) | PVC (Rp) | PVC Cap (Rp) | Total Price (Rp)/unit |
|-----------------|------------|----------|--------------|-----------------------|
| 3               | 1          | 20.000   | 5.000        | 25.000                |
| 4               | 1          | 25.000   | 8.000        | 32.000                |
| 5               | 1          | 28.000   | 11.000       | 39.000                |
| 6               | 1          | 30.000   | 13.000       | 43.000                |
| 7               | 1          | 35.000   | 15.000       | 50.000                |

- PVC compost maker lifetime > 10 year



# Time Schedule

| Aktivitas   | Schedule |   |   |   |   |   |   |   |   |    |    |    |
|---|----------|---|---|---|---|---|---|---|---|----|----|----|
|   | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Persiapan action plan (Ijin dari kepala sekolah dan yayasan)*   | X        | X |   |   |   |   |   |   |   |    |    |    |
| Persiapan kelompok pilot project dalam bentuk ekskul atau organisasi sekolah  |          |   | X |   |   |   |   |   |   |    |    |    |
| Pengumuman kegiatan melalui radio sekolah dan pengumuman dipapan pengumuman sekolah. Persiapan pengelompokan sampah     |          |   |   | X | X |   |   |   |   |    |    |    |
| Pembuatan kompos dari sampah organik (PVC Compost maker)  |          |   |   |   | X | X | X | X | X | X  | X  | X  |
| Pembuatan recycle corner  |          |   |   |   | X | X | X | X | X | X  | X  | X  |
| Exhibition (Melibatkan siswa SD, SMP, SMA, Orang tua, Staff dan masyarakat sekitar)                                     |          |   |   |   |   |   |   | X |   |    |    | X  |
| Melibatkan seluruh siswa, guru, orang tua, staff, dan masyarakat dalam ikut serta kegiatan recycle dan pembuatan kompos |          |   |   |   | X | X | X | X | X | X  | X  | X  |
| Monitoring (monthly monitoring)   |          |   |   |   | X | X | X | X | X | X  | X  | X  |