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**FUNGSI PENGOMPOSAN**

- Reduksi Volume - peningkatan densitas
- Reduksi Massa
- Stabilisasi bahan biodegradable
- Penapihan air (pengeringan dan produksi melalui oksidasi)
- Produksi CO<sub>2</sub> (suplai unt industri)
- Reduksi patogen manusia/tanaman
- Pre-treatment terutama untuk ekstraksi nutrien yang dibutuhkan tanaman
- Pre-treatment terutama digunakan sebagai substrat faktor tumbuh tanaman
- Sumber panas kualitas rendah

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**Teknologi Pengomposan**

- Teknologi Rendah
  - Windrow
- Teknologi Menengah
  - Gundukan aerasi
  - Kotak aerasi
- Teknologi Tinggi
  - Rotary Drum Composters
  - Box/Tunnel Composting Systems
  - Mechanical Compost Bins

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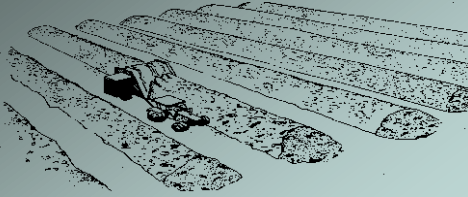
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## Windrow composting



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## Pengomposan Aerobik



- Organik, lembab, porous, fase-padat
- Kelembapan = 40 - 65%
- Predominan kondisi aerobik
- Pemanasan sendiri
- Suhu = ruang - 65°C
- Destruksi Patogen
- Produksi Volatil
- Residu (~50%)
- Vol Reaktor tgl pengguna akhir



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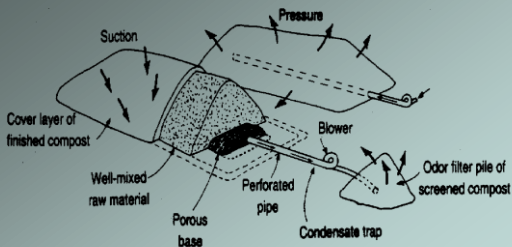
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## Gundukan Aerasi statik



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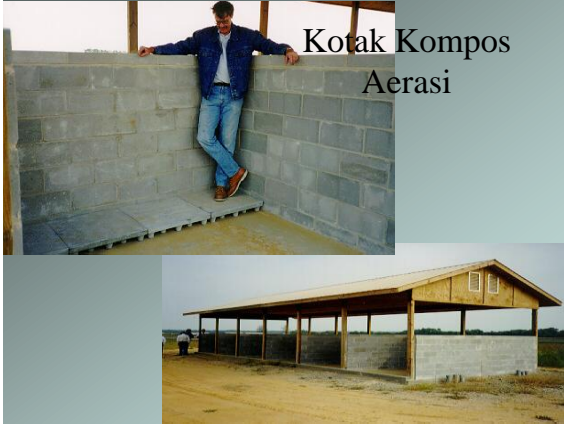
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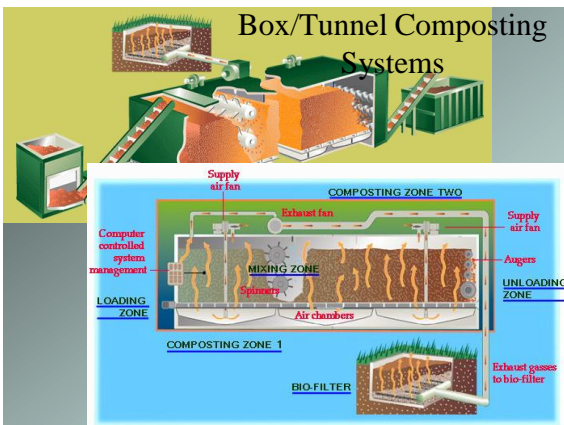
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## Mechanical Compost Bins




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## Kompatibilitas Limbah

- Pantas vs. tidak pantas
  - Limbah yang pantas dapat atau tidak dapat diperlakukan
- Jumlah yang dapat dibiodegradasi
- Nisbah Karbon thd Nitrogen (C:N)
- Kelembapan
- Ukuran partikel
- Limbah individu dapat tidak pantas (mis feces, kertas) tetapi pantas jika dicampur secara tepat

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## Skenario Penanganan Limbah




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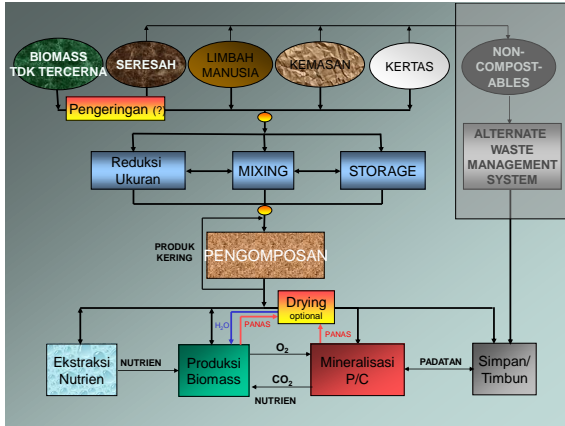
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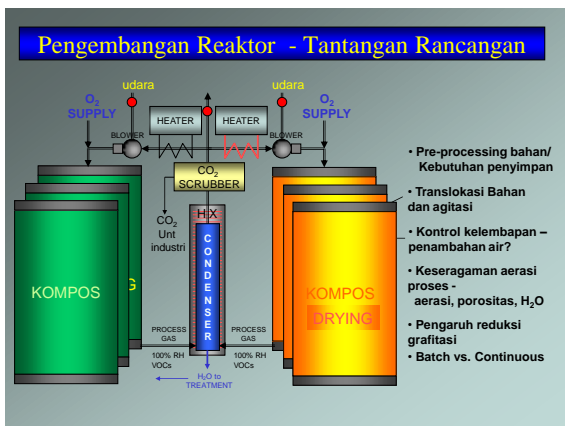
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