Food and organic waste management

Why separation at source is beneficial for businesses

Main insight

By separating food or organic waste from your business’ general waste stream, you can save on logistics and landfilling costs, operate more sustainably and comply with new waste management regulations.

Potential benefits to your business:

The Western Cape has experienced rapid growth in organic waste solutions, turning a ‘problem waste’ into a usable commodity.

The benefits of organic waste management to your business include:

• Savings on waste management costs (through savings on landfilling and collection costs).
• Receiving income by selling organic wastes after proper sorting.
• Helping your business achieve sustainability goals which can be illustrated in an organisation’s integrating reporting to stakeholders.

What is the industry brief about:

This brief provides an introduction to organic waste management for Western Cape businesses. Should you be interested in exploring the options for your business after reading this brief, a more detailed guide is available on request from GreenCape.

The following sections highlight:

• Potential benefits of organic waste management to your business.
• Alternative solutions to sending organics to landfill.
• Best practices for managing organic waste onsite.
• Important waste regulations to be aware of.

The Western Cape Government plans to ban the landfilling of all organic waste by 2027, with a 50% target set for 2022.
The Western Cape has numerous organic waste management solutions for homes, and industrial and commercial businesses.

Some require a specific type of feedstock (e.g. plant-based materials), but most allow for varied feedstock (mixed organic waste). These solutions can be broken down into five types as illustrate on the right:

**Waste-to-Pharma/Chem:**
Conversion of organics to fine chemicals for the chemical / pharmaceutical industry.

**Waste-to-Food:**
Redistribution of surplus / obsolete food to initiative feeding people.

**Waste-to-Feed:**
Forwarding of food and organic waste to animals / livestock.

**Waste-to-Soil:**
Processing food and organic waste into compost and soil enhancers.

**Waste-to-Energy:**
Processing of organic waste into fuels or generate heat / electricity.

### Considerations for your business solutions

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<thead>
<tr>
<th>What is your organic / food waste?</th>
<th>Possible solution</th>
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<tbody>
<tr>
<td>Specific, high volume, and homogenous (unmixed) feed stocks</td>
<td>Waste to fine chemicals/pharmaceuticals, biogas</td>
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<tr>
<td>Food (before sell by date and fit for humans)</td>
<td>Redistribution by feeding schemes and stock retailers</td>
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<tr>
<td>Crop waste, food production waste and retail, hospitality and wholesale wastes</td>
<td>Feed for livestock, insect farming, composter, biogas and manufacturing of animal feed</td>
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<tr>
<td>Refined vegetable oils and animal fats</td>
<td>Feed for livestock, insect farming, composting and biogas and for use in manufacturing of animal feed</td>
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<tr>
<td>Most organics from farm, manufacturing, wholesale, retail, restaurant and household wastes</td>
<td>Compost and vermiculture</td>
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In-House waste champion

Someone to drive responsible waste management in the organisation. Their role is to coordinate, monitor and execute the organisation’s waste policy. This may not be a full-time position and can be an additional role for someone within the organisation.

Separate at point of generation

Specific waste streams are produced at various points of production. Waste streams should be segregated at point of generation.

This can be aided considerably by having bins for specific streams readily available where the specific stream is generated.

Waste bins

As a first step, instigate a two-bin system to separate wet and dry waste. The types of bins should reflect the types of waste streams generated on site. Involve your waste service provider to provide a tailored service to its needs.
Best practices to help your business benefit (continued)

Staff involvement

Ensure that all staff members are aware of the separation at source initiative, including your cleaning staff. Explain to them why this is being done, and illustrate creatively the impact of the initiative. Some waste service providers are willing to brief staff to assist in effective source separation.

Designated waste management area

Establish a formal waste management area where the waste generated on site can be consolidated and stored before it is collected by your solution provider. Be sure to discuss this area with your solution provider to best suit their requirements.

Foul odour management

Stored organic waste has a tendency to generate foul odours. A strategy needs to be put in place to avoid/manage rotting and associated odour. Bokashi is one technique to assist with odour management. (organic waste fermentation process using a formulated bran).

Procurement policies

Waste specifications should be included in your contract with waste management companies handling your waste to ensure waste is managed correctly, sent to preferred solutions, and Safe Disposal Certificates are provided for auditing purposes.

Regulations affecting separation at source and storage of waste

As a waste generator, the following regulations are relevant and important:


- **Collecting and storing waste:** Subsidiary legislation (i.e. norms and standards, regulations) that targets the handlers of waste (municipalities or waste service providers), but this does not exempt the waste generator from responsibility.

- **Managing waste in the City of Cape Town:** In terms of the City of Cape Town’s (CCT) by-law, businesses need to separate, businesses separate waste with the aim of minimising waste to landfill and its impacts on the environment. Waste that can be recycled, reclaimed or reused should be stored separately from non-recyclable waste.

- **Supplying waste management services:** The CCT’s Integrated Waste Management by-law of 2009 (as amended in 2010 and 2015), requires waste management companies to register and be accredited with the CCT. Ensure that the service provider you use is accredited.

- **Generating certain industrial wastes:** The CCT by-law requires certain industrial waste generators of particular streams, based on type and tonnage, to register with the CCT and develop a waste management plan.

It is also important to note that a number of landfill bans and restrictions, that will impact on businesses that generate organic waste, will be coming into effect in the coming years. The most ambitious being a provincial ban on all organics by 2027 (50% by 2022).

This industry brief draws on the CCT by-law as a resource. However, most Western Cape municipal waste by-laws have similar requirements.

Need help on next steps?

For a detailed guide on organic waste management, or for help identifying waste service providers, contact GreenCape’s waste sector desk:

waste@greencape.co.za or call 021 811 0250
www.greencape.co.za/content/organic-and-food-waste

GreenCape

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GreenCape is a non-profit organisation that drives the widespread adoption of economically viable green economy solutions from the Western Cape. We work with businesses, investors, academia and government to help unlock the investment and employment potential of green technologies and services, and to support a transition to a resilient green economy. Our vision is for South Africa to be the green economic hub of Africa – the regional headquarters and manufacturing centre for leading companies in this space.

GreenCape’s industry briefs are aimed at businesses, investors and government stakeholders. The briefs communicate opportunities for resource efficiencies, the greening of business, and noteworthy market and other insights from our work and research in this space. They supplement our flagship annual Market Intelligence Reports.