

# THE WASTE MANAGEMENT CRITERIA

Climate Bonds Standard



## What are the Waste Management Criteria?

These Criteria cover waste management operations at all levels of the hierarchy, except prevention and disposal. For waste

collection and transport, please refer to the Transport Criteria. Waste Management Criteria are defined for storage infrastructure, sorting and MRFs, reuse and recycling, composting and anaerobic digestion, incineration with energy recovery (outside the EU) and landfill gas recovery.

Waste Collection		
Assets covered	Eligibility Criteria	
ISO containers, recycling bins, wheeled bins, green/ garden waste containers	Made from 100% recycled and recyclable materials. Containers for residual waste will not be eligible unless part of an investment that also includes an equivalent number of separate containers for material recycling.  Support source segregation of waste.	
Collection vehicles	Must meet Transport Criteria	

Recycling and Reuse		
Assets covered	Eligibility Criteria	
Facilities processing recyclable waste fractions into secondary raw materials	The secondary raw materials (such as steel, aluminum, glass, plastics) cease to be waste and are sold to be used as secondary raw materials.	
Facilities collecting, sort, clean, refurbish, recondition and/ or repair products	The products are put back to their original use without any further preprocessing required.  For waste electrical and electronic equipment (WEEE) specifically, the product is covered by an ecolabelling scheme and only those products meeting the three lowest energy use categories are eligible.	

Waste Sorting				
Assets covered	Eligibility Criteria			
Sorting facilities (Includes material recovery facilities (MRFs) and some MBT plants.	Facilities sorting mixed recyclables into separate glass, metal, plastic, paper, etc. are eligible for certification where the outputs are demonstrated via invoices or weighbridge tickets to go to facilities that are or would be certifiable under CBI's criteria.			
	Facilities processing mixed residual waste to produce feedstock for EfW are eligible where the outputs are demonstrated via invoices or weighbridge tickets to go to facilities that are or would be certifiable under CBI's criteria.			

Waste Storage			
Assets covered	Eligibility Criteria		
Storage and bulking facilities	Dedicated to eligible waste processing asset(s) downstream. Those downstream assets do not need to be certified but do need to meet the criteria for that asset type. All waste stored must be transferred to those assets.		
Collection vehicles	Must meet Transport Criteria		

Composting				
Assets covered	Eligibility Criteria			
Facilities processing food and/ or green/ garden/ yard waste to produce compost for agricultural, municipal or consumer applications	<ul> <li>Zero measurable methane emissions</li> <li>Monitoring, sampling and control of the following is carried out in accordance with PAS100 guidance or equivalent national or state standard or guidance:         <ul> <li>Waste inputs,</li> <li>The process, and</li> <li>Product quality.</li> </ul> </li> <li>The resulting product is not landfilled and replaces non-waste material in the market.</li> </ul>			





## **Anaerobic Digestion**

Allaerobic Digestion		
Assets covered	Eligibility Criteria	
Facilities which produce power and/ or heat using food and/ or green/ yard waste	<ul> <li>Total methane emissions &lt;= 1285g CH4/tonne of waste input (this is approximately equivalent to 100g CO2e/kWh</li> <li>Woody waste must be segregated before or after processing and sent to an eligible EfW or composting plant</li> <li>Monitoring, sampling and control of the following is carried out in accordance with PAS110 guidance or equivalent national or state standard or guidance:         <ul> <li>Waste inputs,</li> <li>The process, and</li> <li>Product quality.</li> </ul> </li> <li>"The solid and liquid products are not landfilled and replace non-waste</li> </ul>	

## **Adaptation & Resilience Requirements**

#### Framework for Criteria addressing Climate Adaptation and Resilience

materials in the market.

Municipal waste management has the potential to improve the resilience of ecosystems to climate change by preventing waste, emissions and other pollutants from entering the environment. And conversely, climate change can influence the resilience of assets and facilities via an increased number and intensity of weather events, coastal inundation, and more extreme temperatures.

Therefore, specific requirements about climate change adaptation and resilience are included to ensure that; waste management facilities are resilient to climate change; and waste management assets/projects have no negative impact on climate resilience of areas in, or beyond that in, which they are operated.

The climate risk posed to the waste management sector is more about asset level resilience and hence the siting of facilities. Therefore, those seeking certification for waste management assets and projects will be required to conduct a climate risk assessment and have an adaptation plan where high risks are identified – assessed via the

## **Landfill Gas Recovery**

#### Assets covered Eligibility Criteria

Projects to capture biogas from closed landfill facilities

- Gas capture >= 75%; AND
- Gas used to generate electricity and input to the natural gas grid or used as vehicle fuel: AND
- The landfill is not accepting further waste (with the exception of restoration materials)

## Energy from Waste (outside the EU only)

## Assets covered Eligibility Criteria

Facilities which produce power and/ or heat/ cooling by the thermal processing of residual waste, including rejects from recycling/ composting/ AD

For EfW facilities outside the EU only:

- Plant efficiency >= 25%; AND
- Bottom ash recovery; AND
- >= 90% recovery of metal from ash; AND
- Average carbon intensity of electricity and/ or heat over the life of the plant <= waste management allowance; AND
- The capacity of the plant does not exceed the calculated residual waste at any time in the plant's life.

EfW facilities within the EU are not eligible for certification.

#### Adaptation and Resilience Checklist

All elements of this checklist must be addressed, with appropriate evidence provided that these requirements are being met or are not applicable in respect of the specific assets and projects linked to the bond. It is expected that the evidence will encompass a range of assessment and impact reports and associated data, including, but not limited to, those reports required to meet national and local licensing and approval processes. This might include Development Consent Orders, Environmental Impact Assessments, Vulnerability Assessments and associated Adaptation Plans.

#### **Further information sources**

Want to Certify, or just know more? Take a look at these resources:

- Waste Management Criteria
   homepage
- Climate Bonds Standard V3

### For more information:

Go to www.climatebonds.net

**Email certification@climatebonds.net** 

# Checklist for evaluating the Issuer's Adaptation & Resilience performance in respect of a waste management facility

Eligibility Criteria	Proof given	Overall assessment
<b>Section 1:</b> The issuer identifies the climate related risks and vulnerabilities to the asset/site		
<b>Section 2:</b> The issuer identifies the impacts in larger context (spatially and temporally) beyond the asset/site (i.e. the impacts of the underlying assets and projects on the broader ecosystem and stakeholders in that ecosystem)		
<b>Section 3:</b> The issuer has designed and implemented strategies to mitigate and adapt to these climate risks and vulnerabilities		

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