

Landfill-Zero  
Waste  
Prevention  
Scheme



Duvets  
&  
Pillows



**RETHINK YOUR  
BEDDING  
WASTE**

BE SENSITIVE TO  
YOUR ENVIRONMENT







Circular Economy

**BEDDING**

WASTE PREVENTION PRODUCT  
CODE 69



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## Landfill-Zero Waste Prevention Scheme Duvets and Pillows

### 1. Declaration

This Document has been prepared in accordance with Zero-Landfill Waste Prevention Scheme. This document contains all information relevant to the environmental assessment of the project. This information is not false or misleading.

### 2. Glossary and Abbreviation

- EA- Environmental Audit
- EO- Environmental Officer
- Recycling: Recycling Bulky Waste involves: breaking down used items into constituent materials, such as wood, plastic or metal, which are then reprocessed to make new items.
- Re-use: Re-use means any operation by which products or components that are not waste are used again for the same purpose for which they were conceived.
- Third Sector: Encompasses voluntary and community organisations, charities, social enterprises, social firms, cooperatives and mutuals, both large and Small. The term Civil Societ which includes, but is broader in its Coverage, is used in England.
- TSO: Third Sector Organisation .
- Waste: Any substance or object which the holder discards or intends, or is required to discard.
- WDF -WasteDataFlow: The web-based system for municipal waste data reporting by UK local Authorities to Government



### 3. Bulky Waste

Any article of waste which exceeds 25 kilograms in weight; and/or

Any article of waste which does not fit, or cannot be fitted into:

- a receptacle for household waste provided in accordance with section 46 of the Environmental Protection Act 1990; or
- where no such receptacle is provided, a cylindrical container 750 millimetres in diameter and 1 metre in length. Common Practice Specification “items you take with you when you move house”, thus differentiating what may reasonably be classed as household waste from trade waste.

Co-products: Product manufactured along with a different product, in a process in which both are required in the production of another product. In comparison, a by-product is usually an undesirable product.

HWRC: Household Waste and Recycling Centre

Municipal Solid Waste (MSW): solid wastes that are generated by households and commercial establishments collected by authorities. It comprises mostly household waste. It does not include estimates for commercial items that are privately collected and directly re-used.

Preparation for Re-use: Items for re-use that are classified as waste: “ Waste’s defined as any substance or object... which the holder discards or intends, or is required to discard.” Preparing means checking, cleaning or repairing.

Post-consumer: waste is a waste type produced by the end consumer of a material stream; that is, where the waste-producing use did not involve the production of another product. Post-consumer waste is distinguished from pre-consumer waste, which is the reintroduction of manufacturing scrap (such as trimmings from production, defective product).



## 4. Executive Summary

Duvets and pillows form bulk waste, otherwise known as B-Waste, is a category of discarded bedding items that are no longer wanted or useful, often considered to be “end-of-life.” Many B-waste is usually compacted when they are put into a landfill. The problem is that this removes oxygen and causes the material to break down anaerobically. Over time, the landfill will produce methane: a greenhouse gas that is 20 times more potent than carbon dioxide thus creating risks to human health and the environment. Despite all these concerns, recycling and re-use can be a safe and effective alternative to disposal. Collection, the first step to recycling, involves the act of gathering, sorting, and packaging for transportation.

There are 6 types of collection most commonly used and which include;

- 1) curbside pick-up by collection companies with trucks,
- 2) donation to charitable organisations,
- 3) drop off locations at companies such as supermarkets or local municipal recycling facilities,
- 4) mail-in services through companies, or
- 5) simple disposal in the common waste stream by throwing duvets and pillows into rubbish bin,
- 6) Door to door collection

Cost and convenience are basic factors in any person’s willingness to participate in a recycling program. Consumers with the mind to recycle must spend time and money to locate, pay for, and travel to waste collectors or HWRC before passing off their bedding items to be recycled. Duvets and pillows may take one of several different fates when thrown away. When disposed, duvets and pillows are in most cases incinerated, thrown in a landfill or in remote cases recovered and exported to third world countries.

To deal with the associated cost of safe recycling, EU legislators chose to use an environmental policy known as Extended Producer Responsibility (EPR). The EPR model makes producers, those that create products for the market, take responsibility for removing those products from the market after post consumer use. To do so, producers are held financially responsible for the costs of collection, transportation, and processing. With the EPR model, producers build products that are easier to recycle and contain less hazardous chemicals.

The overall purpose is to present information for organisations considering establishing collections for, or improving collections of non- clothing textiles for re-use, recycling and recovery.



## 5. Introduction

The project proponent Zero-Landfill Waste Prevention Scheme aims to highlight the relative lack of an integrated collection infrastructure for pillows and duvets for re-use and recycling in The UK. Pillows and Duvets are themselves energy and water intensive to manufacture. Non-clothing textiles are a significant waste stream: the quantity of these non-clothing products is difficult to ascertain as there is lack of data. We highlight the need to increase collection of post-consumer non-clothing textiles. The project aimed to determine how to support the development.

### 5.1. Project Overview

In general bedding items, such as duvets and pillows are discouraged by textile collection operators because collections of used clothing are more viable due to their current high price. Where local authorities are concerned duvets and pillows are bulky and lightweight in nature and thus are not considered a priority waste stream to divert from landfill. Nonetheless, duvets and pillows represent “bulk” in the waste stream which contributes to increased usage of scarce landfill space and thus there should be a need to re-purpose this material.

### 5.2. Project Objectives

- Increase the scope of collecting duvets and pillows across The UK.
- Identify a wider scope for the re-use of material from which duvets and pillows are used to produce them.
- Raise the awareness of supply chain stakeholders to support a synergistic network of re-users.
- Commit supply chain stakeholders to subscribe to an ethical advertising fund aimed at funding key community initiatives for the purpose to promote re-use duvets and pillows.
- Raising the awareness amongst consumers to encourage re-use duvets and pillows.
- Raising the awareness amongst consumers of approved recycling locations.

### 5.3. Project Timeline

- 12 months' timeline

### 5.4. Alternatives

- To continue with fragmented and lame approach to the reduction of duvet and pillows waste.



## 6. Project Description

The purpose of this project is for the stakeholders, in this case producers of bedding items to learn how to develop a collection infrastructure which helps reduce the volume of waste connected to this material. The stakeholders are encouraged to identify solutions for re-use of the material on the principal which aligned with circular economics.

### 6.1. Brief Project Statement

This project has 2 broad aims which primarily is to raise awareness of landfill pollution caused by duvets and pillows and secondly to build a network infrastructure for the collection of these items for the purpose of waste prevention.

### 6.2. Statement of Purpose and Need

There are inadequate recycling facilities to support the goal of providing a well-rounded waste prevention scheme well-rounded and keeping the environment safe.

### 6.3. Context or Background

**a. Mission Statement:** Become Circular Economist Today and Refuse To Waste Away!

**b. Stakeholder demographics:** The creation of Steering Group and its inarguable meeting is to gather stakeholder input regarding macro objectives for the building of Resource Collection Infrastructure of post-consumer products which apart from duvets and pillows also include other bedding items such mattresses and carpets. A working paper on macro objectives for building Resource Collection Infrastructure, including a draft proposal set of such macro objectives, will be circulated among stakeholders in advance of the meeting in order to inform and nucleate the discussion.

This paper would consist of background desk research on the subject, highlights of key aspect that we believe should be addressed in the discussion and, as previously referred, a proposal of a set of macro objectives. This will provide stakeholders with a specific proposal to comment and/or amend. There will be a specific period after the meeting (indicatively three weeks) during which written comments to this document will be accepted. The final set of macro objectives for building Resource Collection Infrastructure will take strongly into account the input received at proposed meetings.

**c. Consistency with Plan:** This project originated through research commissioned by LANDFILL-ZERO WASTE PREVENTION with the specific instructions to target "Sleep Bulk Waste" with this dormant material destined for landfill, due to uneconomic recovery costs and in which bedding items are a major contributing factor.



## 6.4. Project Components

- a. Engagement with stakeholders
- b. Deployment and scaling of collection infrastructure
- c. Increasing Consumer awareness
- d. Recognizing and rewarding innovating stakeholders

## 6.5. Waste Prevention Activities

- a. Widening waste prevention activities
- b. Scaling storage facilities
- c. Adopting innovative technology to decrease collection costs

## 6.6. Issues and concerns identified

- a. Stakeholder engagement.
- b. Local Council Permits.

## 6.7. Cultural sea change

## 6.8. Investment

## 6.9. Cost

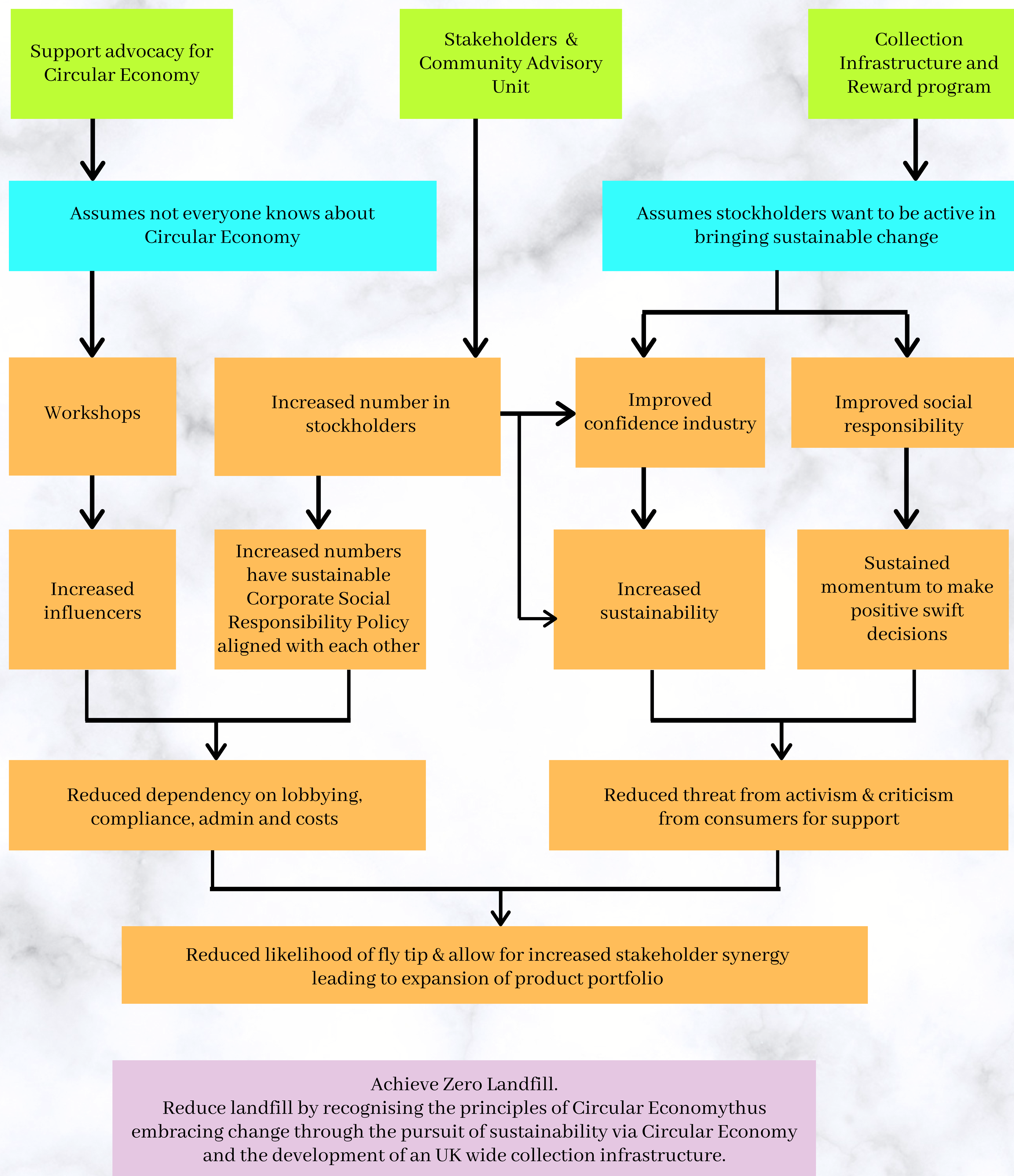
## 6.10. Summary Table

Project Elements	Location And Extent	Construction Phasing	Key Parameters
Landfill Zero Waste Prevention Portal	iCloud	3 months from start of campaign	Budget - costs of development
TROJAN LANDFILL CREDIT SCHEME	Affiliation- nationwide scope	3 months from start of the campaign	Budget - costs of development



Theory of Change - Landfill Zero Waste Prevention Scheme Duvets and Pillow

7. Theory of Change



**Landfill-Zero Waste Prevention of Duvets and Pillows**  
***"Become a circular economist today and refuse to waste away"***

Theory of Change explains how the project has an impact on items of bedding in particular duvets and pillows that are sent to landfill as waste. Essentially under a new compliance regime centred on the principle of Extended Producer Responsibility (EPR) along with the paradigm shift of transitioning from a linear waste economy model to circular economy model there is an urgency for change.





### 7.1. Aims

Supply chain members who have been responsible for product/manufacture of duvets and pillows experience difficulty in solving the problem of collecting these items before they end up in landfill. This project wishes to address this and its aim is to reduce the volume of these items being sent to landfill.

### 7.2. Outcome

There are many reasons why this project specifically focusses on the fact that producers/manufacturers can find it difficult to transition from a linear economy to circular economy. Therefore, the key outcomes for this project are reduced reliance on landfill making it less likely that producers/manufacturers continue to be part of the problem but rather the solution. Other outcomes are then included to explain exactly how those key intermediate outcomes are achieved (please see the Theory of Change diagram on page 1 for details).

### 7.3. Activities

This project has 4 key activities:

1. Advocating circular economy
2. Increasing the role of circular economy innovators and influencers.
3. To establish a collection infrastructure.
4. To publicise (3) above.

### 7.4. Casual Links

1. The project's Theory of Change argues that the activities will reduce landfill usage.
2. In turn these elements reduce the need to rely on landfill.

### 7.5. Assumptions

The project's Theory of Change argues that advocacy and rewarding stakeholders will lead to changes in attitudes and behavior for those parties taking part in the project. However, the project rightly acknowledges that there are assumptions underpinning this claim, in particular that the stakeholders will be better able to build rapport with the consumers. If this doesn't hold true in practice it is likely that the stakeholders will be slow in changing their attitudes and behavior.

The same applies for the assumption about the collection infrastructure and more critically public support - this is beyond the control of the project, but not being able to secure public support would jeopardise the project's effectiveness.

Identifying these assumptions may mean that the project alters its activities slightly - for example by forming a relationship with the local authority to collection infrastructure for the communities connected to the project, or even exploring options for an array of differing modes of collections.