



Climate Resilience & Adaptation Plan

Priority Actions Roadmap

To further SPT's existing effort in adaptation planning, SPT have developed a Climate Change Risk and Opportunity Assessment and a Climate Resilience and Adaptation Action Plan.

SPT aims to enhance resilience across their corporate estate and operations, ensuring continuity and reliability in the face of climate risks. The plan embeds sustainable solutions to develop climate adaptation across our corporate estate, with a focus on opportunities for biodiversity enhancement, nature-based solutions and ensuring the actions contribute positively to the wider environment and local communities.

2025 - 2028

Short term actions

Subway Maintenance

1. Cleaning Drains and Gutters
2. Inspecting and Clearing Culverts
3. Maintaining Ditches and Swales
4. Checking and Repairing Grates

SuD's Implementation

Feasibility studies for SuDs integration (e.g. rain gardens, green roofs/walls, swales) across SPT Assets.

Bus Station NbS

Vegetation management: Planting trees and shrubs that can help absorb excess water and reduce runoff.
Bioswales: Create bioswales or vegetated channels that direct and filter stormwater.

Office energy efficiencies

1. Improve energy efficiency of office buildingsImplementing natural ventilation systems to reduce reliance on air conditioning.
2. Install energy-efficient LED lights to reduce energy consumption and emissions.
3. Install water-efficient fixtures to reduce water consumption. Utilise greywater systems for irrigation of green spaces and gardens.

2028 - 2035

Medium term actions

Subway Flood Defence System

1. Install flood barriers and gates for high-risk assets
2. Improve drainage systems across corporate estate
3. Install green roofs and walls in subway stations and prioritise embedding NbS in design of assets/ refurbishment

Renewable Energy Integration

Use renewable energy sources to power SPT assets e.g. subway station.

Rainwater Water Harvesting

Install systems to capture, treat, and reuse water within subway and bus stations for various purposes, reducing overall water consumption.

Public Awareness Campaigns and community involvement

Educate and engage with SPT asset users about the benefits of NbS and sustainable practices. Encourage community involvement in maintenance and upkeep of green infrastructure flood management practices, fostering a sense of ownership.

2028 - 2035

Long term actions

Digital and SMART technology integration

1. Advanced Predictive Analytics: Utilise AI and machine learning to predict weather patterns and potential flooding events
2. Smart Drainage Systems: Implement IoT-based drainage systems that can dynamically adjust to changing conditions and optimise water flow to prevent flooding.
3. Real-time Monitoring and Response Systems: Implement sensors and monitoring systems to continuously track environmental conditions and automate emergency responses.

Land Restoration

1. Restore and conserve natural habitats e.g., woodlands and grasslands to improve biodiversity and ecological resilience.
2. Invest in carbon sequestration opportunities e.g., tree planting and composting for soil sequestration.
3. Establish pollinator habitats with native plants to support bees, butterflies, and other pollinators, enhancing biodiversity.

Enhanced Public Transport Information Systems:

Implement real-time information systems to keep passengers informed about weather-related disruptions and alternative routes.