

Sustainable Development Framework (SDF) Overview Document

Becoming a Sustainable Development Leader: Taking Cues from Industry

Clear strategies and principles are critical to driving a shift towards sustainable development practices. However, the delivery of these strategies requires practical methods for optimising, specifying, delivering, and monitoring sustainability performance in practice.

Property companies which lead the industry in sustainable development practices consistently adopt a performance-focused approach. This seeks to combine ambitious vision and well-defined strategy with focused performance metrics and quantitative targets – thereby ensuring that ambitions and strategies are translated into SMART (specific, measurable, achievable, relevant, and time-based) outcomes on the ground.

To ensure that TfL Property Development becomes an industry leader in this space, we have developed a performance-focused approach: the *Sustainable Development Framework*.

Sustainability Minimum Targets for all Projects 

The following targets are the minimum requirements for all projects with a capital expenditure over £300,000. Individual targets will be reviewed on a project by project basis and shall be appropriate to the scope and scale of the proposals.

	Retail	Commercial	Residential
Wellbeing			
Local character	→ 100% high efficiency LED lighting, with limited upward light transmission for all exterior lighting		
Occupier health and wellbeing - fit-out	→ Implement the Standard Green Lease Clauses and Deep Fit-Out Guide for future occupiers		→ Use the Office Fit-Out Guide
Community			
Community	→ Contractors to score above 45 on the Considerate Constructors Scheme		
	→ Contractors to support at least one community engagement activity each year, where team members give time to a project that benefits and supports the local community. Community engagement activity should address our four key priority areas in this region: Education, Employment, Business and Culture		
	→ Engage with Centre Management/Managing Agents and seek British Land approval		
Futureproofing			
Energy	→ Achieve an Energy Performance Certificate (EPC) rating of B or better		
	→ Min 95% of light fittings rated energy efficient		
Materials and waste	→ 100% of timber from FSC (Forest Stewardship Council) or PEFC (Programme for the Endorsement of Forest Certification) sources		
	→ Zero waste to landfill: don't 100% of demolition and strip-out waste from landfill and 100% of construction and fit out waste from landfill		
	→ Adhere to the Material Schedule		

THE CROWN ESTATE

Requirements	Performance requirements	Application							
		Type	Use class	Future mean	Retention	Use class			
General									
Detailed Work Stage requirements reporting	Incorporate sustainability requirements within each detailed Work Stage requirements Report, and respond to The Crown Estate DSP Reporting requirements	•	•	•	•	•	•	•	•
Roles and responsibilities	Clearly identify roles and responsibilities of Project Team and Main Contractor across each detailed Work Stage requirements	•	•	•	•	•	•	•	•
Sustainability ratings/certification schemes									
Considerate Constructor's Scheme	CCS Score of 37 or above	•	•	•	•	•	•	•	•
BRE Green Register (most current and relevant scheme)/Home Quality Mark	Excellent Rating (Office/Residential), Very Good Rating (Retail/Industrial), Home Quality Mark pre-assessment	•	•	•	•	•	•	•	•
WELL Building Standard	WELL Ready or Gold rating where certification is sought	•	•	•	•	•	•	•	•
Customer-centric									
Customer wellbeing	Performance requirements should be consistent with the WELL certification standard (or equivalent) unless otherwise stated below	•	•	•	•	•	•	•	•
Healthy design approach	Total VOCs – 8-hour mean: 500µg/m ³ (testing in-line with relevant ISO standard) Formaldehyde – 8-hour mean: 3.7 µg/m ³ PM ₁₀ – 24-hour mean: 50 µg/m ³	•	•	•	•	•	•	•	•
Indoor air quality	Total VOCs – 8-hour mean: 500µg/m ³ (testing in-line with relevant ISO standard) Formaldehyde – 8-hour mean: 3.7 µg/m ³ PM ₁₀ – 24-hour mean: 50 µg/m ³ PM _{2.5} – 24-hour mean: <15 µg/m ³	•	•	•	•	•	•	•	•
	Total VOCs – 8-hour mean: 500µg/m ³ (testing in-line with relevant ISO standard) Formaldehyde – 8-hour mean: 3.7 µg/m ³ PM ₁₀ – 24-hour mean: 50 µg/m ³ PM _{2.5} – 24-hour mean: <15 µg/m ³ , annual mean: 25µg/m ³	•	•	•	•	•	•	•	•

Sustainable Development Framework: Introduction and Objectives

Transport for London is currently undertaking one of London's most significant programmes of urban development and housing delivery. As with many of TfL's historic initiatives, this programme will leave a lasting legacy for London and shape its development for many decades to come. It is therefore critical that it adopts and embodies sustainable development best practice – and realises the economic, environmental, and social legacies that these practices have the potential to create.

To ensure this is achieved and TfL sets a new benchmark for what sustainable development can and should look like, we have created the *TfL Sustainable Development Framework (SDF)*.

The SDF is a metric-driven approach to optimising, specifying, delivering, and monitoring best-in-class sustainability performance across its development portfolio. A living document, it will continuously evolve over time in line with policy, best practice, and lessons learned.

The SDF has six primary objectives, which are shown to the right.



Achieve a balance across the triple bottom line



Allow TfL to take control of sustainability outcomes



Ensure development partners are aligned with Mayoral ambitions



Create a robust framework that can be adapted to individual projects



Define and consistently deliver an above-average performance baseline



Define a market leading performance aspiration to work towards

Sustainable Development Framework:

9 Dimensions of Sustainability

To create a performance-based approach which meets the needs and objectives of TfL Property Development, an interdisciplinary consultation process and a review of policy and best practice was carried out.

This led to the development of a practical and user-friendly set of Key Performance Indicators which span the triple-bottom-line. This includes major ratings systems, such as HQM and BREEAM, in addition to more targeted KPIs which are grouped into nine 'dimensions' of sustainable development:

Economic:

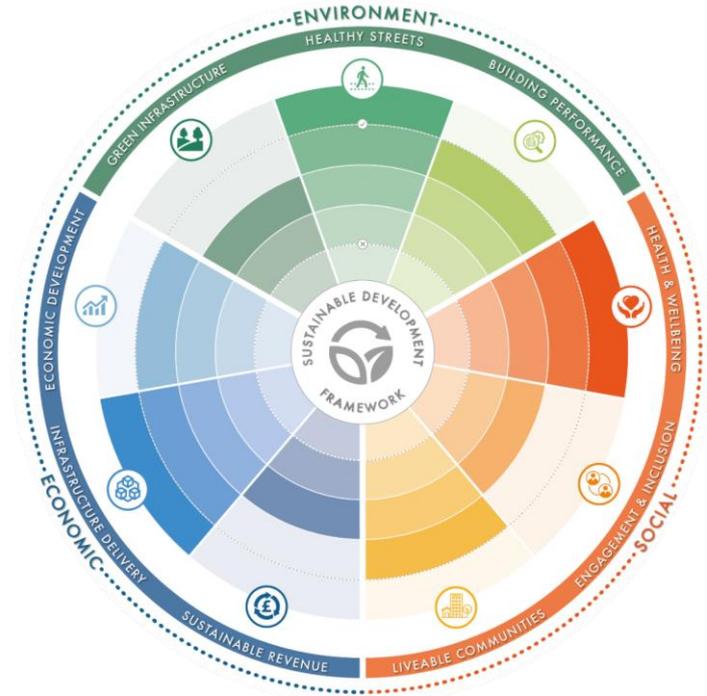
Sustainable Revenue, Infrastructure Delivery, and Economic Development

Environmental:

Green Infrastructure, Healthy Streets, and Building Performance

Social:

Health and Well-being, Engagement and Inclusion, and Liveable Communities



Sustainability Ratings Systems

TfL uses the following ratings systems to benchmark and monitor the overall performance of its schemes.

Assessment ratings



Residential



Commercial



Pilots – to be explored



LIVING BUILDING CHALLENGE™



Economic Dimensions

TfL uses the following KPI themes to benchmark and monitor the economic performance of its schemes.

Sustainable Revenue



- Capital Receipts
- Long-Term Financial Returns
- Lifecycle Cost Assessment

Infrastructure Delivery



- Healthy Streets infrastructure
- Cycle Hubs
- Step free access
- LUL infrastructure
- LBSL infrastructure
- Active travel infrastructure
- Renewable energy infrastructure
- EV charging points

Economic Development



- GLA Good Work Standard
- Ethical labour
- Responsible procurement
- Promoting local business
- Apprenticeships and training
- Job creation
- Local economic impact
- Local business support
- Mixed use development
- Creative enterprise
- Social enterprise



Environmental Dimensions

TfL uses the following themes to benchmark and monitor the environmental performance of its schemes.

Building Performance



- Responsible procurement
- Circular economy
- Construction efficiency
- Embodied carbon
- Operational carbon
- Operational energy
- Operational water
- Operational waste
- Smart building technologies

Healthy Streets



- Checklist for Designers Assessment:
 1. People choose to walk, cycle, and use public transport
 2. Pedestrians from all walks of life
 3. Easy to cross
 4. People feel safe
 5. Things to see and do
 6. Places to stop and rest
 7. People feel relaxed
 8. Not too noisy
 9. Clean air
 10. Shade and shelter

Green Infrastructure



- Urban greening factor
- Biodiversity net gain
- Run-off rates



Social Dimensions

TfL uses the following KPI themes to benchmark and monitor the social performance of its schemes.

Health & Wellbeing



- Responsible construction
- Air quality
- Noise
- Overheating
- Health and safety
- Security

Engagement and Inclusion



- Diversity
- Inclusive design
- Pre-design community engagement
- In-operation community engagement
- Displacement impacts
- Community activities
- Community-led investment
- Meanwhile uses

Liveable Communities



- Social services
- Education
- Healthcare
- Childcare
- Public leisure facilities
- Community spaces

Note: The measurement and quantification of social impact is an emerging field, with little in the way of established methods or best practice. KPI themes relating to social impact (particularly Engagement & Inclusion and Liveable Communities) are consequently expected to change rapidly. As new policy emerges, methodologies are developed, and best practice is established, these KPIs will be updated to reflect current thinking.

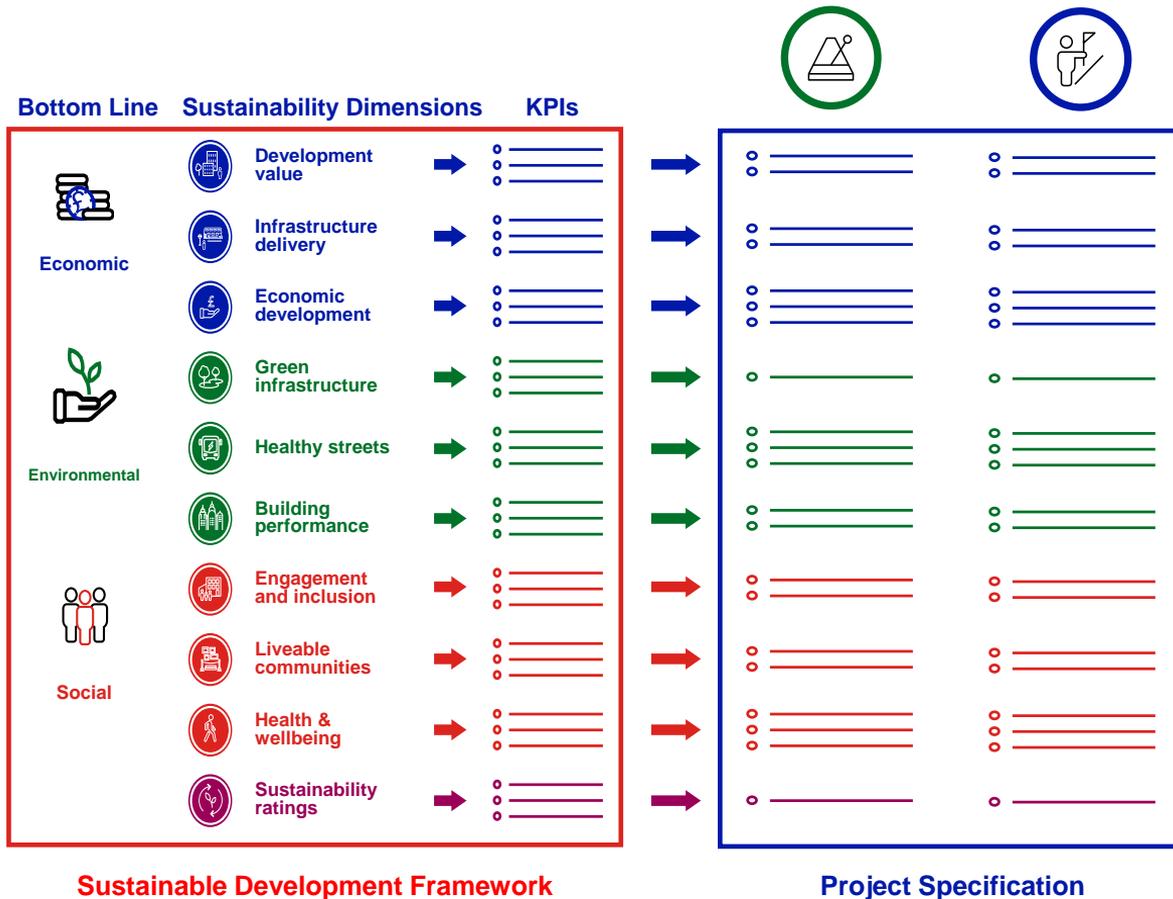
Implementing the SDF

Each of TfL's development sites is unique, and to ensure we are delivering the best outcomes possible, a site-specific approach is required.

This involves three key stages:

- 1. Optimisation:** evaluate opportunities for sustainable development practices, identify suitable measures, complete cost-benefit analysis, and use this information to optimise scheme performance across the triple bottom line.
- 2. Specification:** based on the optimised sustainability approach, set a performance baseline and performance aspiration performance for the project. These will serve as a specification for design teams to work towards.
- 3. Review:** the scheme's performance will be periodically assessed (at the end of each RIBA stage at a minimum) to ensure the desired performance is being achieved.

These stages are outlined in subsequent pages.



SDF Stage 1: Performance Optimisation



When:

- Ideally before RIBA 1 (Detailed Feasibility)
- Useful leading in to ITT or post-JV design
- Not relevant once planning is submitted

Output:

- Assess opportunities and constraints;
- Identify potential interventions;
- Complete cost-benefit analysis;
- Identify relevant interventions for consideration; and
- Set sustainability performance brief for design team.

Benefits:

- Sustainability performance optimized from the outset in a commercially viable manner; and
- SMART outcomes defined for design team

Example: Healthy Streets Optimisation

HEALTHY STREETS LONDON PARTNERSHIP

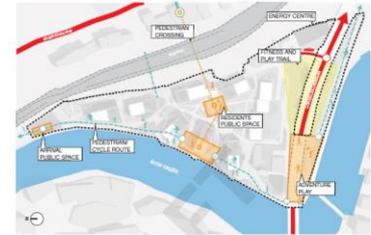
ASSESSMENT OF SITE POTENTIAL

A socially, environmentally and economically responsive development should be centred around a high quality human experience, informed through a high level desktop site appraisal. A series of spatial opportunities and challenges have been identified that look at maximising the site's potential.

CONCEPT SITE POTENTIAL

Limehouse Park's key location within London presents a series of opportunities that should be considered in the future redevelopment of the site. These spatial opportunities aim to positively contribute to the social, environmental and economic performance of the site. Opportunities for further improving the alignment of the development with healthy streets aim to:

Site Feature:	Overview:	Opportunities:	Challenges:
A Central Pedestrian and Cycle Bridge	Proposal to move the pedestrian crossing to more directly link up with the existing street and open space network.	Provide a more central pedestrian and cycle application that seamlessly links into the wider local public space and waterfront environment.	There may be limitations to the permeability for the pedestrian crossing of the bridge.
A Riverside Walk and Cycle Route	A linear pedestrian/cycleway that has break out spaces that interact with the water.	A multidirectional movement corridor supporting remote activities, public spaces and water-facing.	Ensuring the proposed bridge appropriately engages with and enables the public realm to support a wide waterfront experience.
A City - River Connection	Seamless pedestrian links between the pedestrian bridge and a collection of public spaces that connect people and water together.	This should also facilitate a well considered element of public realm to allow people to engage with the water edge and to allow commercial and leisure functions to spill into the space.	Ensuring the residential development allocation will still be achieved if more space is allocated to public spaces.
Consolidation of Deliveries	Consolidate the timing of deliveries on site.	Reduce the amount of vehicles moving through the site throughout the day.	Ensuring the management and operational communication effectively with the various enterprises operating on site.
Green Streets	Creation of green streets throughout the site.	Heavy parking along the street network to provide shade, shelter and urban cooling.	Management and maintenance plans would need to be in place to ensure upkeep.
Accessible Streets	Create an accessible street network that supports a walk and cycle friendly environment.	Opportunity for an street weather protected cycle parking for all types of bikes to support people to travel actively.	Designing in alternative to allow for various forms of transport to seamlessly integrate.



01 A footbridge with an integrated landing point.



02 Accessible streets allow access for all modes of transport.



03 Green inhabited streets link public space to network.



04 Weather protected, green roof cycle storage.

SDF Stage 2: Performance Specification



When:

- Before ITT for JV partners and contractors
- Not relevant post-ITT

Output:

- Evaluate the 'shortlist' of sustainability interventions in detail to identify which ones TfL wishes to see delivered or explored further;
- Draft a specification outlining the chosen interventions, and whether they are required or optional; and
- Validate the proposed KPIs and performance baselines / aspirations for inclusion in the ITT.

Benefits:

- Provides clarity to bidders on TfL's expectations and preferences;
- Ensures all ITT responses align with TfL's targeted performance; and
- Clearly lays out a 'menu' of best practices (and associated costs / benefits) for developers to consider.

Example: Healthy Streets Specification (Aspirational Level)

HEALTHY STREETS **LINEAR PERMABILITY**

HEALTHY STREET IMPROVEMENT: SILVERTOWN WAY
A series of proposed improvements based on the 10+ quality Street indicators have been identified for Silvertown Way. These are high level suggestions that could increase the Silvertown Way's Healthy Street Check score to an aspirational level.

Category	Precedent	Potential Improvement	Indicative Score
PEDESTRIANS FROM ALL WALKS OF LIFE		Accommodate dedicated pathways on both sides of the road corridor to promote active transport.	78
EASY TO CROSS		Upgrade and signal the junction at side street crossings to prioritise people crossing. Review where new crossings need to be added to Silvertown Way. Review traffic lights to ensure street crossings with plenty of time for people to cross.	80
SHADE AND SHELTER		Establish trees and planting alongside the street edge to create a natural canopy for the street. Identify opportunities for average and affordable canopies such as busstops, bus shelters and tree planting.	83
PLACES TO STOP AND REST		Locate seating and benches along the street at key focal spaces along the street. Introduce planters and step terraces alongside some of the building edges. Check opportunities for seating at 10-meter intervals with some seating located key focal spaces.	93
NOT TOO NOISY		Introduce permeable surfaces to reduce noise using design measures to slow speeds such as narrowing lanes, signage at junctions and using a speed camera if appropriate if needed.	73
PEOPLE CHOOSE TO WALK, CYCLE AND USE PUBLIC TRANSPORT		A dedicated cycle path with advanced width to accommodate for two-way use. Dedicated cycle lanes from general traffic and advance narrow footway pinch points to enhance safety and provide active travel.	78
PEOPLE FEEL SAFE		Future development to upgrade and animate the street will improve passive surveillance. Maximise road width to reduce traffic congestion and speed.	83
THINGS TO SEE AND DO		Public development to create ground floor uses that animate the street edge. Clear vendors, street artists and social spaces to encourage people to linger. Public art, street lighting and planting.	83
PEOPLE FEEL RELAXED		Adequate provision of trees along the street to minimise heat. Wide cycle paths to cater for existing and future demand. Align street elements to support people who are walking.	79
CLEAN AIR		Introduce permeable surfaces to reduce vehicular traffic along the street. Consider a road traffic management plan to reduce parking, manage deliveries and create routes through quieter neighbourhoods with limited permeability.	75

18 Healthy Streets: Linear Permeability

Healthy Streets: Linear Permeability 19

SDF Stage 3: Performance Review and Reporting



When:

- At the end of each design stage

Output:

- Audit the scheme's projected performance against the project's targeted performance;
- Provide recommendations on where and how performance can be improved; and
- Specify the range of interventions to be delivered on site which will help to achieve the desired level of performance.

Benefits:

- Provides valuable data and quality assurance;
- Helps demonstrate exemplary sustainability performance to stakeholders, and report performance to governance bodies.

Example: Project Performance Dashboard

