

SUSTAINABILITY FRAMEWORK FOR DEVELOPMENTS

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The framework has been developed with the assistance of Arup, a global firm of designers, engineers, planners and business consultants.

PURPOSE AND STRUCTURE

The purpose of this document is to outline a standardised framework that can be applied to all development projects to identify, assess and address sustainable issues, opportunities and risks. It is intended that this document be used by development teams from across the SEGRO globe for all development projects.

The structure of the document is as follows:

Introduction of the framework and its objectives

Overview of the sustainability process, including roles and responsibilities and links to the Environmental Management System (EMS)

Approach to assessing project sustainability against corporate targets

Process for development and implementation of the Project Sustainability Plan

Project level monitoring and reporting process

Implementation of the framework

OBJECTIVES

Within SEGRO, sustainable development has come to embrace the concept of integrating economic, social and environmental issues, optimising the use of available resources to maximum value for all stakeholders.

SEGRO is committed to addressing the material sustainable issues that are of concern to stakeholders, based on four key areas, shown in Figure 1.

Within the context of these four areas, SEGRO's long term sustainability vision will be guided by a set of long-term corporate sustainability objectives. This Sustainability Framework is intended to help SEGRO in directing its development activities to contribute to achieving these objectives. Recognising the strong level of sustainability practices already evident within the company, this framework seeks to establish a common platform to identify and document sustainability targets and standards for design and construction for all projects, in all countries.

A mechanism for straightforward reporting against agreed benchmarks will ensure all our developments are cognitive of creating maximum value. This will enable the many benefits of a well-designed built environment to be integrated into the SEGRO development decision process, incorporating all of the aspects of value to set a reasonable level of investment, including economic value, building user value, cultural and image value, environmental value and social value.

SEGRO is committed to delivering sustainable buildings and, through its development projects, aims to promote new standards of sustainable development, advancing best practice in design and construction.

Figure 1: Four Areas of Sustainability Framework



OVERVIEW OF SUSTAINABILITY PROCESS

A summary of the key steps in the Sustainability Framework, the governance structure and linkages with the EMS is provided below.

Key Steps

There are three main steps in the Sustainability Framework for Developments, designed to align with SEGRO's development process, as shown in Figure 2.

Project Sustainability Assessment: Each development project should initially undergo an assessment of sustainability opportunities and constraints, evaluating scheme designs against corporate sustainability objectives. This process will guide greater integration of sustainable design and construction features, enhancing the value of the development.

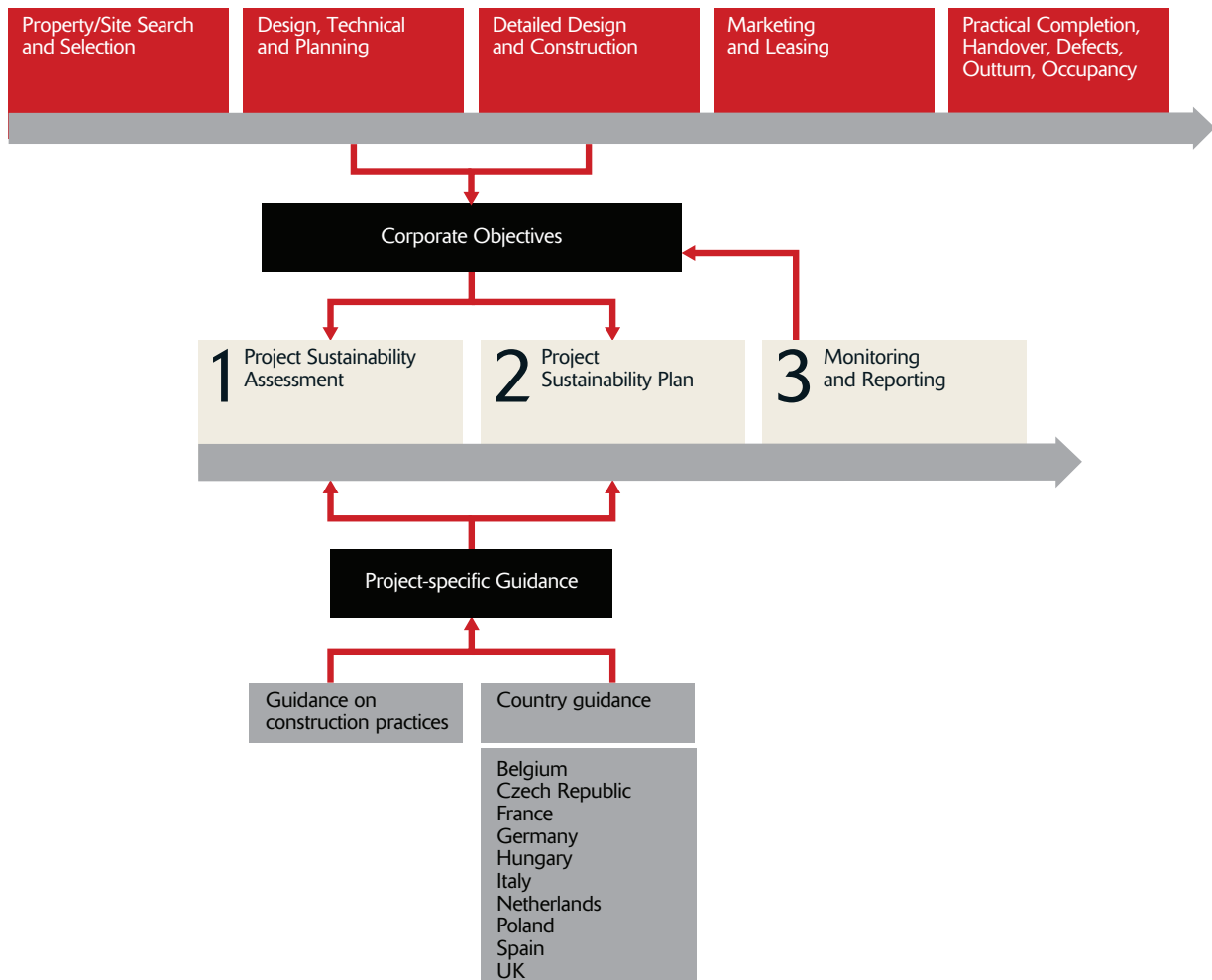
Project Sustainability Plan: Sustainability objectives and targets should then be established within a Project Sustainability Plan, to be implemented throughout the design development and construction in conjunction with supply chain partners. Guidance documents support the preparation of the Plan.

Monitoring and reporting: Progress against the Project Sustainability Plan will be monitored and reported on to enable lessons learned to be collated and to enable the cycle of continual improvement of sustainability performance to be integrated within the way we work.

Roles and Responsibilities

The roles and responsibilities related to the management and implementation of the sustainability framework, both within the UK and across Europe, are presented below. As each country may have its own particular governance mechanisms on projects, these roles and responsibilities may need to be adjusted on a country-by-country basis.

Fig 2: SEGRO Sustainability Framework



OVERVIEW OF SUSTAINABILITY PROCESS

United Kingdom – Roles and Responsibilities	
Board	Fully committed to the continual enhancement of the company’s sustainability performance, with direct responsibility for the development and implementation of its corporate sustainability strategy, including setting of long-term sustainability strategies.
Head of Sustainability	Responsible for overall coordination and development of the Sustainability Framework, performance review and monitoring, and continuous feedback, as well as roll out of the Sustainability Framework across SEGRO’s development operations.
Business Unit Directors/Senior Development Managers	Responsible for reviewing and approving Project Sustainability Assessment and Project Sustainability Plan as part of CAC submission to the Board.
Development Manager	Responsible for preparing Project Sustainability Assessment and Project Sustainability Plan, including setting of targets, in collaboration with Environmental Manager.
Environmental Manager	Responsible for supporting and assisting with the setting of targets in collaboration with Development Manager, and undertaking performance monitoring and reporting.
Project Manager	Responsible for delivering on the sustainability targets established for the project and the implementation of the Plan.
Design Team	Responsible for reviewing the Country Guidance and contributing to the preparation of the Project Sustainability Assessment and Project Sustainability Plan. Design team may be asked to undertake analysis and calculate performance targets for actions related to their respective disciplines.
Principal Contractors	Responsible for reviewing the Country Guidance and contributing to the preparation of the Project Sustainability Assessment and Project Sustainability Plan. May be asked to undertake analysis and calculate performance targets for actions. Responsible for implementation of actions related to construction.

Continental Europe – Roles and Responsibilities

Board	Fully committed to the continual enhancement of the company's sustainability performance, with direct responsibility for the development and implementation of its corporate sustainability strategy, including setting of long-term sustainability strategies.
Head of Sustainability	Responsible for overall coordination and development of the Sustainability Framework, performance review and monitoring, and continuous feedback, as well as roll out of the Sustainability Framework across SEGRO's development operations.
Country Head	Reviews and approves Project Sustainability Assessment and Project Sustainability Plan as part of CAC submission to the Board.
Development Manager	Responsible for preparing Project Sustainability Assessment and Project Sustainability Plan in collaboration with Environmental Manager.
Environmental Manager/Technical Manager	Responsible for supporting and assisting with the setting of targets in collaboration with Development Manager, and undertaking performance monitoring and reporting.
Project Manager	Responsible for delivering on the sustainability targets established for the project and the implementation of the Plan.
Design Team	Responsible for reviewing the Country Guidance and contributing to the preparation of the Project Sustainability Assessment and Project Sustainability Plan. Design team may be asked to undertake analysis and calculate performance targets for actions related to their respective disciplines.
Principal Contractors	Responsible for reviewing the Country Guidance and contributing to the preparation of the Project Sustainability Assessment and Project Sustainability Plan. May be asked to undertake analysis and calculate performance targets for actions. Responsible for implementation of actions related to construction.

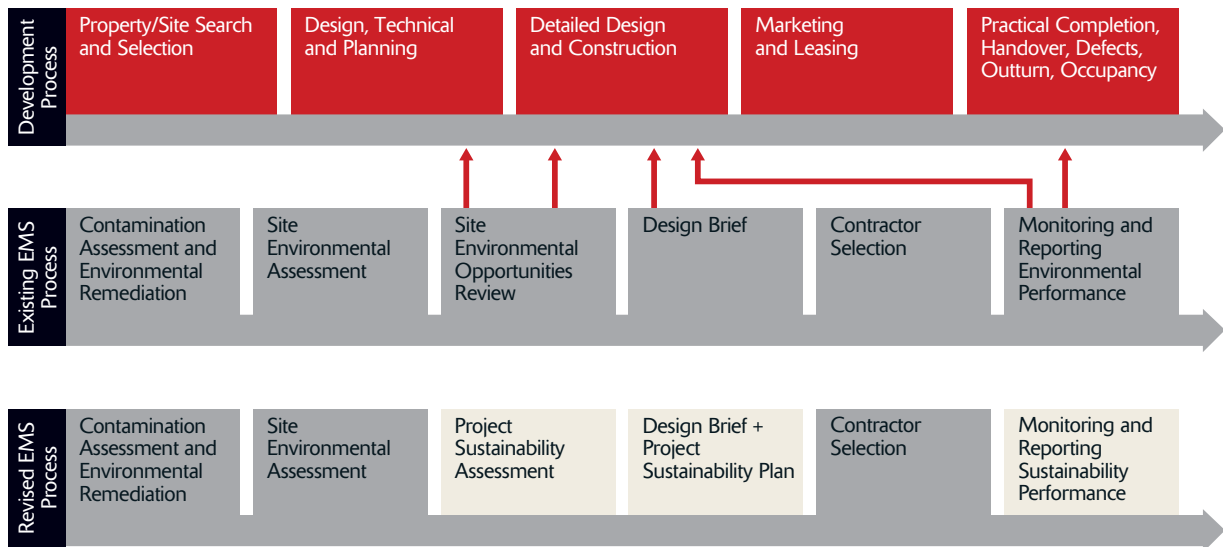
Link to EMS

The SEGRO Sustainability Framework complements the Environmental Management System (EMS). The EMS contains guidance on core SEGRO activities to limit environmental impact. Key mechanisms employed by the EMS include:

- a. Identifying potential environmental liabilities associated with a site prior to acquisition.
- b. Influencing the environmental performance of development designs.
- c. Ensuring that adverse environmental impacts arising from development (demolition and construction) are controlled.
- d. Supporting environmental management of managed assets.
- e. Identifying new suppliers' environmental management practices and policy.
- f. Ensuring that environmental management practices continually improve and that the suitability of the management system is reviewed.

OVERVIEW OF SUSTAINABILITY PROCESS

Figure 3: Link between Development Process, EMS and Sustainability Framework



The sustainability framework will be integrated with the EMS as shown in Figure 3. Major changes are as follow: the Project Sustainability Assessment would take the place of the Site Environmental Opportunities Review; the Design Brief would be accompanied by a Project Sustainability Plan; and the environmental monitoring and reporting will be expanded to also address sustainability performance. Over time the sustainability framework will be fully integrated with the EMSs for all countries where SEGRO has operations.



PROJECT SUSTAINABILITY ASSESSMENT

Purpose

The purpose of the Project Sustainability Assessment is to highlight opportunities and constraints for aligning a development scheme design with SEGRO's sustainability objectives. The assessment is intended to establish an early business case for achieving or going beyond corporate objectives.

Corporate Sustainability Objectives

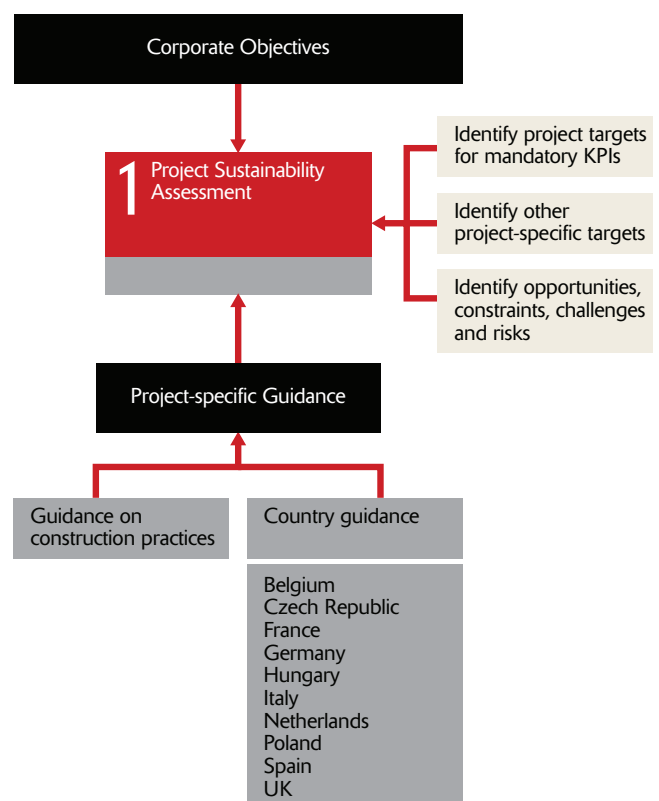
Corporate objectives have been established within the Sustainability Framework, including development objectives which form the basis for completing the Project Sustainability Assessment. The objectives establish corporate aspirations under which project specific sustainability targets should be aligned and based. Each corporate sustainability objective is associated with a specific performance indicator. Projects are required to use these mandatory indicators in setting sustainability targets.

Structure and Approach

The SEGRO Sustainability Objectives are communicated to design teams within the project brief and it is the achievement of these objectives which will be assessed by the Environmental Manager at various points in the project as discussed in the Performance Monitoring and Reporting section of this document.

The Project Sustainability Assessment will be undertaken as part of the project feasibility, at outline design stage, and will be used to inform the development of the Project Sustainability Plan.

Figure 4: Approach for Preparation of Project Sustainability Assessment



PROJECT SUSTAINABILITY ASSESSMENT

Theme	Sustainability Objectives for Developments	Project Key Performance Indicator
Energy and Emissions	Construct buildings with 30% better energy efficiency than base build.	% energy reduction over base build.
	Investigate feasibility of renewable energy for every development site.	Renewable energy feasibility analysis conducted.
Water	Incorporate water efficiency measures and water recycling to reduce mains water use by 20% compared to base build.	% water reduction over base build.
Waste	Reduce the proportion of non-hazardous construction and excavation waste to landfill by at least 70% compared to 2007.	Weight of non-hazardous construction and excavation waste sent to landfill per million pound sterling of construction costs.
	Re-use or recycle 80% of non-hazardous construction and demolition waste.	% non-hazardous construction and demolition waste diverted from landfill.
Transportation	For all appropriate new developments and managed estates to have a tailored travel plan.	Travel plan developed.
Community Engagement	Ensure Community Engagement Plans are in place where we have a major presence.	Community Engagement Plan in place.
Community Investment	Invest in communities where we have a major presence and report the level of investment on an annual basis.	Community investment (in GBP/Euro) associated with a project.

Template

A template for the Project Sustainability Assessment is shown below.

PROJECT SUSTAINABILITY ASSESSMENT						
Project	Location/Address		Region/Country	Development Manager	Project Manager	
Resources						
A. Category	B. Corporate Targets	C. Opportunities	D. Risks, Constraints, Challenges	E. Required Key Performance Indicator (KPI)	F. Project Sustainability Target(s) (against KPI if applicable)	G. Design Team Responsibility
Climate Change - Energy & Emissions	Construct buildings with 30% better energy efficiency than base build. Investigate feasibility of renewable energy for every development site.			% energy reduction over base build Renewable energy feasibility analysis conducted		
Water	Incorporate water efficiency measures and water recycling to reduce mains water use by 20% compared to base build.			% water reduction over base build		
Waste	Reduce the proportion of non-hazardous construction and excavation waste to landfill by at least 70% compared to 2007.			Weight of non-hazardous construction & excavation waste sent to landfill per million pound sterling of construction costs		
	Re-use or recycle 80% of non-hazardous construction and demolition waste.			% non-hazardous construction & demolition waste diverted from landfill		
Environmental Standards & Systems						
Pollution						
Materials						
Biodiversity / Land Use						
Regeneration						
A. Category	B. Corporate Targets	C. Opportunities	D. Risks, Constraints, Challenges	E. Required Key Performance Indicator (KPI)	F. Project Sustainability Target(s) (against KPI if applicable)	G. Design Team Responsibility
Economic Regeneration						
Community Engagement	Ensure Community Engagement Plans are in place where we have a major presence.			Community Engagement Plan in place		
Community Investment	Invest in communities where we have a major presence and report the level of investment on an annual basis.			Community investment (in GBP /Euro) associated with a project		
Health & Well-being						
Accessibility						
A. Category	B. Corporate Targets	C. Opportunities	D. Risks, Constraints, Challenges	E. Required Key Performance Indicator (KPI)	F. Project Sustainability Target(s) (against KPI if applicable)	G. Design Team Responsibility
Transport	For all appropriate new developments and managed estates to have a tailored travel plan.			Travel plan developed		
Connectivity						
Flexibility						
A. Category	B. Corporate Targets	C. Opportunities	D. Risks, Constraints, Challenges	E. Required Key Performance Indicator (KPI)	F. Project Sustainability Target(s) (against KPI if applicable)	G. Design Team Responsibility
Climate Change Adaptation						
Building Adaptability						
Design Quality						
Prepared by:			Approved by:			
Title:			Title:			
Date:			Date:			
Signature:			Signature:			

Instructions for Completion

The Assessment form is designed to enable design teams to identify how they are considering incorporating sustainable design elements into their projects. By establishing a track record for how each project has considered implementing sustainability, the Assessment will help to standardize the approach to sustainability across all of SEGRO's regional operations, as well as improve the transparency of the approach. It should be used in tandem with the Country Guidance which provides specific suggestions for sustainability technologies and approaches that can be incorporated into different project types. The template contains all the categories included within SEGRO's sustainability framework. We encourage design teams to use it as a tool to track progress over time and coordinate the approach to sustainable design and planning of projects.

Information should be entered into the form as follows:

Project Identification

Enter information related to the project name, location, reference numbers, as well as the Development Manager and Technical Manager on the project.

Column C: Opportunities

The major opportunities that are available to the project should be identified, including systems, technologies, design components, planning approaches, procurement strategies, etc.

Column D: Risks, Constraints, Challenges

In this section, design teams can identify what factors may limit their ability to deliver on the opportunities identified. These factors could relate to: technical complexity, physical constraints, financial viability, availability of supply, market response, alignment with client requirements, time constraints, etc.

Column E: Required Key Performance Indicators

Provides the required key performance indicators (based on corporate objectives).

Column F: Project Sustainability Target(s)

This is where teams should identify the target established as part of the Sustainability Assessment. Targets should be established for each category in the sustainability framework. These targets can be quantitative or qualitative as long as their performance can be measured or evaluated. If there are required key performance indicators (KPIs) for that category (as listed in Column C), then the target for Column F must directly related to the required KPI.

Column G: Design Team Responsibility

While ultimate responsibility for the Assessment rests with Technical Managers, team members who hold responsibility for achieving specific targets should be identified.



PROJECT SUSTAINABILITY PLAN

Purpose

The purpose of the Project Sustainability Plan is to establish project sustainability targets that optimize the economic, social and environmental resources available, and identify the broad approach that will be employed to achieve targets. The Plan is the basis for future performance monitoring and reporting.

Structure and Approach

Further to the Project Sustainability Assessment, appropriate design and construction decisions will be facilitated through the creation of a Project Sustainability Plan, which recognises both development location and project type as the primary determinants of potential sustainability objectives.

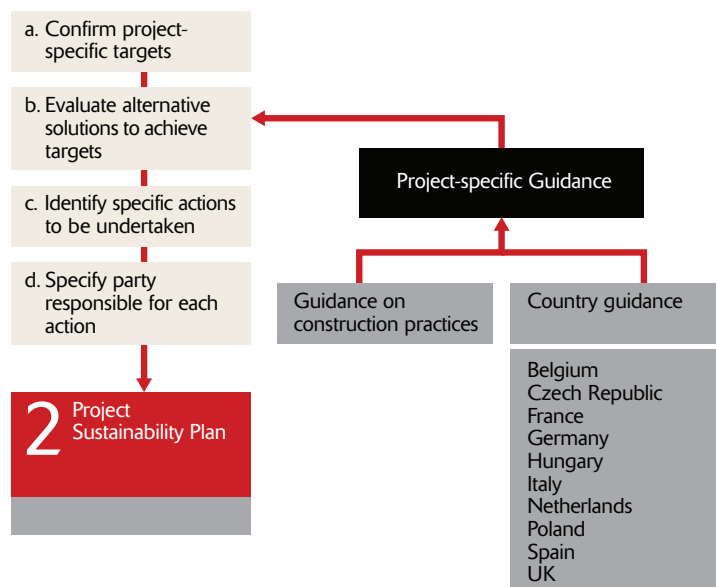
The Plan will continue to be a live (working) document, throughout the development process, providing a structure to establish, document and communicate the sustainability objectives and targets of the project, and forms the basis for monitoring of performance achieved throughout the process.

Further, in recognition of the increasing awareness of our tenants to the sustainability of the buildings they occupy, this Project Sustainability Plan incorporates a facility to engage with third parties to establish tenant-specific design criteria.

Link with Capital Approval Process

While the Project Sustainability Plan is a living document that cannot be fully completed until the detailed design stage, an early draft should form part of the capital approval process, to provide the Capital Approval Committee (CAC) an indication of the sustainability measures planned for the project.

Figure 5: Approach for preparation of Project Sustainability Plan



Country Guidance

To support the development of Project Sustainability Plans (and associated targets), a series of country-specific design guidance documents has been produced. These identify the key issues, opportunities, best practices, resources and reference guidelines across the 4 areas of SEGRO's sustainability framework: resources, regeneration, accessibility and flexibility to present best practices in sustainable design (Appendix). The Guidelines are not mandatory; rather they have been developed to highlight issues and opportunities to consider for incorporation into projects.

Sustainable Design and Construction Guidance

Design teams are encouraged to consult best-practice construction guidance, such as the CIRIA publication "Environmental good practice on site" (<http://www.ciria.org/acatalog/C650.html>).

PROJECT SUSTAINABILITY PLAN

Template

A template for the Project Sustainability Plan is shown below.

PROJECT SUSTAINABILITY PLAN		Location/Address		Region/Country		Development Manager		Project Manager																																																	
Project Sustainability Plan																																																									
Performance Monitoring & Reporting Against Plan																																																									
A. Category	B. Corporate Target	C. Required Key Performance Indicator (KPI)	D. Project Sustainability Target(s) (against KPI if applicable)	E. Actions	F. Responsibility	G. Design Stage - Performance Against Target	H. Target Achieved? (Y/N)	I. Post-Construction - Performance Against Target	J. Target Achieved? (Y/N)	K. Post-Occupancy - Performance Against Target	L. Target Achieved? (Y/N)																																														
Climate Change - Energy & Emissions	Construct buildings with 30% better energy efficiency than base build. Investigate feasibility of renewable energy for every development site.	% energy reduction over base build Renewable energy feasibility analysis conducted																																																							
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Instructions for Completion

The Project Sustainability Plan is designed to document the sustainability features that are to be included in projects, including targets the project is aiming to achieve. The Plan should be updated over time when there is a change in major decisions affecting the sustainability components of the project. It is also used to undertake performance monitoring and reporting at various stages of the project.

Information should be entered into the form as follows:

Project Identification

Enter information related to the project name, location, reference numbers, as well as the Development Manager and Technical Manager on the project.

Column D: Project Sustainability Target(s)

This is where teams should identify the targets established as part of the Sustainability Assessment.

Column E: Actions

Indicates major sustainability initiatives, features, components that are expected to be incorporated into the project.

Column F: Responsibility

Indicates member of the team who is responsible for directing efforts towards achieving the target.

Columns G-L: Performance Monitoring and Reporting

These are completed at the detailed design, post-construction and post-occupancy stages, as appropriate. Actual performance against targets should be identified. Should project targets not be achieved, reasons should be identified, together with opportunities for ensuring success on future projects.



PERFORMANCE MONITORING AND REPORTING

Data quality is a central consideration within this Sustainability Framework, with data collected and handled in a structured and systematic way to facilitate monitoring and reporting of progress.

Performance monitoring and reporting is to be carried out at three key points in the project lifecycle: the design stage, at construction completion and once the building has been occupied for one year. As previously mentioned, all projects are required to use the mandatory KPIs to establish targets.

Performance monitoring should be undertaken against these required KPIs and against any other previously established project targets. The Project Sustainability Plan can be used to record performance results during these three stages as appropriate.

The Environmental Manager is responsible for monitoring performance and collecting data about individual projects and reporting this data to the Head of Sustainability during design and post-construction/initial occupancy periods.

IMPLEMENTATION OF SUSTAINABILITY FRAMEWORK

Training on the use of the forms will be rolled out over the course of the year.

SEGRO is exploring different IT solutions to provide online access, including help tools, to the Project Sustainability Assessment and Project Sustainability Plan forms. Currently they are available through an excel-based form located in S:\Sustainable Development Framework.

In keeping with SEGRO's emphasis on continual improvement, feedback mechanisms have been established to enable the Sustainability Framework to evolve and improve over time. The Sustainability Framework (including the procedures, forms and country guidance documents) will be reviewed for effectiveness once per year (as occurs with the EMS). Selected projects will be audited to identify best practices that can be applied elsewhere, as well as lessons learned.

APPENDIX COUNTRY DESIGN GUIDANCE

A series of Design Guidance Notes have been developed to support the identification of best practice sustainability targets and solutions within this Sustainability Framework.

In recognition of the variances which exist across countries, Design Guidance Notes are available for the following countries:

Belgium

Czech Republic

France

Germany

Hungary

Italy

Netherlands

Poland

Spain

UK

It should be recognised that these Design Guidance Notes do not represent an exhaustive list of sustainability best practice. Innovative design, specification and construction techniques should be encouraged to advance best practice.

