

SUSTAINABLE DESIGN & CONSTRUCTION SPD				
	TASK A2	TASK A3		
	Baseline analysis	TASK A3 : Identifying sustainability issues and problems		
SA Theme	Baseline Situation	Issues	Opportunities	Interrelationships
Biodiversity	No additional baseline information	<ul style="list-style-type: none"> Protection and enhancement of biodiversity in the design of new buildings 	<ul style="list-style-type: none"> Designing in Biodiversity to new developments Maximise Biodiversity credits under Code for Sustainable Homes / BREEAM 	LDF SA Objective :- 1 & 8
Water and Soil	<p><i>Water Consumption</i></p> <ul style="list-style-type: none"> 2004/05 average household water consumption in unmetered households was 150 litres per person per day. Metered household water consumption was 136 litres per person per day. 	<ul style="list-style-type: none"> Increase water efficiency in new developments Reduce surface-water run-off from developments Reduce soil erosion and maintain landscape value 	<ul style="list-style-type: none"> Include water efficient fittings, rainwater harvesting and greywater recycling Incorporate SUDS features 	Biodiversity Climatic Factors LDF SA Objective :- 6 , 5
Population & Human Health	No additional baseline information	<ul style="list-style-type: none"> Climate Change effects on the health of buildings and its inhabitants Walking and cycling 	<ul style="list-style-type: none"> Ensure buildings are flexible to the impacts of Climate Change Provide cycle storage Natural ventilation 	Climatic Factors Air Social Inclusion LDF SA Objective :- 6 , 7
Air	No additional baseline information	<ul style="list-style-type: none"> Air pollution from buildings 	<ul style="list-style-type: none"> Reduce pollution from new developments 	Climatic Factors LDF SA Objective :- 7 , 2
Climatic Factors	<p><i>Ecological Footprint</i></p> <ul style="list-style-type: none"> South East Ecological Footprint was 55m global hectares which 	<ul style="list-style-type: none"> Adapt and mitigate against climate change Environmental impact of new development on CHC emissions 	<ul style="list-style-type: none"> Holistic approach to sustainable design and construction as set out in the Core Strategy Complement Design policies and 	All

	<p>equates to 6.8 global hectares per person</p> <ul style="list-style-type: none"> • South East carbon emissions are estimated at around 20 tonnes per person. <p><i>Renewable Energy</i></p> <ul style="list-style-type: none"> • Renewables accounted for 4.2% of electricity generated in the UK in 2005, up from 3.6% in 2004. • In 2005 , bio-fuels accounted for 83% of renewable energy sources, Hydro 9% and wind power 6%. • Kent Renewable Electricity & Heat Installed Capacity (MW) - 42.40 MWe (electricity) / 0.30 MWth (thermal heat) <p><i>Residential Carbon Emissions</i></p> <ul style="list-style-type: none"> • 53% of Residential Carbon Dioxide Emissions comes from Space Heating, 22% from Lights and appliances, 20% from Water Heating and 5% Cooking. 	<p>development on GHG emissions</p> <ul style="list-style-type: none"> • Microclimate effects • Places will need to be resilient to climate change effects in the future • Reduce carbon emissions from homes and buildings 	<ul style="list-style-type: none"> • Compliment Design policies and SPD • On-site renewable energy technologies • Energy efficiency 	<p>LDF SA Objective :- 1, 5,6,7,14,17,18</p>
<p>Material assets</p>	<p><i>Municipal Solid Waste</i></p> <ul style="list-style-type: none"> • 38,751 tonnes of Ashford’s Municipal Solid Waste was sent to Landfill in 2004/05 • 6,350 tonnes of Municipal Solid Waste was Recycled/Composted <p><i>Collection</i></p> <ul style="list-style-type: none"> • Cost of collection of waste per household is £35.70 	<ul style="list-style-type: none"> • Low levels of household waste management and recycling. • Increasing amounts of waste being sent to landfill • Limited opportunities for sorting waste for recycling • Impact of construction materials 	<ul style="list-style-type: none"> • Incorporate into new buildings space to collect and sort waste • Reducing construction waste 	<p>Climate Factors</p>

	<p><i>Waste Arisings</i></p> <ul style="list-style-type: none"> • Kent average 2002/03 to 2004/05 is around 3%. • Ashford figures are : 2002/03 5.40% , 2003/04 3.43% , 2004/05 2.49% <p><i>Recycling</i></p> <ul style="list-style-type: none"> • Ashford 2001/02 9.18% , 2002/03 12.42% , 2003/04 14.63% , 2004/05 14.42% • Percentage of recycled and composted waste improved from 13.96% in 2004/05 to 18.3% in 2005/06. • In 2005/2006 the kilograms of waste collected per household fell from 414kg in 2004/2005 to 377kg in 2005/2006 			LDF SA Objective :- 17
Cultural Heritage & Landscape	No additional baseline information	Not relevant to this SPD	-	-
Economic Development	No additional baseline information	<ul style="list-style-type: none"> • Meeting the LDF target of 16,700 additional jobs by 2021 	<ul style="list-style-type: none"> • Incorporating new technologies can stimulate demand and a local market for more sustainable technologies and materials 	Climatic Factors LDF SA Objective :- 17 & 18
Social Inclusion	No additional baseline information	<ul style="list-style-type: none"> • Impacts on community from climate change • Creating a sense of place 	<ul style="list-style-type: none"> • Renewable energy installation can create a community/ neighbourhood focus 	Climatic Factors LDF SA Objective :- 8 , 7 , 13

SUSTAINABLE DESIGN & CONSTRUCTION SPD																																
TASK A5																																
TESTING THE SUSTAINABLE DESIGN & CONSTRUCTION SPD OBJECTIVES AGAINST THE LDF SA FRAMEWORK.																																
Objectives																																
A	To ensure that all new development are designed to the highest sustainability standards and minimise their environmental impact																															
B	To ensure that all new developments are designed to make efficient use of natural resources, particularly water and energy.																															
C	To ensure that all new developments are designed to mitigate and adapt to the effects of climate change																															
D	To ensure that new developments consider the environmental impact of the materials used																															
E	To ensure that new developments reduce their carbon emissions, where appropriate through sustainable energy, and are carbon neutral, where appropriate.																															
F	To provide guidance to developers on what will be expected to deliver CS Policy CS10 standards, and the information that are to be submitted with applications.																															
Sustainable Design & Construction SPD Objectives and SA Interaction Matrix																																
	LDF Sustainability Objective																															
SPD Objective	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22										
A	C	-	-	C	C	C	C	C	-	-	-	-	-	-	-	-	C	C	-	-	-	-										
B	-	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	C	C	-	-	-	-										
C	-	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	C	C	-	-	-	-										
D	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	C	C	-	-	-	-										
E	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	C	C	-	-	-	-										
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
Key																																
C	Compatibility											N	Objectives are not compatible																			
?	Uncertainty over compatibility											-	No relationship between objectives																			