

Swale Borough Council Members Briefing

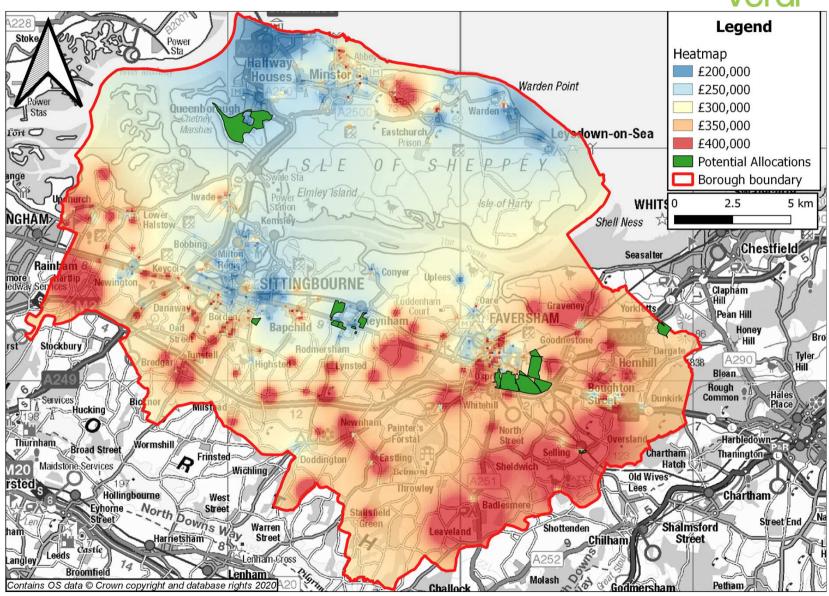
02 December 2020



Development viability approach overview

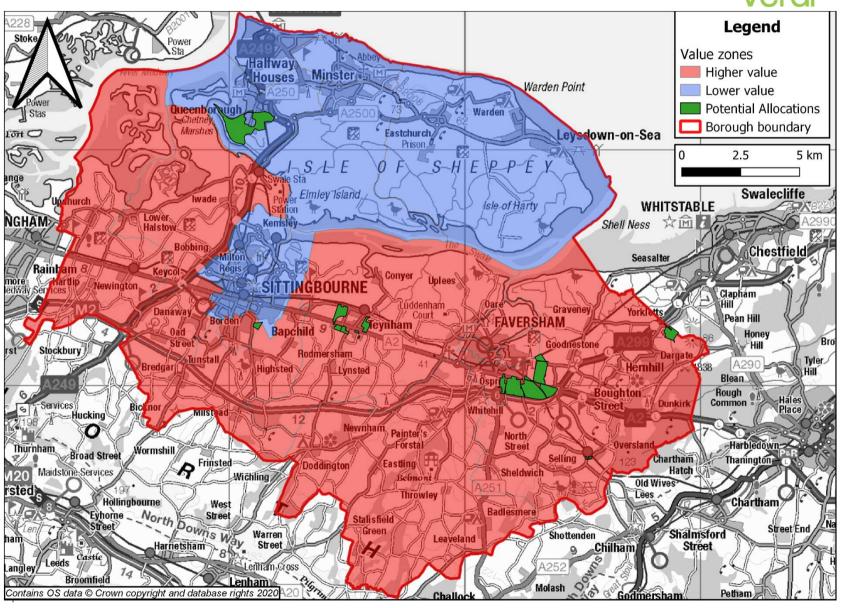
Swale Borough – Value heat map (all sales) with Potential Allocations





Swale Borough – Value Zones with Potential Allocations





Residential values



Typology	Unit size	unit price	£psm
Higher value area			
1 bed flat	50	£195,000	£3,900
2 bed flat	60	£235,000	£3,916
2 bed house	70	£265,000	£3,785
3 bed house	90	£375,000	£4,166
4 bed house	130	£500,000	£3,846

Residential values



Typology	Unit size	unit price	£psm
Lower value area			
1 bed flat	50	£175,000	£3,500
2 bed flat	60	£210,000	£3,500
2 bed house	70	£240,000	£3,428
3 bed house	90	£330,000	£3,666
4 bed house	120	£440,000	£3,666



Identifying viability surplus for policy costs

Identifying surplus for policy costs



- Step 1
 - Establish policy costs that are included within the appraisals, mostly mandatory requirements and expected S106 costs established in the SPD's and conversations with SBC (i.e. education costs).
- Step 2
 - Determine the viability surplus available for additional policy requirements.
- Step 3
 - Review potential policy cost which could be incorporated in new Local Plan
- Step 4
 - Members to consider potential policy costs option to be funded through viability surplus identified in Step 2.



Step 1 Policy costs that are included within the appraisals

Policy cost inputs (included in appraisals - summary)



Element	Cost	
Affordable housing	Viability output	
10% biodiversity net gain	£948 per dwelling	
Water efficiency - limit water usage to 110 litres/person/day	£9 per dwelling	
Air quality assessments	Included in professional fees	
SuDs	Included in external allowance / gross to net allowance	
Secondary schools	£5,176 per 'applicable' house and, £1,294 per 'applicable' flat	
Primary schools	£ variable on local requirements	
Social care	£146.88 per dwelling	
Library services	£55.45 per dwelling	
Community learning	£16.42 per dwelling	
Youth services	£65.50 per dwelling	
Waste and recycling	£183.67 per dwelling	
Health care	£300 per dwelling	
Total	£15,957.92 dwelling (excluding schools)	



Step 2 Viability results / surplus

Results – higher value overview



Greenfield – higher values

Location	SHLAA Ref.	Surplus per dwelling @ 30% AH	Surplus per dwelling @ 40% AH
Land at Cellar Hill	18/010	£40,000	£30,000
Chilton Manor Farm, Highstead Road	18/021	£30,000	£20,000
Land west of Frognal Lane	18/025	£35,000	£25,000
Land at Lady Dane Farm	18/091	£20,000	£13,500
Land adjacent Monica Close, Neames Forstal	18/093	£45,000	£35,000
Land east of Selling Road, Neames Forstal*	18/094	£40,000	£30,000
Land east of Selling Road, Neames Forstal	18/096	£45,000	£30,000
Land at Barrow Green Farm, east Teynham	18/106	£30,000	£20,000
Land south of London Road/ west of Lynsted Lane	18/116	£25,000	£13,500
Land to the north of Claxfield Farm	18/122	£40,000	£30,000
Land to the east of Claxfield Farm	18/123	£40,000	£30,000
Land at Graveney Road	18/135	£30,000	£20,000
Land south of Dover Castle Inn/ Cellar Hill	18/153	£40,000	£30,000
Land at Preston Fields	18/178	£30,000	£20,000

^{* 60} dph so more flats included in the mix

Results - lower value overview



- Greenfield / brownfield lower values
 - @ 30% affordable housing

Location	SHLAA Ref.	Surplus per dwelling
Rushenden South	18/113	Unviable

— @ 10% affordable housing

Location	SHLAA Ref.	Surplus per dwelling
Rushenden South	18/113	£6,000

 There will be site abnormals due to the nature and location of this site, costs are unknown for any flood risk mitigation or site remediation. Actual surplus likely to be lower.

Results - lower value overview



- Generic greenfield typologies tested
 - 30% and 40% affordable housing

Units	Housing / flatted	Greenfield / brownfield	Surplus per dwelling @ 30% AH	Surplus per dwelling @ 40% AH
15	Housing	Greenfield	£20,000	£13,000
30	Housing	Greenfield	£20,000	£13,000
75	Housing	Greenfield	£20,000	£13,000

- Generic brownfield typologies tested
 - 30%, 20% and 10% affordable housing

Units	Housing / flatted	Greenfield / brownfield	Surplus per dwelling @ 30% AH	Surplus per dwelling @ 20% AH	Surplus per dwelling @ 10% AH
15	Flatted	Brownfield	Unviable	Unviable	Unviable
30	Mixed	Brownfield	£4,000	£10,000	£20,000



Step 3 Policy costs excluded from appraisals

Policy cost inputs (excluded from appraisals - summary)



Element	Cost
Electric charge points, housing development	£500 per dwelling
Electric charge points, flatted development	£2,500 per dwelling
Housing accessibility M4(2)	£1,400 per dwelling
Housing accessibility M4(3)	£10,307 per dwelling
20% biodiversity net gain	£142.20 per dwelling

Policy cost inputs (excluded from appraisals - summary)



Element	Cost
10% reduction in CO2 using fabric installation	£2,100 per dwelling
20% reduction in CO2 based on 2013 standards	£2,557 per dwelling
23% reduction achieved using an Air Source Heat Pump	£4,200 per dwelling
31% reduction in CO2 based on 2013 standards	£4,850 per dwelling
48% reduction using PV installation	£4,700 per dwelling
72% reduction (achieved by onsite reduction PV)	£7,300 per dwelling
Zero regulated carbon (using a combination of measures)	Up to £10,100 per dwelling
Delivering onsite renewables (additional cost to be included if	£3,500 per dwelling
achieving zero carbon through fabric first but could potentially be if	
carbon is achieved through renewable technology)	



Step 4 Members to consider additional policy costs from surplus

Policy options



Greenfield

- Surpluses available to fund potential policies are wide ranging £20k- £45k at 30% AH
- Surpluses available to fund potential policies fall by circa. £8k per dwelling to a range between £13k-£35k at 40% AH

Brownfield

- Flatted development is unviable no results shown in policy options tables below
- Housing development (Rushenden) viable 10% affordable housing & £6k per dwelling surplus
- Mixed housing & flatted development is viable:
 - 30% AH £4k per dwelling surplus
 - 20% AH £10k per dwelling surplus
 - 10% AH -£20k per dwelling surplus

Health warning

- Surpluses stated do not allow for an viability buffer
 - Potentially places affordable housing ask at risk (negotiable)
 - Potentially increases the need for site specific assessments contra to PPG:

"Policy requirements, particularly for affordable housing, should be set at a level that takes account of affordable housing and infrastructure needs and allows for the planned types of sites and development to be deliverable, without the need for further viability assessment at the decision making stage."

and guidance (Harman Report)

"Local Plan policies should not be predicated on the assumption that the development upon which the plan relies will come forward at the 'margins of viability'."

Policy options – all greenfield sites



£18k surplus with max achievable affordable housing of 30%	£13k surplus with max achievable affordable housing of 40%	
Electric charge - £500 per dwelling	Electric charge - £500 per dwelling	
Biodiversity net gain from 10 – 20% £142 per dwelling	Biodiversity net gain from 10 – 20% £142 per dwelling	
M4 (2) on 75% of total units - £1,050 per dwelling when cost averaged across all dwellings	M4 (2) on 90% of total units - £1,260 per dwelling when cost averaged across all dwelling	
M4 (3) on 25% of total units - £2,577 per dwelling when cost averaged across all dwellings	M4 (3) on 10% of total units - £1,037 per dwelling when cost averaged across all dwellings	
Zero regulated carbon - £10,100 per dwelling (could meet renewable targets depending on zero carbon solution)	Zero regulated carbon - £10,100 per dwelling (could meet renewable targets depending on zero carbon solution)	
Renewables - £3,500 per dwelling (could be some double counting with zero carbon costs depends on zero carbon solution)		
£17,869 per dwelling total	£13,039 per dwelling total	

Policy options – brownfield sites lower value



Rushenden 10% affordable housing & £6k surplus	10% AH mixed housing & flats schemes£18k per dwelling surplus	20% AH mixed housing & flats schemes - £10k per dwelling surplus	30% AH - mixed housing & flats schemes- £4k per dwelling surplus	
Electric charge - £500 per dwelling	Electric charge - £500 per dwelling	Electric charge - £500 per dwelling	Electric charge - £500 per dwelling	
Biodiversity net gain from 10 – 20% £142 per dwelling	Biodiversity net gain from 10 – 20% £142 per dwelling	Biodiversity net gain from 10 – 20% £142 per dwelling	M4 (2) all units - £1,400 per dwelling when cost averaged across all dwelling	
M4 (2) on 90% of total units - £1,260 per dwelling when cost averaged across all dwelling	M4 (2) on 75% of total units - £1,050 per dwelling when cost averaged across all dwellings	M4 (2) on 90% of total units - £1,260 per dwelling when cost averaged across all dwelling	10% reduction in CO2 using fabric installation - £2,100 per dwelling	
20% reduction in CO2 - £2,557 (does not meet renewables)	M4 (3) on 25% of total units - £2,577 per dwelling when cost averaged across all dwellings	M4 (3) on 10% of total units - £1,037 per dwelling when cost averaged across all dwellings		
M4 (3) on 10% of total units = £1,037 per dwelling	Zero regulated carbon - £10,100 per dwelling (could meet renewable targets depending on zero carbon solution)	58% reduction in CO2 (10% reduction in CO2 using fabric installation - £2,100 per dwelling 48% reduction using PV installation£4,700 per dwelling) - £6,800 per dwelling		
	Renewables - £3,500 per dwelling (could be some double counting with zero carbon costs depends on zero carbon solution)			
£5,469 per dwelling total	£17,869 per dwelling total	£9,739 per dwelling total	£4,000 per dwelling total	

Questions





Appendices – technical data appraisal inputs & assumptions

Affordable housing values



- Tenure split
 - 60% affordable/social rent
 - 25% first homes
 - 15% shared ownership
- Transfer values
 - Affordable/social rent 45% of OMV (open market value)
 - First homes 70% of OMV
 - Shared ownership 75% of OMV

Unit sizes & dwelling mix



Market units cross-reference unit sizes with national minimum

space standards

Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage	
	1p	39 (37) *			1.0	
1b	2p	50	58		1.5	
	3р	61	70			
2b	4p	70	79		2.0	
	4p	74	84	90	2.5	
3b	5p	86	93	99		
	6р	95	102	108		
	5p	90	97	103		
	6р	99	106	112		
4b	7p	108	115	121	3.0	
	8p	117	124	130	1	
	6p	103	110	116	3.5	
5b	7p	112	119	125		
	8p	121	128	134		
	7p	116	123	129		
6b	8p	125	132	138	4.0	

 Affordable units cross-reference unit sizes with national minimum space standards & SPD

Туре	Size m ²
1 bed 2 person	45 – 55
2 bed 3 person	60 - 65
2 bed 4 person	70 – 75
3 bed 5 person	80 – 85
4 bed 6 person	90 – 110

Construction cost inputs



Element¤	Cost¤	Comment¤
Residential·-·build·cost· houses¤	£1,221·psm¤	'Build costs based on appropriate data for example that of the Building Cost Information Service."
		Based·on·Median·'generally'·Estate·Housing·BCIS·costs·re-based·for·Swale,·5·year- sample.·A·copy·of·the·BCIS·data·is·enclosed·in·Appendix·5.⋅∞
Residential·build·cost· flats¤	£1,371·psm·¤	Based·on·Median·'generally'·Flats·BCIS·costs·re-based·for·Swale··5·year·sample.·A·copy·of·the·BCIS·data·is·enclosed·in·Appendix·5.¤
External works for services and infrastructure	15%	External works will vary, depending on site requirements. Industry norms and other schemes coming forward in the Borough.
Strategic site infrastructure	£20,000 per dwelling	Costs are in relation to opening up the site, including; spine road, site servicing, site preparation etc. Based on garden communities work in Maidstone. Site promoters indicated this cost per dwelling net of policy costs.
Site abnormals – applied to brownfield development only	£110,000 per net developable acre	Site abnormals will vary significantly from site to site. We have assumed our allowance includes the cost for demolition and remediation. We have had regard to HCA (now Homes England) guidance on dereliction, demolition and remediation costs March 2015, along with comparable and other schemes coming forward in the District.
Statutory Planning Fees (Residential)	Based on national formula.	Based on national formula.
Planning Application Professional Fees, Surveys and reports	Calculated as a three times multiplier to national formula above.	Calculated as a three times multiplier to national formula above.
Professional fees	10% of BCIS build cost	Typically ranges between 8% - 12%, based on industry norms and other schemes coming forward in the Borough.
Contingency	5% of BCIS build cost	Typically ranges between 3% - 5%, based on industry norms and other schemes coming forward in the Borough.
Residential - Sale Agents Costs	1.5%	Source: Page 35 Harman report and comparable schemes

Construction cost inputs



Element¤	Cost¤	Comment¤	10
Residential·-·Sale·Legal· Costs¤	0.5%¤	As-above.¤	30
Residential·-·Marketing·and· Promotion¤	1.5%¤	As above.¤	30
Older·Persons·-·Marketing· and·Promotion¤	5%·market·value¤	Comparable-scheme-analysis-shows-higher-costs-over-'general-needs-market-housing'. Cost-allowance-assumed-still-in-line-with-the-Harman-report-(P.35)-but-at-higher-end.¤	- 10
Marketing·and·Promotion¤	1.00%·GDV¤	Ditto¤	30
Profit·on·market·housing·¤	20.0%·on·GDV·¤	'For the purpose of plan making an assumption of 15-20% of gross development value (GDV) may be considered a suitable return to developers in order to establish the viability of plan policies. Plan makers may choose to apply alternative figures where there is evidence to support this according to the type, scale and risk profile of planned development.	
Profit·on·affordable·housing¤	6.0%·on·GDV¤	'A lower figure may be more appropriate in consideration of delivery of affordable housing in circumstances where this guarantees an end sale at a known value and reduces risk. Alternative figures may also be appropriate for different development types."	10
Profit·on·retail,·office·and· industrial·¤	20%-of-build-costs¤	Commercial-development-is-assessed-by-way-of-profit-on-costs-and-not-GDV-to-reflect-the-developer-who-sell-the-completed-scheme-onto-an-investor¤	30
Profit·on·BTR⊭	13%·on·GDV··¤	BTR·can·be·assessed·on·Internal·Rate·of·Return·(IRR)·basis·rather·than·profit·on·GDV·or·cost.·The·IRR·varies·greatly·from·scheme·to·scheme·and·developer·to·developer.·As-this·is·assessment·is·non-developer·specific·we·have·used·a·reasonable·benchmark-profit·assessed·on·GDV·base·on·other·schemes·we·have·recently·assessed.·¤	
Interest·¤	7.5%¤	Gross-interest-inclusive-of-fees.·Industry-norms-and-other-schemes-coming-forward-in-the-Borough.· □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	30
SDLT·on·land·value·¤	5.0%¤	Slabbed·figure.·¤	30

Construction cost inputs



Element¤	Cost¤	Comment¤	1
Agents-fee-on-land-value-¤	1.0%¤	Industry·norms·and·other·schemes·coming·forward·in·the·district.··¤	i
Legal·fee·on·land·value·¤	0.5%¤	As-above.¤	1
Letting·Agents·Costs¤	10.0%·rental·value¤	Based·on·industry·norms·and·other·schemes·coming·forward·in·the·District.¤	1
Letting·Legal·Costs¤	5.0%·rental·value¤	Ditto∞	i
Investment·Sale·Agents· Costs¤	1.0%GDV¤	Ditto¤	1
Investment-Sale-Legal-Costs¤	0.50%·GDV¤	Ditto¤	1
Gross·to·net·of·general· needs·flats¤	85%¤	Based·on·schemes·we·have·analysed·previously¤	1

Land value assessment



- Greenfield sites
 - EUV plus premium of £100k per gross acre
 - Premium equals between x9 x15 times agricultural values
 - But non-agricultural and unproductive land has lower land value
- Brownfield
 - EUV based on development land values
 - Trading between £270k-£500k per acre
 - Smaller and mid size sites
 - £400,000 per gross acre (£988,400 per gross hectare).
 - Landowner Premium at 10%

Policy cost inputs (included in appraisals)



Element	Cost	Comment
Affordable housing	Viability output	
10% biodiversity net gain	£948 per unit	Based on: Biodiversity net gain and local nature recovery strategies, 2019 Impact Assessment by DEFRA.
		We have relied on the net gain delivery for greenfield development (residential), in the South East region.
		The study estimates that each 1 ha of greenfield land developed results in 7.4 biodiversity units lost.
Water efficiency - limit	£9 per dwelling	Based Department of Communities and Local Government Housing
water usage to 110		Standards Review Cost Impact, September 2014 by EC Harris.
litres/person/day		
Air quality assessments	Included in professional	The cost of Air Quality Impact Assessment and Emissions Mitigation
	fees	Assessment covered by professional fees. Any mitigation are consider an
		abnormal and will be captured through contingency or reduced land value.
SuDs	Included in external	Cost reflected into external cost allowance. Assumed to be covered
	allowance / gross to net	through general build cost / design allowance. Landscaping provided in
	allowance	the difference between gross to net.

Policy cost inputs (included in appraisals)



Element	Cost	Comment
Secondary schools	£5,176 per 'applicable' house and, £1,294 per 'applicable' flat	Cost for secondary school - based on KCC calculations.
Primary schools	£ variable on local requirements	Primary school cost is weighted per site appropriately as per KCC comments.
Social care	£146.88 per dwelling	As above.
Library services	£55.45 per dwelling	As above.
Community learning	£16.42 per dwelling	As above.
Youth services	£65.50 per dwelling	As above.
Waste and recycling	£183.67 per dwelling	As above.
Health care	£300 per dwelling	As above.

Policy cost inputs (excluded from in appraisals)



Element	Cost	Comment
Electric charging	£500 per dwelling housing	Cost for unit per dwelling based on discussions with the Councils consultant;
points	schemes assumed wallbox	SquareGain and information provided by Energy Savings Trust and the Office
	£10,000 per multi car park	for Lew Emission Vehicles (OLEV).
	charge point for flatted	Cost for multi car park schemes based on cost advice by Swindon Borough
	schemes – assumed for	Council for their Whole Plan Wide Viability study we are advising on.
	every 4 dwellings	
Housing	M4(2), £1,400 per dwelling	M4(2) cost is based on the MHCLG Raising accessibility standards for new
accessibility	M4(3), £10,307 per dwelling	homes consultation paper (2020). Previously set at £521 per unit based on the DCLG Housing Standards Review.
		M4(3) cost is based on the DCLG Housing Standards Review, Final Implementation Impact Assessment, March 2015, paragraphs 153 and 157.
20% biodiversity net gain	£1,090.20 per dwelling	Based on: Biodiversity net gain and local nature recovery strategies, 2019 Impact Assessment by DEFRA.
		To achieve 20% biodiversity net gain – 19% increase in cost.
		£948 + additional £142.20 per unit = £1,090.20
		'When analysing the impact of changing the level of net gain required, we show that doubling (to 20%) and halving (to 5%) the net gain percentage increases costs to developers by 19% and decreases costs by 10% respectively in both a 10 year and 40 year appraisal period.'





- Draft policy requires stepped reductions in operational carbon:
 - 50% reduction compared to 2013 Building Regs at publication
 - 75% in 2025
 - 100% in 2030
- All new development to have:
 - At least 10% total regulated operation energy from on-site renewable at publication
 - 50% from 2025
 - 75% by 2030
- Our cost evidence is not suited to hitting these targets directly
 - Double counting also needs to be considered
- Our testing needs to consider current day costs & values

Policy cost inputs (excluded from in appraisals)



Element	Cost	Comment
Renewable/low	£3,500 per dwelling	Cost reflects renewable / low carbon energy production to provide at least 10% of
carbon energy		predicted energy requirements. The policy is not prescriptive on how this is to be
		delivered. This could be a combination of passive solar design, solar thermal (solar
		hot water), solar electricity (photovoltaics or 'PV), heat pumps and combined heat
		power (Micro-CHP). In 2006, the Energy Saving Trust published research 'Meeting
		the 10% target for renewable energy in housing – a guide for developers and
		planners', which indicated a cost of between £2,500 and £5,000 per dwelling.
		Research by Currie & Brown, Cost of Carbon Reduction in New Buildings, 2018
		state that the cost of a 2kWp PVs are £2,940 and Air Source Heat Pumps (ASHP)
		for a semi-detached house as £4,200. Again, our figure falls in the range of the two
		technology solutions.
		There could potentially be an element of double counting with the cost of achieving
		carbon reduction, as naturally any reduction in operational carbon will be achieved
		through the use of renewable technologies. Where a zero net carbon cost is
		adopted, we would assume this cost will be automatically included within to avoid
		double counting.

Policy cost inputs (excluded from in appraisals)



Element	Cost	Comment
Mitigating and adapting	£ Variable depending on	Cost based on MHCLG The Future Homes Standard 2019 Consultation
to climate change	outcome	on changes to Part L: Impact Assessment:
through sustainable		 20% reduction in CO2 based on 2013 standards, £2,557 per dwelling
design and construction		(assuming fabric, gas boiler and waste water heat recovery system).
		31% reduction , £4,850 per dwelling (adds in PV panels)
		There are alternative energy efficiency costs based on research by Currie
		& Brown, Cost of Carbon Reduction in New Buildings, 2018:
		10% reduction using fabric installation, £2,100 per dwelling and a further
		23% reduction achieved using an ASHP, £4,200 per dwelling
		o 48% reduction using PV installation, £4,700 per dwelling
		o 72% reduction, £7,300 per dwelling (achieved by onsite reduction PV)
		 Zero regulated carbon, £6,800 - £10,100 per dwelling (varies on
		house type). Achieved by combination of measures.