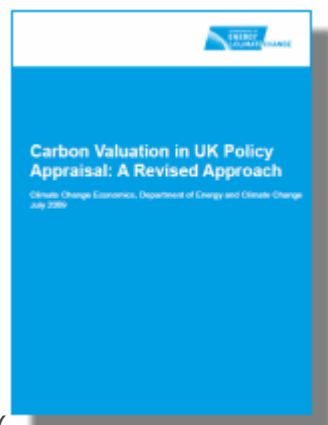


## Current UK government guidance on the social value of carbon



This current UK government guidance ( [DECC, 2009](#)

[updated link:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/41798/1\\_20090715105804\\_e\\_\\_\\_\\_carbonvaluationinukpolicyappraisal.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/41798/1_20090715105804_e____carbonvaluationinukpolicyappraisal.pdf)], [DECC, 2010](#), DECC, 2011

[[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/41793/3136-guide-carbon-valuation-methodology.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/41793/3136-guide-carbon-valuation-methodology.pdf)], DECC, 2012

[[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/41794/6667-update-short-term-traded-carbon-values-for-uk-publ.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/41794/6667-update-short-term-traded-carbon-values-for-uk-publ.pdf)]

[<https://www.gov.uk/carbon-valuation>]) includes central estimates for 2013 of:

£6/tCO<sub>2</sub>e (£22/tC) for sectors covered by the EU Emissions trading scheme (ETS) and

£59/tCO<sub>2</sub>e (£215/tC) for non-ETS sectors

Both rising over time to £334/tCO<sub>2</sub>e (£1226/tC) in 2077 at 2012 prices, thereafter declining.

Based upon target reductions of 34% compared to 1990 levels by 2020 and 80% by 2050, estimated values are considered consistent with the UK's contribution to limiting global temperature increase to 2°C above pre-industrial levels (HM Treasury & DECC, 2012

[[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/68764/122-valuationenergyuseggemissions.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/68764/122-valuationenergyuseggemissions.pdf)]).

The effect of applying Treasury Green Book (declining) discount rates ([Treasury, n.d.](#)) is shown in the table below for selected years, illustrating how present values of future benefits in non-ETS sectors (e.g. what a tonne of CO<sub>2</sub>

sequestered by a forest in a future year is estimated to be worth currently) initially declines, before increasing again to a peak in 2054.

<b>Social values of carbon (£/tCO<sub>2</sub> at 2012 prices)</b>						
<b>Year</b>	<b>Sectors covered by EU ETS</b>			<b>Sectors not covered by EU ETS</b>		
	<b>Central Price of Carbon</b>	<b>Discounted Price of Carbon</b>	<b>Index (2013 Discounted Price =100)</b>	<b>Central Price of Carbon</b>	<b>Discounted Price of Carbon</b>	<b>Index (2013 Discounted Price =100)</b>
2013	6	6	100	59	59	100
2020	9	7	112	65	51	87
2030	76	42	705	76	42	72
2040	147	58	969	147	58	99
2050	217	63	1053	217	63	107
2060	289	62	1042	289	62	106
2070	327	52	877	327	52	89
2080	332	40	663	332	40	67
2090	318	28	476	318	28	48
2100	291	20	341	291	20	35