

Guidance for CBA spreadsheet model

Tab	Instructions
Option summary	Provide a description of the stated aim / investment decision contained within this CBA analysis workbook, along with a list of options considered to meet the aim. Also include here the short list of options contained within this workbook which have been fully costed and specify which option has been adopted following CBA and included in your business plan submission.
Fixed data	Enter pre-tax WACC and prices consistent with your business plan
Baseline scenario	Enter costs and benefits associated with the baseline scenario. The baseline scenario represents status quo; that is the cost of business as usual in the absence of any investment intervention. Where business as usual is not an option i.e. an investment intervention of some kind is required DNOs should chose the option with the lowest investment to represent the baseline scenario.
Working baseline	Show any calculation used to derive the values in your baseline scenario
Option 1	Enter costs and benefits over and above the baseline scenario i.e. the marginal or incremental costs / benefits of the option being considered. Enter capitalisation rates consistent with your business plan.
Working 1	Show any calculation used to derive the values in your CBA

Colour code:

User populated cells
Fixed data
Summation formula
Other formula

The user should populate the light blue cells. All other cells are either fixed or auto-populated.

Enter costs / benefits in 2012/13 prices (£m).

Costs should be entered as negative values.

Benefits (i.e. avoided costs) should be entered a positive values.

Costs entered should correspond to values set out in company business plans i.e. should exclude RPEs and include ongoing efficiencies consistent with assumptions contained in your business plan submission.

Copy *Option 1 worksheet & workings 1* for each CBA option and label these *option 2 & workings 2* etc.

Where a 'do minimum option' exists, Option 1 should represent your 'do minimum' or 'reference scenario' e.g. do nothing, ongoing maintenance of existing asset or the option which requires the minimum investment .

Use the relevant *Workings worksheet* to demonstrate any calculation/information that can support the costs and benefits you have entered for each option. This is free fill and provides you with an opportunity to show additional underlying data you believe will assist Ofgem in evaluating/understanding your CBA.

Please highlight your chosen option by colouring the worksheet tab yellow.

Purpose of CBA: describe the stated aim of the investment decision

To determine the cost/benefit of undertaking regeneration of power transformer insulating oil to extend the serviceable life of the transformer.

If investment is to replace an existing asset / asset class, please state the condition of the asset / asset class (HI / CI etc.)

The HI of the identified subset of power transformers ranges from HI2 to HI4.

List below all options considered to meet the stated aim

Options considered	Comment
Oil regeneration undertaken	This is the only option that meets the stated aim.

List below the short list of those options which have been costed within this CBA workbook

Option no.	Options considered	Decision	Comment	Spend area (from Table C1) (relevant only to adopted option)	NPVs based on payback periods				
					16 years	24 years	32 years	45 years	DNO view
1	No oil regeneration undertaken				-£8.03	-£13.15	-£16.71	-£20.50	
2	Oil regeneration undertaken		This is the selected option.	CV9	-£1.44	-£5.15	-£10.73	-£15.59	
3									
4									
5									

If more options are costed, please copy *Option 1* and *workings 1* worksheets and add detail to the short list table above.

[illegible]

¹ Includes all GHG not associated with losses e.g. 5% converted to rCO₂e using Defra conversion factors
<http://www.defra.gov.uk/publications/2012/05/20/jh1373-2012-ghg-conversion/>
 Where losses are entered in terms of MWh, the CO₂e associated with those losses will be calculated based on an assumed GHG conversion factor. The rCO₂e are monetised using DECC traded carbon values.
 All other GHG emissions not associated with losses should be entered in row 90 to avoid double counting.

² <http://www.hse.gov.uk/risk/theory/alwayscheck.htm>.