

6.3.9.3 Net Cash Benefit of AFR [RC]

Description

Extended net cash benefit of alternative fuels and raw materials (ENCB AFR) corresponds to the total of AFR related cash revenues (costs) and the actual costs to transport, prepare, handle and process AFR, regardless the effective consumption of AFR in the production process; Kiln system, Power Generation (Captive Power Plants – CPP) and Drying (Hot Gas Generators – HGG) of materials used in the production process are included.

Reference to Process

This indicator refers to:

- Main cost centers 'Raw material preparation', 'Raw meal preparation', 'Clinker production' and 'Cement grinding/blending'
- Pre-process cost centers 'Traditional fuels preparation and handling', 'Alternative fuels preparation and handling' and 'Alternative raw materials preparation and handling' and 'Power generation' at cement plant and 'Alternative fuels preparation and handling' and 'Alternative raw materials preparation and handling' at AFR Unit,
- Drying activities (Hot Gas Generators – HGG) of materials at cement plant
- Main cost center 'Corporate Manufacturing - AFR'
- Main cost center 'Marketing and Sales - AFR' (limited to the type of cost 'Write-Offs and Allowances for Bad and Doubtful Debts')
- Main cost centers of 'Administration - AFR'
- Product sub-segment Clinker and Cement

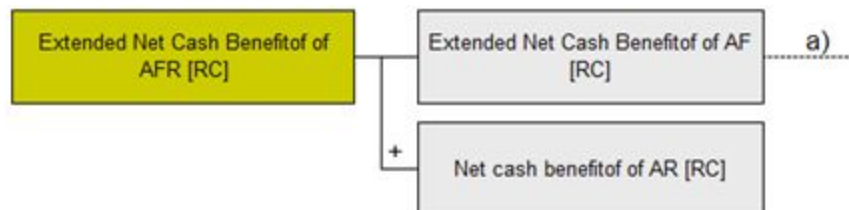
Purpose

To measure the benefit from accepting alternative fuels and alternative raw materials for co-processing. This is a component of [EGAV](#).

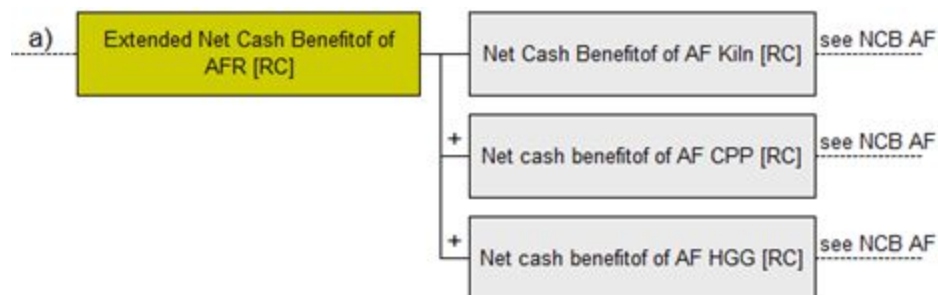
Calculation

The indicator and its major components are calculated and reported at Group Reporting Unit (GRU) level.

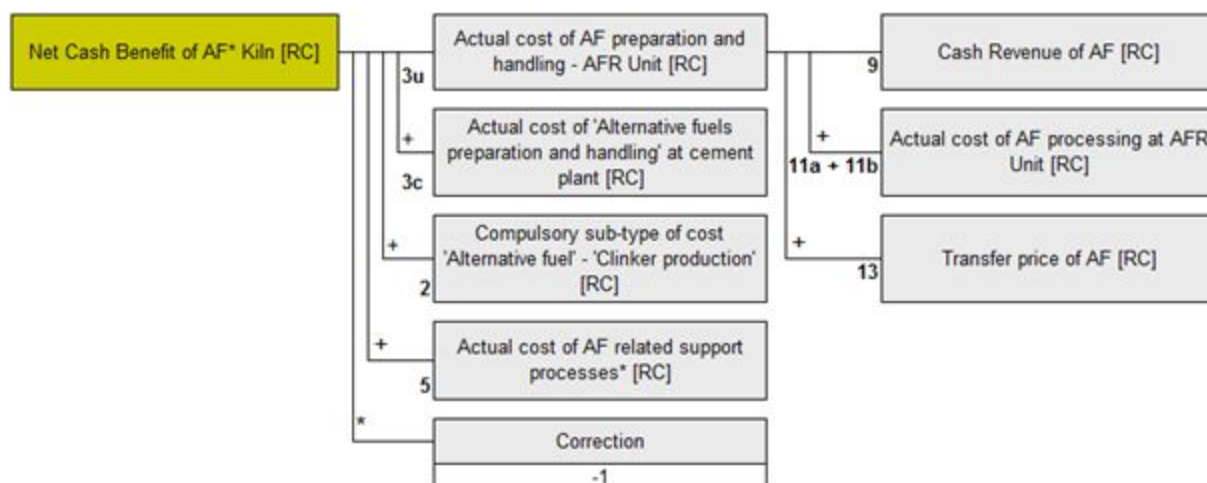
Extended net cash benefit of AFR (ENCB AFR)



Extended net cash benefit of AF (ENCB AF)



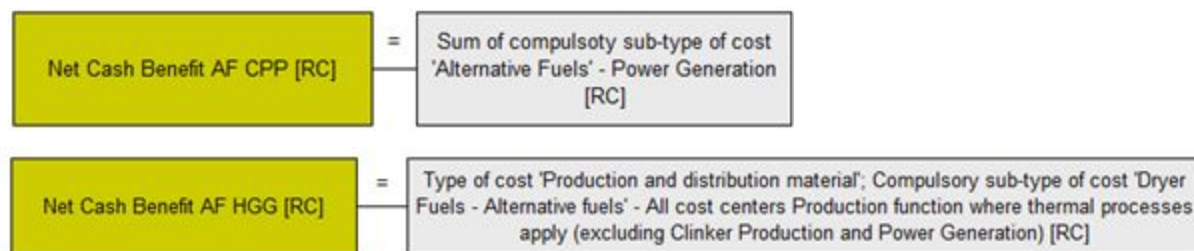
Net cash benefit AF kiln (NCB AF kiln)



NOTE: the components NCB AF CPP and NCB AF HGG rely on certain assumptions and interpretations (especially in the case of 100 % substitution or missing the TF). Care should therefore be taken when analyzing the results of this indicator and comparisons against other companies is difficult.

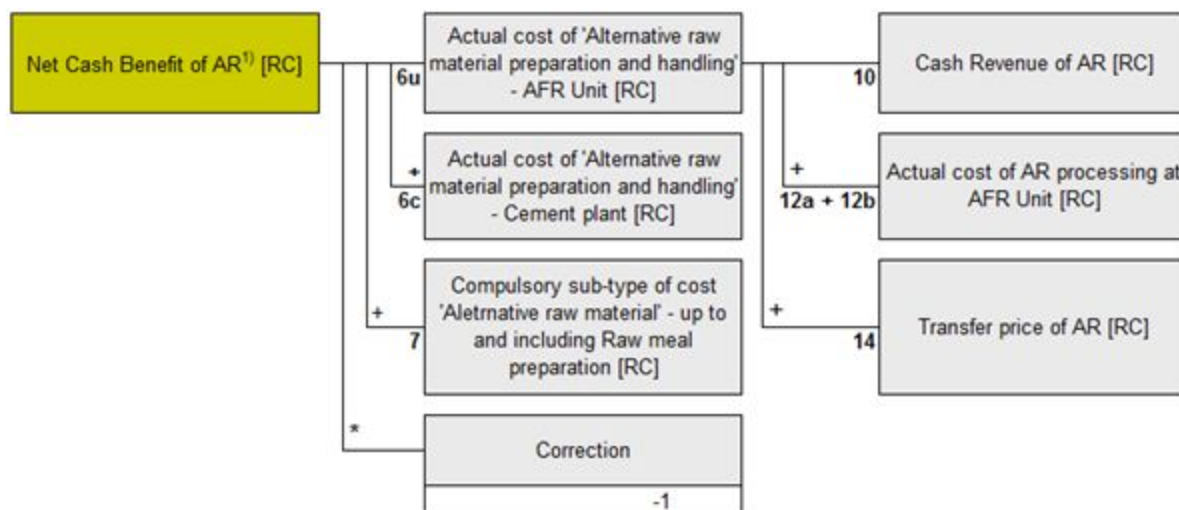
Net cash benefit AF CPP / HGG (NCB AF CPP / HGG)

At cement plants with usage of AF in the kiln, for simplicity and considering that the preparation and handling costs of AF are already captured in 'NCB AF kiln', the following can be applied:



In the seldom case where there is no kiln operated in a plant or no AF consumed in the kiln, but only running CPP and/ or HGG, the indicator includes all costs with the preparation and feeding the AF, respectively all AF Support Process costs.

Net cash benefit of AR (NCB AR)

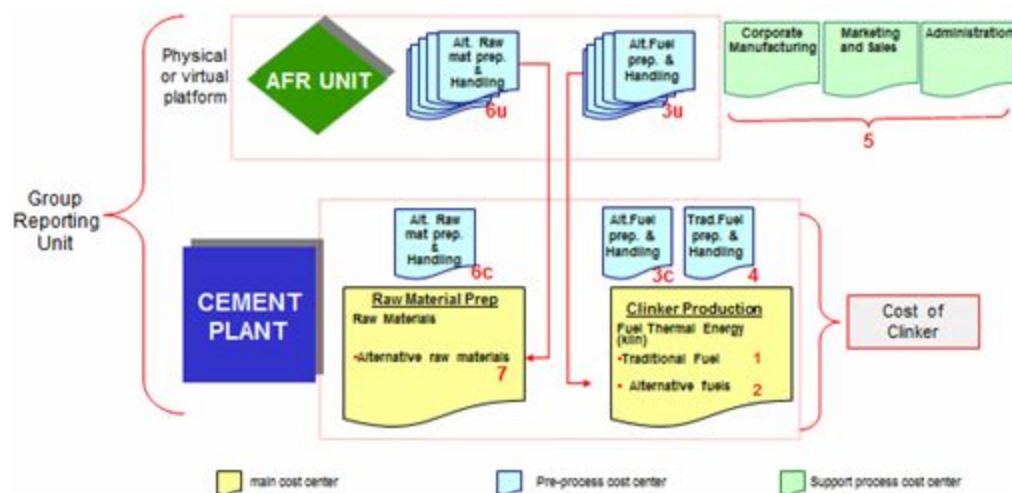


The cost of transportation can be included either in the AFR Unit or at the Cement plant 'Preparation and handling AR/AF/correctives' pre-process cost centers.

Comments and examples

At GRU's where in CPP's / HGG's (if any) there is no AF in use, the Extended NCB AF equals to NCB kiln.

Overview of the components



Types of cost	At AFR Unit/s		At Cement Plant(s)						AFR Support Processes				Company Level	
	Pre-process cost center "Alternative Raw Materials preparation and handling"	Pre-process cost center "Alternative Fuels preparation and handling"	Pre-process cost center "Alternative Raw Materials preparation and handling"	Raw Material Preparation	Raw Meal Preparation	Pre-process cost center "Traditional Fuels preparation and handling"	Pre-process cost center "Alternative Fuels preparation and handling"	Clinker Production	Clinker and Cement Corp Manufacturing of which AFR	Clinker and Cement Administration of which AFR	Clinker and Cement Marketing and Sales of which AFR	Cost of Fuels	Specific Cost of Fuels	
Variable cash costs	(2,863)	(50,740)	3,895	(3,001)	500	56,500	52,600	52,219	275	125	-	109,510	2.61	
Electrical energy fixed	500	30,000	1,200			30,000	30,000					91,700	0.00	
Maintenance material	800	4,530	2,800			4,000	4,000					16,190	0.39	
Labor expenses own	1,250	10,500	600			10,000	10,000		250	250		32,850	0.78	
Labor expenses subcontracted fixed	25	300	25			300	300		25	50		1,025	0.02	
Labor expenses maintenance own	55	1,000	55			1,000	1,000					3,110	0.07	
Labor expenses maintenance subcontracted	40	300	40			300	300					980	0.02	
Other personnel expenses	120	900	50			900	900		100	100		3,070	0.07	
Third party services	160	1,400	110			1,400	1,400		100	150		4,720	0.11	
Third party services maintenance	50	400	50			400	400					1,300	0.03	
Other cost center expenses	200	1,000	100			1,000	1,000		50	50		3,400	0.08	
By-products and other revenues	(150)	(400)	(100)			(400)	(400)		(10)	(10)		(1,470)	-0.04	
Fixed actual costs	3,050	49,990	4,330	-	-	48,900	48,900	-	515	590	-	156,875	3.74	
Cash Costs	187	(750)	8,825	(3,001)	500	105,400	101,500	52,219	790	715	-	266,385	6.34	
Other Provisions and Write-Offs	64	34	64			4	3		5	5	5	1,273	0.03	
Actual Costs	390	(650)	9,580	(3,001)	500	105,500	101,600	52,219	800	720	-	267,658	6.37	
Depreciation and amortization of long-term assets	280	4,000	1,000			4,000	4,000		20	10		13,310	0.32	
Total	670	3,350	10,580	(3,001)	500	109,500	105,600	52,219	820	730	-	280,968	6.69	

Clinker Production volume

42,000

Calculation example of Extended net cash benefit of AFR

Extended Net Cash Benefit of AFR [RC]	Extended Net Cash Benefit of AF [RC]
33'000	25'000
+	Net cash benefit of AR [RC]
	8'000

Calculation example of Extended Net Cash Benefit of AF:

At AFR Unit

Alternative Fuels Preparation and Handling

Cost Center Classification:

Pre-Process

Subsegment:

Clinker and Cement

Support Process:

n/a

		Cost of processing at AFR Unit	Cash Revenue	Transfer price	Sold to 3rd parties	This Month Total for this Cost Center		
						Actual	Budget	% Var
Variable Cash Cost								
Raw Materials	n/a	-	9	13	-	-	-	-
Fuels/Thermal Energy (Kiln)		-	(208'075)	104'735	-	(103'340)	-	-
Traditional Fuels		-	-	-	-	-	-	-
Alternative Fuels		-	(208'075)	104'735	-	(103'340)	-	-
Variable Cash Cost		52'600	(208'075)	104'735	-	(50'740)		
Fixed Cash Cost								
By-Products and Other Revenues		(50)	-	-	(350)	(400)	-	-
Fixed Cash Cost		50'340	-	-	(350)	49'990		
Cash Cost		102'940	(208'075)	104'735	(350)	(750)		
Actual Cost		103'040	(208'075)	104'735	(350)	(650)		
	11 a			11 b	3u			

Net Cash Benefit of AF* Kiln [RC]							
		3u	Actual cost of AF preparation and handling - AFR Unit [RC]	9	Cash Revenue of AF [RC]		
			-650		-208'075		
	+	3c	Actual cost of 'Alternative fuels preparation and handling' at cement plant [RC]	11a + 11b	Actual cost of AF processing at AFR Unit [RC]		
			101'630		102'690		
	+	2	Compulsory sub-type of cost 'Alternative fuel' - 'Clinker production' [RC]	13	Transfer price of AF [RC]		
			-104'437		104'735		
	+	5	Actual cost of AF related support processes* [RC]				
			1'520				
	+	*	Correction				
			-1				

Calculation example of Net cash benefit of AR:

At AFR Unit

Alternative Raw Materials Preparation and Handling

Cost Center Classification:

Pre-Process

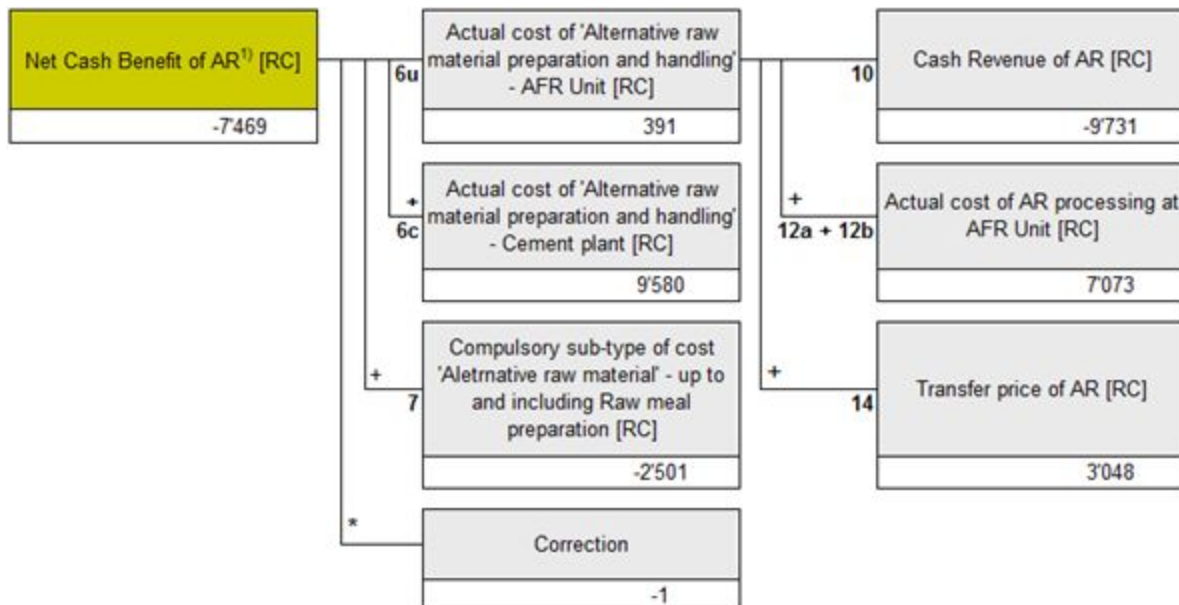
Subsegment:

Clinker and Cement

Support Process:

n/a

					This Month Total for this Cost Center		
	Cost of processing at AFR Unit	Cash Revenue	Transfer price	Sold to 3rd parties	Actual	Budget	% Var
Variable Cash Cost		10	14				
Raw Materials	-	(9'731)	3'048	-	(6'683)		
Alternative Raw materials	-	(9'731)	3'048	-	(6'683)		
Variable Cash Cost	3'820	(9'731)	3'048	-	(2'863)		
Fixed Cash Cost							
By-Products and Other Revenues	(100)			(50)	(150)		
Fixed Cash Cost	3'100	-	-	(50)	3'050		
Cash Cost	6'920	(9'731)	3'048	(50)	187		
Actual Cost	7'123	(9'731)	3'048	(50)	390		
	12 a		12 b	6u			



¹⁾ Net Cash Benefit of AR is also known as Actual Revenue of AR

A positive value of NCB indicates a gate fee whereas a negative value indicates a net cost to source and prepare the AR. This cost should be compared to the cost of the equivalent traditional raw material to measure the value added.

Note that usage of alternative fuels and raw materials (AFR) may generate hidden costs by increased thermal energy consumption, additional maintenance costs and/or losses in clinker production rate. These hidden costs are not included in the calculation of these indicators.

Reporting Requirements

The indicators are reported in SAP FC.