



COOPERATION WITH THE PRIVATE SECTOR IN AFRICA

DEVELOPMENT PARTNERSHIPS WITH THE PRIVATE SECTOR (DPP)



Classification of activities to the key topics and fields of intervention

Output 1.1		The project baseline on available waste resources, compositions and logistics is established			
No.	Activity \ Field of intervention	1 Access and amount of waste fractions	2 Management of waste flow	3 Requirement of AF	4 Process of clinker brick
1.1	Establish baseline on available waste resources, compositions and logistics in the project region				
1.1.1	Assess economic (commerce, industry) and alternative sectors with regards to their potential for waste production	1.1 Appropriate waste categories			
1.1.2	Estimate available quantities	1.2 Estimate available quantities			
1.1.3	Assess waste composition: compounds and share, incl. investigation regarding calorific value(s), ash, composition of ash, chlorine, sulphur and heavy metals	1.3 Characteristic of waste			
1.1.4	Assess the organization of the public and the private disposal system	1.4 Contract law of waste disposal			
1.1.5	Assess collection system and logistic and identify potential disposal/transport providers for integration in AF production process	1.4 Contract law of waste disposal			
1.1.6	Identify the role of the informal sector (amongst other measures, by using the Poverty Impact Assessment (PIA) Tool)	1.5 Integration of formal sector			
1.1.7	Develop a concept on how to integrate the informal sector (in cooperation with INDH)	1.5 Integration of formal sector			



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Output 1.2		The project baseline on current cement processing and future needs is established			
No.	Activity \ Field of intervention	1	2	3	4
1.2	Establish baseline on current cement processing undertaken by local cement works				
1.2.1	Identification of local cement works and catchment area in the project regions	Access and amount of waste fractions	Management waste flow	Requirement of AF	Process of clinker brick
1.2.2	Examine existing and needed technical equipment regarding thermal valorization potential, process and handling of AF by the local cement works			3.3 Process related requirement	
1.2.3	Test the quality impact on product and process by main, minor and trace elements				4.2 Simulation of process parameters
1.2.4	Analyze emissions (dust, SO ₂ , NO _x , Cl, Hg, Cd, Tl...) in the local cement works				4.3 Computation of emissions
1.2.5	Draw up prognosis of emission of local cement works				4.2 Simulation of process parameters
1.2.6	Establish an energy balance				4.2 Simulation of process parameters



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Output 1.3		The project baseline on the potential for production of AF is established				
No.	Activity \ Field of intervention	1	2	3	4	
1.3	Establish baseline on the potential for production of AF					
1.3.1	Establish parameters for combustion, production and monitoring of emissions				4.2 Simulation of process parameters	
1.3.2	Monitor parameters e.g. particle size, calorific value, chlorine, moisture content				4.2 Simulation of process parameters	
1.3.3	Draw up prognosis of emissions incurred by combustion of AF				4.3 Computation of emissions	
1.3.4	Identify potential operators for waste treatment plants for production of AF		2.2 Identify potential operators			
1.3.5	Sensitize industrial waste producers		2.2 Identify potential operators			



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Output 1.3	The project baseline on the potential for production of AF is established								
No.	Activity \ Field of intervention	1	Access and amount of waste fractions	2	Management of waste flow	3	Requirement of AF	4	Process of clinker brick
1.4	Establish baseline on relevant rules and regulations								
	1.4.1	Approach competent authorities regarding the formulation of sublegal rules and regulations (waste management and environmental protection) and establish standards for co-processing as a directive			2.1 Requirement specification		3.5 Authorization procedure		
	1.4.2	Clarifying the license conditions and the participation of public units			2.1 Requirement specification				
	1.4.3	Coverage of social aspects and informal care			2.1 Requirement specification				



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Output 2		An appropriate waste stream management system is established				
No.	Activity \ Field of intervention	1 Access and amount of waste fractions	2 Management of waste flow	3 Requirement of AF	4 Process of clinker brick	
2.1	Assess the financial demand for investment and operation of the processing installation and the installation of the facilities for co-processing				4.4 Technical concept for co-processing	
2.2	Develop technical concept for pre-processing incl. achieving qualitative parameters				4.4 Technical concept for co-processing	
2.3	Scoping of environmental impact study and safety analysis				4.5 Authorisation procedure	
2.4	Clarification of logistical issues		2.4 Logistical issues of cost structure of supply chain		4.4 Technical concept for co-processing	
2.5	Assure access to appropriate/ feasible waste streams		2.1 Requirement specification			
2.6	Stimulate companies active in the disposal/transport sector to recognize the business potential for expanding their services		2.2 Identify potential operators			



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2.7		Conduct further information campaigns for the informal sector		1.5 Integration of formal sector		
2.8		Stepwise integration of the informal sector for the provision of suitable wastes (in cooperation with INDH)		1.5 Integration of formal sector		
2.9		Clarify practical enforcement of Moroccan legal specifications		1.4 Contract law of waste disposal		



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Output 3		The financial and economical criteria are known and investment decisions are made			
No.	Activity \ Field of intervention	1 Access and amount of waste fractions	2 Management of waste flow	3 Requirement of AF	4 Process of clinker brick
3.1	Cost and profit analysis regarding the chain of waste management, disposal charge and fees	Cost- benefit- analyse			
3.2	Prepare Business Plans for the processing installation and the installation of the facilities for co-processing				
3.3	Familiarization with the identified potential third party operators (for disposal/transport services as well as waste treatment plant)	Decision on investment			
3.4	Decide on investment in waste treatment plant (installation engineering)				



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Output 4		The commissioning and operation of the processing plant and the installation of facilities for co-processing are realized with a functioning quality assurance system			
No.	Activity \ Field of intervention	1	2	3	4
		Access and amount of waste fractions	Management of waste flow	Requirement of AF	Process of clinker brick
4.1	Elaborate and edit standards "Quality and test requirements for secondary fuels derived from waste with high calorific content".		2.3 Quality insurance		
4.2	Establish a quality assurance system		2.3 Quality insurance		4.1 BREF
4.3	Facilitate logistics and delivery of secondary fuel		2.5 Modal contract of the delivery of AF		4.4 Technical concept for co-processing
4.4	Plan, supervise and assist in plant commissioning and plant operation coach				4.4 Technical concept for co-processing
4.5	Provide job description of staff management for the processing plant and the cement works				4.4 Technical concept for co-processing
4.6	Conduct informational meetings with actors from the informal sector		1.5 Integration of formal sector		