



COOPERATION WITH THE PRIVATE SECTOR IN AFRICA

DEVELOPMENT PARTNERSHIPS  
WITH THE PRIVATE SECTOR (DPP)



**Progress Report no. 03**

**Reporting period: from 01.01.2014 to 30.06.2014**

**Project**



*Please indicate (X)  
the overall current status  
of the project (green, amber or red?)*

Project country	<b>Morocco</b>		
Project number	<b>05.2161.7-013.02</b>	Contract number	<b>Ko-AF/12AfrFaz</b>
Project start	<b>01.02.2013</b>	Project end	<b>03/2015</b>

<b>Name of company</b>	<b>CIMENTS DE L'ATLAS/ ThyssenKrupp Polysius/ GIZ</b>
<b>Contact</b>	Adil GUELZIM
<b>Name of GIZ programme</b>	<b>Environmental Program (PGPE)</b>
<b>Contact</b>	<b>Michael E. L. Stock, AV Project</b>
<b>DPP-Project manager (GIZ)</b>	<b>Mrs. Kira de Groot, Competence Center Cooperation with the Private Sector, Africa Department</b>
<b>3rd partner(s)</b>	<b>Fédération Marocaine de Plasturgie (FMP) Association Professionnelle des Cimentiers (APC)</b>



**1. Project finances**

Contributions of...	Cimat	TK Polysius	GIZ
Planned budget in €	<b>206.750</b>	<b>50.000</b>	<b>190.000</b>
Share in %	<b>46,3</b>	<b>11,2</b>	<b>42,5</b>
Actual expenditures in €	<b>150.466</b>	<b>0</b>	<b>124.702</b>
Share in %	<b>73</b>	<b>0</b>	<b>65,6</b>

**1.1 Comments with regard to the budget:**

The expenditure has been effected in accordance to the planning.

**1.2 Measures to be taken with regard to the budget:**

Nothing to report.

**2. Current status of the project <sup>1)</sup>**

Overall goal	Progress on achievement of objective
A mass flow management ... is developed ...	60% (
Indicator(s)	Progress on achievement of indicator(s)
<ul style="list-style-type: none"> <li>▪ An initial plant for producing alternative fuel is in operation...</li> <li>▪ The cement producer ... achieves a substitution rate of 25% ...</li> <li>▪ A regulation ... is implemented in form of an “arrête” as a legally binding regulation.</li> <li>▪ A concept for transferring the informal sector ... is developed.</li> </ul>	<p>The general conditions and technical basics are determined, the access and amount of waste fractions are analyzed.</p> <p>The processes of collection and sale of valuable materials in the informal sector are examined.</p> <p>The production processes and their characteristics are accounted for (comparative basis).</p> <p>The organizational and business conditions of the public waste disposal are available.</p>

<sup>1)</sup> For better monitoring of the project the partners had decided to structure the operational plan in four main axes.



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<b>Output 1</b>	<b>Access and amount of waste fractions</b>	<b>Traffic light*</b>	X		
<b>Indicator</b>					
<b>The project baseline on available waste resources, compositions and logistics is established</b>					
<b>Milestone</b>	<b>Achieved by</b>	<b>Progress on achievement of milestones</b>			
1.1 <b>Appropriate waste categories</b>	March 2013	<ul style="list-style-type: none"> <li>Deposit of waste par industrial sector,</li> <li>Classification of producer/ manufacturer,</li> <li>Determination of selected types of waste,</li> <li>Benchmarks by industrial sector <sup>1)</sup></li> </ul>			
1.2 <b>Estimate available quantities</b>	June 2013	<ul style="list-style-type: none"> <li>Ratio and amount of waste in targeted provinces</li> </ul>			
1.3 <b>Characteristics of waste</b>	June 2013	<ul style="list-style-type: none"> <li>Access waste composition: compounds and share including investigation regarding colorific value, ash, chlorine, sulphur, heavy metals.</li> </ul>			
1.4 <b>Contract law of waste disposal</b>	Sept. 2013	<ul style="list-style-type: none"> <li>Diagnostic status of waste management and evaluation of waste amount can be valued as alternative fuel.</li> </ul>			
1.5 <b>Integration of formal sector</b>	June 2013	<ul style="list-style-type: none"> <li>Analyze of the impact on poverty: Integration of the informal recovery.</li> </ul>			

1) Not affordable as part of this project, because lack of available data on the context of waste arising per unit of production.

<b>Output 2</b>	<b>Management of mass flow</b>	<b>Traffic light</b>		X	
<b>Indicator</b>					
<b>An appropriate waste stream management system is established</b>					
<b>Milestone</b>	<b>Achieved by</b>	<b>Progress on achievement of milestones</b>			
2.1 <b>Requirement specif.</b>	...	<ul style="list-style-type: none"> <li>Approach competent authorities ... (continuous).</li> </ul>			
2.2 <b>Identify potential operators</b>	Sept. 2013	<ul style="list-style-type: none"> <li>Diagnostic status of waste management and evaluation of waste amount can be valued as alternative fuel.</li> </ul>			
2.3 <b>Quality insurance system</b>	...	<ul style="list-style-type: none"> <li>Code of practice (is already available as a manuscript): Requirement profile for alternative fuel.</li> </ul>			
2.4 <b>Logistical issues and cost structure of supply chain</b>	June 2013	<ul style="list-style-type: none"> <li>Structure of cost- benefit- analyze ... (continuous).</li> </ul>			
2.5 <b>Modal contract for the delivery of AF</b>	...	<ul style="list-style-type: none"> <li>Diagnostic status of waste management and evaluation of waste amount can be valued as alternative fuel.</li> </ul>			



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<b>Output 3</b>	<b>Requirement of alternative fuel</b>	<b>Traffic light</b>	<span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	<span style="background-color: #FFFF00; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	<span style="background-color: #FF0000; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>
<b>Indicator</b>					
<b>The financial and economic criteria are known and investment decisions are made.</b>					
<b>Milestone</b>		<b>Achieved by</b>	<b>Progress on achievement of milestones</b>		
3.1	<b>Benchmark</b>	...	<ul style="list-style-type: none"> <li>▪ Evaluation of literature</li> </ul>		
3.2	<b>Specification of AF-parameters</b>	Dec. 2013	<ul style="list-style-type: none"> <li>▪ Reference date for waste pollutant</li> </ul>		
3.3	<b>Process-related requirement</b>	...	<ul style="list-style-type: none"> <li>▪ Examine existing and needed technical equipment regarding thermal valorization potential, process and handling of AF by the local cement works.</li> <li>▪ Required equipment for waste quality control has been estimated</li> </ul>		
3.4	<b>Technical concept of treatment</b>	...	<ul style="list-style-type: none"> <li>▪ Terms of reference are confirmed, the concept planning is mandated.</li> <li>▪ Pretreatment concept is established</li> </ul>		
3.5	<b>Authorization procedure</b>	...	<ul style="list-style-type: none"> <li>▪ Approach competent authorities regarding the formulation of sublegal rules and regulations and established standards for co-processing as a directive ... (continuous).</li> </ul>		

<b>Output 4</b>	<b>Process of clinker</b>	<b>Traffic light</b>	<span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	<span style="background-color: #FFFF00; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>	<span style="background-color: #FF0000; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>
<b>Indicator</b>					
<b>The commissioning and operation of the processing plant and the installation of facilities for co-processing are realized with a functioning quality assurance system.</b>					
<b>Milestone</b>		<b>Achieved by</b>	<b>Progress on achievement of milestones</b>		
4.1	<b>BREF</b>	...	<ul style="list-style-type: none"> <li>▪ Evaluation of the Best Available Technical Reference ... (continuous).</li> </ul>		
4.2	<b>Simulation of process parameters</b>	Sept. 2013	<ul style="list-style-type: none"> <li>▪ Acceptabilité environnementale.</li> <li>▪ Rapports des émissions.</li> <li>▪ Rapport bilans thermique.</li> <li>▪ AF- Study (TKP).</li> </ul>		
4.3	<b>Computation of emissions</b>	Sept. 2013	<ul style="list-style-type: none"> <li>▪ Rapports des émissions: Analyze emissions (dust, SO<sub>2</sub>, NO<sub>x</sub>, Cl, Hg, Cd, ...) in the local cement works.</li> </ul>		
4.4	<b>Technical concept for the co-processing</b>	...	<ul style="list-style-type: none"> <li>▪ Etude d'impact: Valorisation des combustibles et matériaux de substitution à la cimenterie de Beni Mellal.</li> </ul>		
4.5	<b>Authorization procedure</b>		<ul style="list-style-type: none"> <li>▪ Scoping of environmental impact study and safety analysis.</li> </ul>		



### 3. Evaluation of the progress

#### 3.1 Achievements

*Please give a brief summary of the most important developments and activities which contribute to the objective of the measure.*

**We could clarify one of the most important conditions to implement an efficient treatment of locally arising wastes as alternative fuel (AF): The sorting campaigns, organized on spring and autumn of this year, has shown, that we can gain a high calorific fraction out of household waste. This fraction meets the requirements of a qualified AF, no separate technical requirements are to provide for their production.**

**To assure the potential of AF - obtained from household waste - we need to win the interest of cities and municipalities with a radius up to 300 km to the production facilities of Cimat.**

**Contact has been established with Béni Mellal (community of location of on of the cement plants of Ciments d'Atlas) municipality for the development of a waste pretreatment facility.**

**The enquiry of informal recovery shows a heterogeneous structure. A first approach is to promote the foundation of social associations, as mediator to integrate the informal recovery.**

#### 3.2. (Preliminary) Contributions to poverty reduction

*Please outline briefly how the implemented activities have or are expected to contribute to poverty reduction.*

**As part of the interventions (1.5) "Integration informal sector" we have evaluated - based on the methodic "Poverty Impact Assessment" - the situation of the informal recovery using the examples of three regions. With the result of the interviews we will be in position to develop concepts and measures, how we could integrate the informal sector into the management of mass flow to assure the quantities of AF as well as to train them through technical rules to improve their quality, condition in order to achieve higher income.**

#### 3.3 Major deviations

*Please outline both positive and negative deviations and changes from the original concept regarding results, indicators (all red and amber indicators have to be commented here), milestones, the target group, expected impacts, risks.*

**Due to an intensive process between the partners to vote adapted requirements on AF-quality and conditions for the planning of AF- treatment conception we have to compensate a time loss of more than three months. Therefore we will edit the calculation and economic of quality system until the end of third quarter 2014. However these delays will not affect final goals.**

#### 3.4 Need for action

*Please describe measures to be taken with regard to the amber or red indicators and give details of proposed actions derived from section 3.2 or from other findings.*

**The progress of the contributions of Cimat are little effected, because the current focus is on the access and amount of waste fractions as well as the management of mass flow.**



### 3.5 Partnership / cooperation management

*Please give a brief assessment of the status of the cooperation management. Is the cooperation management of the partnership successful? Is the steering structure appropriate to the diversity of the tasks to be undertaken and the risks involved?*

**The management of partnership is deemed probative. An effective approach combining the interventions of the project with the daily activities has been found since Cimac has installed a professional for AF.**

### 4 Own inputs (actual costs) by the company - pursuant to the cost calculation

Inputs specified in the cost calculation (annexe 3)	Designated purpose	Amount EURO
Engineer (Own / man days)	1-2-1- Assess local situation of cement works	3.500
External consultant (CEMEX)	1-2-1- Assess local situation of cement works	17.913
Engineer (Own / man days)	1-2-2- Assess existing and to complete technical equipment	8.750
External consultant (Lechtenberg – German company))	1-2-2- Assess existing and to complete technical equipment	9.778
Engineer (Own / man days)	1-2-4- Conduct emissions analysis	3.500
External laboratory (LPEE)	1-2-4- Conduct emissions analysis	23.345
Engineer (Own / man days)	1-2-6 – Elaborate energy balance	3.500
Engineer (Own / man days)	1-3-2- Monitoring of parameters	1.750
Engineer (Own / man days)	1-4-2- Permitting support and report, clarifying license conditions	3.500
External consultant (Life solution)	1-4-2- Permitting support and report, clarifying license conditions	19.825
Engineer (Own / man days)	2-3- Clarification of administrative issues	1.750
External (Vecoplan)	2.5- Technical concept for pre-procession	20.000
Engineer (Own / man days)	2-6- Scoping environmental impact study and safety analysis	7.000
External consultant (EDIC)	2-6- Scoping environmental impact study and safety analysis	24.605
Engineer (Own / man days)	5-3- Monitoring public-relationships	1.750
<b>Total</b>		<b>150.466</b>



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**We hereby confirm that our accounts contain the vouchers for the aforementioned [external](#) items and that these may be inspected at any time.**

*Casablanca/ Rabat, 30-06-2014*

\_\_\_\_\_  
*Date / place*

\_\_\_\_\_  
*Ciments d'Atlas/ GIZ-PGPE*