Case study

Feasibility study to use waste as fuel for cement factories

Technical assistance to determine the technical and financial feasibility of the production and use of RDF from municipal solid waste in cement factories in Mozambique

Antonio Uaisson
Nairobi, 27th of September 2016
The request

Request generation: from the Task Force on NAMAs in the waste sector

Task force: group led by MITADER to formulate mitigation actions (NAMAs) in the waste sector and work towards their implementation (with climate support)

Priority actions: recycling, waste to energy, sanitary landfill, using Extended Producer Responsibility as a financial mechanism

Led by the MITADER (Ministry of Land, Environment and Rural Development), with participation of FUNAB/FNDS (Fund for the Environment/National Fund for Sustainable Development), ANAMM (Association of the Mozambican Municipalities), Carbon Africa (Expert in climate finance), AMOR (expert in recycling)
The request

Interactions facilitated by the Task force: participation of the private sector: Cimentos de Moçambique, 3R – Reduce, Reuse, Recycle

Interest in RDF (Refuse Derived Fuel) : possible PPP (discussed now, between Municipalities, MITADER, 3R, Cimentos de Moçambique)

Meetings between NDE and Task force in early 2015
Request submitted on 14th of April 2015
Appraisal letter on 27th of May 2015
Response Plan approved in November 2015
Why? Relevance for Mozambique

Use waste as fuel by the cement factory: 160t of RDF/day

Alternative fuel (substituting gaz): mitigation of GHG through co-processing

NAMAs one Waste management are part of Mozambique contribution on (i)NDC.

So far: only one cement factory producing clinquer, but possible replication in Matutuine and Nacala

ToR drafted by the Task Force
1. Technical feasibility study on RDF
2. Economic feasibility study (financials)
3. Assessment of the current legal and regulatory framework
4. Development of a MRV system for RDF
5. Workshop to present deliverables to stakeholders
6. Final report

Note: Task force counting on a USD 250 000 budget.
Consultants: UNEP-DTU
Amount delivered: USD 50 000
MRV - Monitoring, reporting and verifying
Where are we now?

- Outputs ready, but less detailed than expected
- Workshop to be organized in late October/early November
- Results feed a NAMA Facility proposal on integrated waste management for Maputo and Matola (to be submitted in October)
- More (technical) details are needed: discussions about possible second request by the Task Force
Suggestions

• Involve the government (or Task Force) in the selection of the consultants
  ➔ To have people aware of the local context and specificities

• More clarity on the budget (between USD 50 000 and USD 250 000)
  ➔ Who decides on that? Based on what?
  ➔ What is the message to convey?

• Response plan to be ready quickly after appraisal
Conclusions

- Very positive overall.

- Existence of « Task Force » useful to make interactions easier.

- Results used to feed NAMA Facility proposal → leverage effect.

- Possible second request to go further into the details.