IMPLEMENTING MITIGATION AND ADAPTATION PROJECTS IN AFRICA

Lessons

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PROJECT ONE – BIOGAS IN SOUTH AFRICA

blozwatt

• BIO2WATT, A RE PROJECT DEVELOPER HAS FINALISED THE 1ST COMMERCIALLY VIABLE GRID-CONNECTED BIOGAS PROJECT IN SOUTH AFRICA – **BBP (PTY) LTD ("BBP")**.

• **3,3MW** OF ELECTRICAL POWER SOLD TO AN INDUSTRIAL OFF-TAKER VIA A PPA.

- BBP WILL OPERATE FOR **10 YEARS**, WITH THE OPPORTUNITY TO RENEW AGREEMENTS FOR AN ADDITIONAL 10 YEARS.
- TOTAL PROJECT COSTS AMOUNT TO \$13.5M.
- THE PROJECT IS STRUCTURED AS A LIMITED RECOURSE FINANCE TRANSACTION, WITH A 70%:30% DEBT TO EQUITY RATIO.

• BBP IS AT FINANCIAL CLOSE AND SHOULD BECOME OPERATIONAL IN Q3 2014.

BBP – PROJECT TIMELINE



PRE-DEVELOPMENT COSTS ~\$1.5m

SOME INTERESTING FACTOIDS

56

1,500

18

No. of iterations performed on the Project Finance Model

Pages of legal documents

No. of direct project stakeholders

\$600k ... spent in legal fees

No. of Grants obtained



PROJECT TWO – WAVE POWERED DESALINATION IN CAPE VERDE



- RESOLUTE MARINE HAS CONCEPTUALISED THEIR 1ST COMMERCIALLY VIABLE WAVE POWERED DESALINATION PROJECT IN CAPE VERDE
- PROJECT ECONOMICS LOOK GOOD
- CAPITAL COSTS ARE REASONABLE SO FAR. PROJECT COST ESTIMATES DO NOT TAKE RISK PREMIUMS INTO ACCOUNT YET
- CAPE VERDE GOVERNMENT IS KEEN, BUT NOT THE MOST CREDITWORTHY ENTITY

• A LOT OF WORK TO BE DONE TO CONVINCE BANKS AND EQUITY PROVIDERS

... Ambitious schedule

Tasks	2013		2014				2015			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Prefeasibility studies										
Letter of support	٠							RME's i		
Partnerships, site selection								- Personality Disk	rtible Note	47
Technical and Economic Feasibility								Project	financing	3
Convertible note		•	🕨 🛑 \$21	Ν						
Feasibility studies										
EIA and permits										
Wave assessment							l.			
Water quality assessment							ļ			
Bathymetry							l i			
Site piloting construction										1
Site piloting operations and monitoring							l i			
Letter of intent			•							
Engineering and procurement										
P&G					1					
Legal			1				l i			
Water Purchase Agreement				•	•					
Financial structure negotiation					2		i 🍓 \$18	M		
Construction and commissioning										
Procurement, shipment and construction										
Commissioning										
Operations										
YI TELEVISION	-			14			Sec. 1	-	-	

In less than 2 years, we could have the world first wave-driven desalination system operating in Cape Verde

DEVELOPER'S LEARNING CURVE



INNOCENCE

CONFIDENCE

Learned when to say "enough".

LEGAL

RECOGNITION

NAÏVE CONFIDENCE

Acquired a new vocabulary from "take-orpay" to "Horizontal Waivers" and learned to read rather than trust ...

FINANCIAL

Learnt expressions like "cash sweep", "DSCR", "IDC", "waterfall structures", "lockup period" to name a few terms.



LESSONS FOR DEVELOPERS:

COSTS:A "SMALL" PROJECT-FINANCED RE PROJECTWILL COST SUBSTANTIALLY MORE ...PREDEVELOPMENT EXPENSES CAN AMOUNT TO10-15% OF PROJECT COSTS (1st time)

LEGAL ADVISORS: MAY COST > 5% (MAY BE FLOWN IN)

FINANCIAL ADVISORS: NEEDED (CTI-PFAN)

AGREEMENTS:FINANCIAL CLOSE CAN EASILY BEPUSHED OUT BY 12 MONTHS

YOUR BANK:

THE LESS THEY KNOW THE LONGER IT WILL TAKE

YOUR INVESTORS:

NEED TO BE PATIENT



LESSONS FOR REGULATORS:

- SIMPLIFY AND ACCELERATE LICENSING PROCESSES
- CREATE A POLICY FRAMEWORK THAT CATERS FOR SMALLER TO
 MEDIUM SIZED PROJECTS
- ADAPT PROJECT FINANCING REQUIREMENTS TO THE SIZE OF THE
 PROJECT
 - LOWER GUARANTEE REQUIREMENTS
 - EPC SILVER BOOK AS STANDARD



BENEFIT OF CTI PFAN INTERVENTION:

- PROJECT FINANCE ASSISTANCE
- DEAL STRUCTURING
- MANAGE DUE DILIGENCE PROCESS
- STAKEHOLDER NEGOTIATIONS
- FINANCIAL MODELING
- CONFIDENCE BUILDING

