

NATIONAL CLIMATE CHANGE ACTION PLAN



REPUBLIC OF KENYA

FINANCE

Analysis of the Carbon Market Landscape in Kenya

Prepared by Carbon Africa for Adam Smith
International



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1. INTRODUCTION

THIS SHORT PAPER PROVIDES AN ANALYSIS OF THE CARBON CREDIT MARKET IN KENYA, WITH A FOCUS ON THE CLEAN DEVELOPMENT MECHANISM (CDM), BUT ALSO ON OTHER VOLUNTARY MARKET STANDARDS. A BRIEF OVERVIEW OF THE REGULATORY ENVIRONMENT IS FOLLOWED BY A DETAILED LOOK AT THE CARBON CREDIT PIPELINE, INCLUDING PROJECTS THAT ARE REGISTERED AND THOSE UNDER DEVELOPMENT. KEY PARAMETERS SUCH AS THE PROJECT DEVELOPER, THE NUMBER OF EMISSION REDUCTIONS AND THE CARBON BUYER ARE IDENTIFIED WHERE POSSIBLE FOR EACH PROJECT, ALTHOUGH SOME OF THIS INFORMATION IS FOUND IN AN ANNEX RATHER THAN IN THE BODY OF THE REPORT. AN ASSESSMENT OF THE BARRIERS TO CARBON PROJECT IMPLEMENTATION IS INCLUDED. THE PAPER GIVES AN OUTLOOK OF THE CARBON MARKET POTENTIAL IN KENYA AND CONCLUDES WITH A LIST OF RECOMMENDATIONS FOR THE EXPANSION OF THE SECTOR.

THIS ANALYSIS HAS BEEN PREPARED BY CARBON AFRICA LIMITED BASED ON A DESK REVIEW OF PUBLICLY AVAILABLE INFORMATION AND DATA IN ADDITION TO THE CONSULTANTS' OWN INDUSTRY KNOWLEDGE.

2. SUMMARY FACTS AND FIGURES

THIS ANALYSIS IS SUMMARIZED IN THE FOLLOWING TABLE.

REGULATORY AND INSTITUTIONAL ENVIRONMENT	<ul style="list-style-type: none"> » HENYAN REGULATORY ENVIRONMENT IS SUFFICIENT TO ATTRACT CARBON FINANCE AND INVESTMENT ALTHOUGH THERE IS ROOM FOR IMPROVEMENT. » THERE IS RELATIVELY GOOD CAPACITY IN CARBON PROJECT DEVELOPMENT AND TRANSACTION MANAGEMENT AVAILABLE IN HENYA. THIS IS FOUND PRIMARILY IN THE PRIVATE SECTOR. » ANY CHANGES TO THE REGULATORY TREATMENT (INCLUDING TAX) OF EMISSION REDUCTION PROJECTS IN HENYA SHOULD BE CAREFULLY PLANNED SO AS NOT TO DISCOURAGE PRIVATE SECTOR PARTICIPATION.
CDM STATUS	<ul style="list-style-type: none"> » THE FIRST CDM PROJECT IN HENYA WAS REGISTERED IN SEPTEMBER 2008. » CURRENTLY THERE ARE FIVE REGISTERED CDM PROJECTS, AND 21 CDM PROJECTS AND SIX CDM PROGRAMME OF ACTIVITY (PoA) SUB-PROJECTS UNDER REQUEST FOR REVIEW OR VALIDATION. » FOUR OF THE REGISTERED CDM PROJECTS ARE COMMISSIONED AND OPERATIONAL. » THE SECTORAL AND REGIONAL DISTRIBUTION OF CDM PROJECTS IN HENYA IS FAIRLY DIVERSIFIED ALTHOUGH KEY SECTORS AND REGIONS HAVE YET TO PARTICIPATE. » TOTAL AGGREGATE EMISSION REDUCTIONS BY PROJECTS IN THE CDM PIPELINE IN HENYA ARE EXPECTED TO EXCEED 18 MILLION TONNES OF CARBON DIOXIDE EQUIVALENT (tCO₂e) BY 2020.
CDM FINANCE	<ul style="list-style-type: none"> » THE CDM MAY BE ABLE TO FACILITATE PROJECT FINANCING AND INVESTMENT IN HENYA OF MORE THAN \$1.5 BILLION BY 2015. » TOTAL REVENUE FROM CERTIFIED EMISSION REDUCTIONS (CERs) SHOULD EXCEED 90 MILLION BY 2020.
VOLUNTARY MARKET	<ul style="list-style-type: none"> » THE VOLUNTARY CARBON MARKET IS IMPORTANT IN HENYA IN TERMS OF PILOTING NEW APPROACHES TO EMISSION REDUCTIONS (E.G. REDUCED EMISSIONS FROM DEFORESTATION AND FOREST DEGRADATION (REDD)), ATTRACTING CARBON FINANCE FOR CERTAIN TYPES OF PROJECTS, INCLUDING PRE-REGISTRATION CARBON CREDITS AND COULD PLAY AN EVEN BIGGER ROLE AS THE ONLY MAJOR CARBON MARKET AVAILABLE FOR HENYAN PROJECT DEVELOPERS POST 2012. » AT PRESENT THERE ARE 14 VOLUNTARY GOLD STANDARD PROJECTS IN THE PIPELINE IN HENYA AND SEVEN FORESTRY SECTOR VOLUNTARY PROJECTS.
BARRIERS	<ul style="list-style-type: none"> » CDM SPECIFIC BARRIERS INCLUDE (A) LACK OF AWARENESS OF CDM REQUIREMENTS BY PROJECT DEVELOPERS, (B) HIGH CDM DEVELOPMENT COSTS AND LACK OF FUNDS OR APPETITE TO PRE-PAY FOR SUCH, (C) ABSENCE OF METHODOLOGIES AND BASELINE DATA IN SOME SECTORS OF SPECIAL INTEREST TO HENYA (E.G. ETHANOL OR PETROL BLENDING), (D) MISTAKES IN PROJECT DEVELOPMENT, (E) ABANDONMENT OF THE UNDERLYING PROJECT, AND (F) THE BUREAUCRACY AND 'BEAN-COUNTING' OF DESIGNATED OPERATIONAL ENTITIES (DOEs). » MAIN PROJECT BARRIERS AMONG MANY ARE (A) LACK OF ACCESS TO UNDERLYING PROJECT CAPITAL, (B) PROJECT DEVELOPER INEXPERIENCE, (C) SECTORAL RISKS, AND (D) POLITICAL AND INSTITUTIONAL RISKS.
FUTURE MARKET OUTLOOK	<ul style="list-style-type: none"> » THE CDM PIPELINE IS EXPECTED TO INCREASE CONSIDERABLY IN THE SHORT-TERM RUSH TO MEET THE 2012 REGISTRATION "DEADLINE" FOR CONTINUED ACCESS TO THE EU MARKET. » HENYA IS SET TO BECOME THE NUMBER TWO CDM COUNTRY IN AFRICA AFTER SOUTH AFRICA. » ONCE THE 2012 DEADLINE HAS PASSED, FURTHER CDM DEVELOPMENT WILL BE STIFLED IN HENYA, RESULTING IN A LOSS OF MOMENTUM FOR PROJECT-BASED APPROACHES (EXCEPT THOSE FOR THE VOLUNTARY MARKET) DUE TO EU MARKET RULES. » HOWEVER, CARBON AND CLIMATE FINANCE ACTIVITIES WILL CONTINUE UNDER SUB-PROJECTS THAT CAN BE ADDED TO REGISTERED CDM PROGRAMMES OF ACTIVITIES, VOLUNTARY MARKETS AND NEW APPROACHES SUCH AS NATIONALLY APPROPRIATE MITIGATION ACTIONS (NAMAs) AND FOREST FUNDS. THIS MIGHT SEE NEW SECTORS BENEFIT THAT ARE ABSENT FROM THE CDM, SUCH AS TRANSPORT AND REDD.
RECOMMENDATIONS	<ul style="list-style-type: none"> » NINE NEAR AND MID-TERM SUGGESTIONS ARE PROVIDED TO HELP FACILITATE INCREASED CDM PROJECT UPTAKE, DIVERSIFY INTO NEW AREAS AND POSITION HENYA TO CONTINUE TO ACCESS CARBON FINANCE AND CLIMATE INVESTMENT,

3. CARBON MARKET REGULATORY ENVIRONMENT

3.1. POLICIES AND REGULATIONS

KENYA DOES NOT HAVE SPECIFIC LEGISLATION RELATING TO CLIMATE CHANGE OR CARBON CREDIT MARKETS. HOWEVER, AS A DEVELOPING COUNTRY, AND HAVING RATIFIED THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC) ON 30TH AUGUST 1994 AND ACCEDED TO THE KYOTO PROTOCOL ON 25TH FEBRUARY 2005, KENYA IS ABLE TO HOST CLEAN DEVELOPMENT MECHANISM PROJECTS.

CERTAIN LAWS AND POLICIES, SUCH AS THE FOREST ACT (2005), MAKE REFERENCE TO CLIMATE CHANGE AND THE ROLE OF GREENHOUSE GAS EMISSIONS BUT DO NOT PROVIDE DIRECTLY ON FOR THE CDM OR VOLUNTARY CARBON MARKETS. ONLY THE ENERGY ACT (2006) PROVIDES EXPLICITLY FOR THE MINISTER OF ENERGY TO USE THE CDM AND CARBON TRADING TO PROMOTE RENEWABLE ENERGY.

VISION 2030, KENYA'S DEVELOPMENT PLAN TO TRANSFORM THE COUNTRY TO MIDDLE-INCOME STATUS BY THE YEAR 2030, INCLUDES A GOAL UNDER ENVIRONMENTAL MANAGEMENT TO ATTRACT "AT LEAST FIVE CLEAN DEVELOPMENT MECHANISMS (CDM) PROJECTS PER YEAR IN THE NEXT FIVE YEARS." HOWEVER, MEASURES TO BE TAKEN TO IMPLEMENT THIS ARE NOT ELABORATED.

IN APRIL 2010, KENYA FINALIZED ITS NATIONAL CLIMATE CHANGE RESPONSE STRATEGY (NCCRS), WHICH WAS A COLLABORATIVE EFFORT LED BY THE MINISTRY OF ENVIRONMENT AND MINERAL RESOURCES (MEMR). THE STRATEGY INCLUDES A BUDGET WITH PROPOSED CLIMATE CHANGE PROJECTS AND PROGRAMMES AS WELL AS RECOMMENDATIONS ON CDM AND REDUCING EMISSIONS FROM DEFORESTATION AND FOREST DEGRADATION. CURRENTLY, THE MEMR HAS DIVIDED FURTHER DEVELOPMENT OF THE STRATEGY INTO AN ELABORATE ACTION PLAN THROUGH EIGHT SUB-COMPONENTS, WHICH HAVE BEEN CONTRACTED OUT TO EXTERNAL CONSULTANTS.

THE MINISTRY OF FINANCE IN 2011 PREPARED A DRAFT NATIONAL POLICY FOR CARBON INVESTMENTS AND TRADING, WHICH COULD BRING SIGNIFICANT CHANGES TO THE KENYAN MARKET AND SHOULD HAVE MORE INPUTS FROM STAKEHOLDERS BEFORE IT IS ADOPTED.

3.2. KEY INSTITUTIONS

THE MINISTRY OF ENVIRONMENT AND MINERAL RESOURCES IS IN CHARGE OF CLIMATE CHANGE ISSUES AND IS THE COUNTRY'S FOCAL POINT TO THE UNFCCC. AN INTER-MINISTERIAL COMMITTEE ON ENVIRONMENT COORDINATES CLIMATE CHANGE ISSUES BETWEEN GOVERNMENT BODIES AND OTHER STAKEHOLDERS, AND INCLUDES TECHNICAL COMMITTEES SUCH AS THE NATIONAL CLIMATE CHANGE ACTIVITIES COORDINATION COMMITTEE (NCCACC), FOR WHICH THE NATIONAL CLIMATE CHANGE COORDINATING OFFICE IN MEMR IS THE SECRETARIAT.

THE NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA), ESTABLISHED UNDER EMCA 1999, ACTS AS THE PRINCIPAL INSTRUMENT FOR THE IMPLEMENTATION OF GOVERNMENT POLICIES RELATING TO THE ENVIRONMENT. NEMA IS HOUSED IN MEMR, AND HOSTS THE DESIGNATED NATIONAL AUTHORITY (DNA), WHICH IS RESPONSIBLE FOR CDM REGULATION AND PROMOTION IN KENYA.

THE KENYA FOREST SERVICE (KFS) IS DESIGNATED AS THE GOVERNMENT BODY RESPONSIBLE FOR REDD IN THE COUNTRY. KENYA IS PARTICIPATING IN BOTH THE WORLD BANK FOREST CARBON PARTNERSHIP FACILITY (FCPF) AND THE UNITED NATIONS REDD PROGRAMME (UN-REDD), AND IS FORMULATING A NATIONAL REDD READINESS PLAN, STRATEGY AND IMPLEMENTATION FRAMEWORK UNDER THE FORMER.

THE CLIMATE CHANGE COORDINATION UNIT (CCCU) IN THE OFFICE OF THE PRIME MINISTER IS PLAYING A SUPERVISORY ROLE AS A KEY PROMOTER OF CLIMATE CHANGE MITIGATION AND ADAPTATION ACTIVITIES IN KENYA. WHILE THE CCCU DOES NOT INVOLVE ITSELF DIRECTLY IN CDM PROJECTS, THE OFFICE OF THE PRIME MINISTER IS RESPONSIBLE FOR ADMINISTERING THE WATER TOWERS CONSERVATION FUND ESTABLISHED IN 2010 TO HELP FINANCE FOREST PROTECTION INITIATIVES. THIS AND OTHER SIMILAR FUNDS MAY IN THE FUTURE BE LINKED TO CLIMATE FINANCE.

THE MINISTRY OF FINANCE IS RESPONSIBLE FOR FORMULATING FINANCIAL AND ECONOMIC POLICIES. AT PRESENT THERE ARE NO SPECIFIC FISCAL OR TAXATION REQUIREMENTS FOR CDM PROJECTS AND CARBON CREDIT REVENUES, ALTHOUGH MINISTRY OFFICIALS HAVE INDICATED THAT SUCH MAY BE IMPLEMENTED IN THE FUTURE. IN 2010, THE NATIONAL BUDGET SPEECH BY THE MINISTER OF FINANCE INCLUDED PLANS FOR A CARBON CREDIT INVESTMENT FRAMEWORK IN KENYA, WITH THE ESTABLISHMENT OF AN EMISSION TRADING SCHEME AS ONE OF THE PRIORITIES FOR FISCAL YEAR 2010/2011.

THE KENYA INVESTMENT AUTHORITY (KIA) HAS AN INDIRECT ROLE IN PROMOTING INVESTMENT IN THE UNDERLYING ASSETS OF CDM AND REDD PROJECTS IN KENYA.

3.3. THE DESIGNATED NATIONAL AUTHORITY

KENYA'S DNA OFFICE BECAME OPERATIONAL AROUND 2005. THE DIRECTOR GENERAL OF NEMA IS THE OFFICIAL CONTACT POINT FOR THE DNA, WHICH IS STAFFED BY A SECRETARIAT OF NEMA PERSONNEL. THE 2001 KENYA NATIONAL GUIDELINES ON THE CDM PROVIDE GUIDANCE FOR THE ELIGIBILITY OF CDM PROJECTS IN KENYA AND SET OUT THE INSTITUTIONAL FRAMEWORK FOR A CDM NATIONAL CLEARING HOUSE (NCH) FOR THE PROCESSING OF CDM PROPOSALS AND THE ISSUANCE OF LETTERS OF APPROVAL BY THE DNA.

ON THE BASIS OF A CDM PROJECT IDEA NOTE (PIN) OR DRAFT PROJECT DESIGN DOCUMENT (PDD), THE DNA CAN ISSUE A LETTER OF NO OBJECTION, NORMALLY WITHIN ONE TO TWO MONTHS. THE LETTER OF APPROVAL AND/OR AUTHORIZATION CAN TAKE A BIT LONGER (THREE TO FOUR

MONTHS) AND IS USUALLY OBTAINED PRIOR TO OR DURING THE CDM VALIDATION PROCESS, ALTHOUGH THE PROJECT PROPONENT MUST ALSO SHOW THAT THEY HAVE RECEIVED THE ENVIRONMENTAL IMPACT ASSESSMENT LICENSE, IF APPLICABLE.

KENYA'S DNA OFFICE HAS MORE THAN FIVE YEARS OF EXPERIENCE IN THE APPRAISAL AND APPROVAL OF CDM PROJECTS. THE PROCESS IS FAIRLY STANDARDIZED. A LIST OF SUSTAINABLE DEVELOPMENT CRITERIA AGAINST WHICH A PROJECT CAN BE ASSESSED IS AVAILABLE. A RECORD OF MEETING MINUTES AND DNA DECISIONS CAN BE PROVIDED UPON REQUEST. THE DNA HAS NO REQUIREMENTS WITH REGARDS TO VOLUNTARY MARKET CARBON PROJECTS.

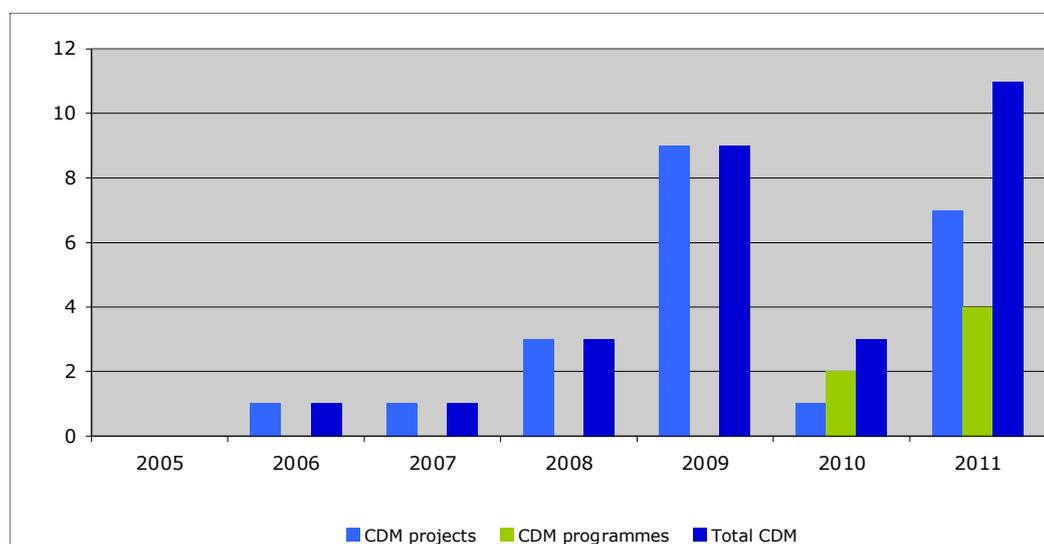
THE DNA DOES FACE HUMAN RESOURCE CHALLENGES IN TERMS OF A BUSY WORK SCHEDULE AND HIGH STAFF TURNOVER, WHICH OFTEN RESULTS IN LOSS OF INSTITUTIONAL MEMORY AND DELAYS IN APPROVING PROJECTS. THE DNA HAS ALSO NOT BEEN AS PROACTIVE AS IT COULD BE WITH REGARDS TO, FOR EXAMPLE, IDENTIFYING A LIST OF SMALL-SCALE TECHNOLOGY TYPES THAT COULD BE CLASSIFIED AS AUTOMATICALLY ADDITIONAL (AS PERMITTED UNDER CDM RULES) OR THE DETERMINATION OF BASELINE EMISSIONS IN DIFFERENT SECTORS. HOWEVER, IN GENERAL THE REGULATORY ENVIRONMENT IN KENYA SUPPORTS THE DEVELOPMENT OF CDM PROJECTS AND THE USE OF CARBON FINANCE. THIS IS ALSO DUE TO THE COUNTRY'S BROADER INVESTMENT LAWS AND CLIMATE.

4. CARBON MARKETS IN KENYA

4.1. THE CLEAN DEVELOPMENT MECHANISM

IN NOVEMBER 2006, THE FIRST KENYAN PROJECT BEGAN THE CDM VALIDATION PROCESS. ALMOST TWO YEARS LATER IN SEPTEMBER 2008, IT BECAME KENYA'S FIRST REGISTERED CDM PROJECT, THE "35 MW BAGASSE BASED COGENERATION PROJECT" BY MUMIAS SUGAR COMPANY LIMITED. THE NEXT PROJECT WAS NOT REGISTERED UNTIL MARCH 2010, BUT SINCE THEN THERE HAVE BEEN AN INCREASING NUMBER OF NEW PROJECTS AND PROGRAMMES OF ACTIVITIES APPLYING FOR CDM REGISTRATION.

FIGURE 1: NUMBER OF NEW CDM PROJECTS AND PROGRAMMES STARTING VALIDATION IN KENYA



THE SUDDEN JUMP IN CDM PROJECTS STARTING VALIDATION IN 2009 WAS DUE TO SEVEN WORLD BANK-SUPPORTED SMALL-SCALE REFORESTATION PROJECTS BY THE GREENBELT MOVEMENT ENTERING THE PIPELINE AT THE SAME TIME.

AS OF 1ST NOVEMBER 2011, THE COUNTRY HAS FIVE REGISTERED CDM PROJECTS: TWO GEOTHERMAL POWER PLANTS, ONE WIND FARM AND ONE REFORESTATION PROJECT IN ADDITION TO THE AFORESAID BIOMASS COGENERATION PROJECT. ANOTHER 16 PROJECTS ARE UNDERGOING VALIDATION, AND ONE PROJECT IS CURRENTLY SUBJECT TO A REQUEST FOR REVIEW. FURTHERMORE, AT LEAST 20 PROJECTS HAVE SUBMITTED CDM PRIOR CONSIDERATION FORMS INDICATING THAT THEY INTEND TO APPLY FOR CDM REGISTRATION. IN TOTAL, CDM PROJECTS THAT ARE REGISTERED, REQUESTING REGISTRATION OR UNDER VALIDATION ARE EXPECTED TO REDUCE GREENHOUSE GAS EMISSIONS BY 2.45 MILLION tCO₂e BEFORE THE END OF 2012 AND BY MORE THAN 16 MILLION tCO₂e BY THE END OF 2020.

THE PIPELINE IN KENYA IS EXPECTED TO INCREASE DRAMATICALLY BETWEEN NOVEMBER 2011 AND MID-2012 DUE TO THE NUMBER OF PROJECTS RUSHING TO MEET THE 2012 CDM REGISTRATION DEADLINE FOR CONTINUED ACCESS TO THE EUROPEAN UNION EMISSION TRADING SCHEME (EU-ETS). CARBON AFRICA ESTIMATES AT LEAST 15 NEW PROJECTS AND PROGRAMMES ENTERING VALIDATION IN THE LAST QUARTER OF 2011 AND THE FIRST TWO QUARTERS OF 2012, INCREASING THE CURRENT PIPELINE BY ABOUT 35 .

TABLE 1: REGISTERED CDM PROJECTS IN KENYA

CDM NUMBER	NAME	TYPE	REGISTRATION DATE	OWNER	ANNUAL EMISSION REDUCTIONS (tCO ₂ e)	CARBON BUYER
1368	"35 MW BAGASSE BASED COGENERATION PROJECT" BY MUMIAS SUGAR COMPANY LIMITED (MSCL)	BIOMASS ENERGY	2 SEP 2008	IPP	129,591	JAPAN CARBON FINANCE (JAPAN)
4740	OLHARIA III PHASE 2 GEOTHERMAL EXPANSION PROJECT IN KENYA	GEOTHERMAL	4 MAR 2010	IPP	177,600	N/A
2448	OLHARIA II GEOTHERMAL EXPANSION PROJECT	GEOTHERMAL	4 DEC 2010	GOVT	149,632	WORLD BANK
6404	LAKE TURHANA 310 MW WIND	WIND	28 FEB 2011	IPP	736,615	N/A

	POWER PROJECT					
5123	ABERDARE RANGE/ MT. KENYA SMALL SCALE REFORESTATION INITIATIVE - KAMAE-HIPIPIRI SMALL SCALE A/R PROJECT	REFORESTATION	11 JUN 2011	NGO	8,542	WORLD BANK BIOCARBON FUND

IN ADDITION TO SINGLE CDM PROJECTS, THERE ARE FIVE CDM PROGRAMME OF ACTIVITIES CURRENTLY UNDER VALIDATION IN KENYA, AND A UGANDAN-BASED PoA THAT INCLUDES ONE OF ITS FIRST SUB-PROJECTS IN KENYA. PROJECT PROPONENTS ARE DEVELOPING PoAs FOR A VARIETY OF REASONS:

- » REDUCED UNIT TRANSACTION COSTS
- » BETTER APPLICABILITY TO SMALLER SCALE OR DECENTRALIZED ACTIVITIES
- » IT IS POSSIBLE TO INCLUDE MULTI-COUNTRY ACTIVITIES
- » POST-2012 EU MARKET ELIGIBILITY FOR REGISTERED PoAs IN KENYA
- » PoAs ARE SEEN AS THE PRECURSOR TO SECTORAL APPROACHES AND NAMAs

TABLE 2: CDM PROGRAMME OF ACTIVITIES UNDER VALIDATION WITH AT LEAST ONE SUB-PROJECT IN KENYA

CDM ID	NAME	TYPE	VALIDATION START	MANAGING ENTITY	ERs TO 2012	CARBON BUYER
PoA0062	IMPROVED COOK STOVES FOR EAST AFRICA	EE STOVES	11 NOV 2010	UGANDA CARBON BUREAU	0 IN KENYA	N/A
PoA0070	EFFICIENT COOKSTOVE PROGRAMME: KENYA	EE STOVES	25 DEC 2010	CO2BALANCE	65,600	N/A
PoA0118	HTDA SMALL HYDRO PROGRAMME OF ACTIVITIES	SMALL HYDRO	27 AUG 2011	KENYA TEA DEVELOPMENT AGENCY	0	N/A
PoA126	BAREFOOT POWER LIGHTING PROGRAMME	SOLAR LEDs	7 SEP 2011	BAREFOOT POWER	20,300	N/A
PoA154	KENYA IMPROVED WOODSTOVES PROJECT	EE STOVES	22 OCT 2011	CLIMATE PAL	16,400	EcoACT (FRANCE)
PoA156	GREEN LIGHT FOR AFRICA	EE LIGHTING	25 OCT 2011	STANDARD BANK	19,900	STANDARD BANK (UK)

KENYA'S CURRENT CDM PIPELINE OF SINGLE CDM PROJECTS MAKES UP 11.6% OF THE TOTAL AFRICAN PIPELINE AND IS THE BIGGEST ON THE CONTINENT AFTER SOUTH AFRICA. THE CDM PoA PIPELINE IS SIMILAR, WITH SOUTH AFRICA LEADING WITH 20 PROJECTS AND KENYA IN SECOND PLACE WITH SIX.

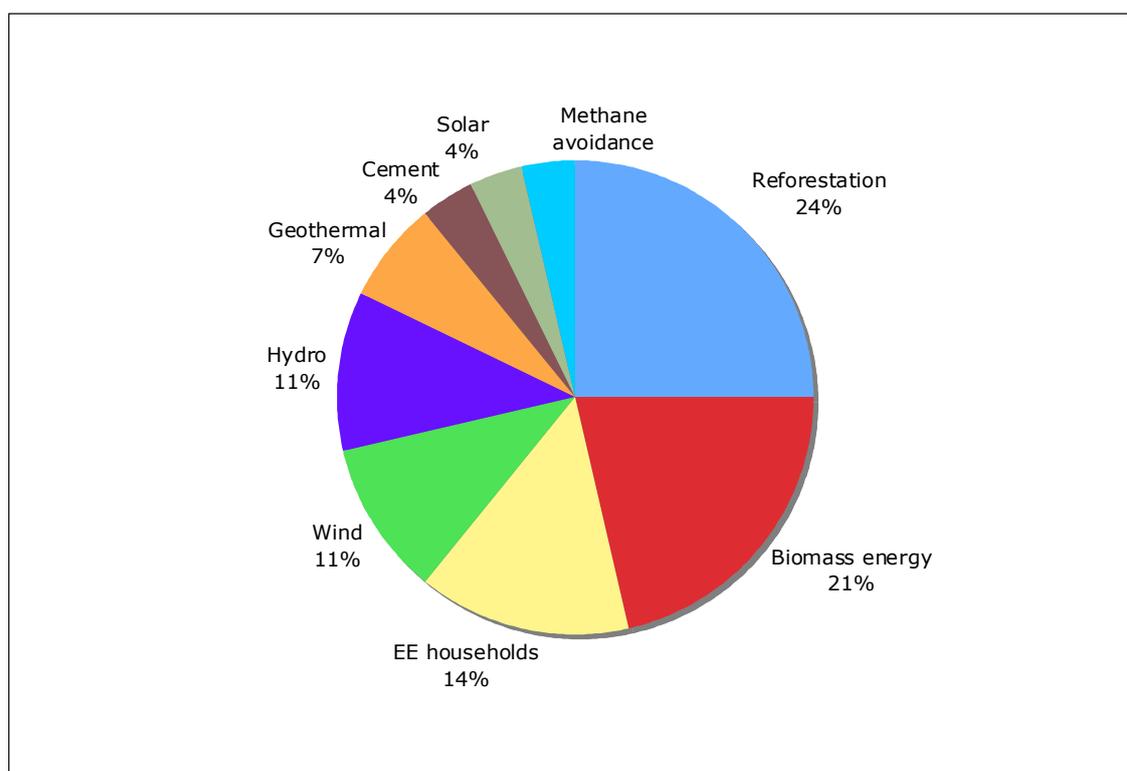
TABLE 3: AFRICAN CDM PROJECT PIPELINE (PoAs AND COUNTRIES WITH LESS THAN 4 PROJECTS NOT SHOWN)

COUNTRY	REGISTERED	AT VALIDATION	TOTAL
SOUTH AFRICA	20	31	51
KENYA	5	17	22
EGYPT	10	7	17
MOROCCO	6	11	17
UGANDA	5	9	14
NIGERIA	5	8	13

TANZANIA	1	6	7
TUNISIA	2	3	5
SENEGAL	1	4	5
DR CONGO	2	2	4
MADAGASCAR	1	3	4
GHANA	0	4	4
RWANDA	3	1	4
CAMEROON	2	2	4

A BROAD RANGE OF SECTORS ARE COVERED BY CDM PROJECTS AND PoAs IN KENYA. IN TERMS OF RENEWABLE ENERGY, TECHNOLOGIES INCLUDE WIND, LARGE AND SMALL HYDRO, GEOTHERMAL, BIOMASS (FUEL SWITCH AND COGENERATION) AND SOLAR LED LIGHTING. HOUSEHOLD LEVEL ENERGY EFFICIENCY AND RENEWABLE ENERGY PROJECTS (COOKSTOVES, LIGHTING AND BIOGAS) ARE NEXT IN IMPORTANCE. ONE SITE IN PARTICULAR (ABERDARES NATIONAL PARK) HAS A NUMBER OF SMALL-SCALE CDM REFORESTATION ACTIVITIES, ALTHOUGH FOREST AND AGRICULTURE-RELATED MITIGATION IS MORE COVERED BY THE VOLUNTARY CARBON MARKETS IN KENYA. ONE CEMENT CLINKER REPLACEMENT PROJECT ROUNDS OUT THE CDM PIPELINE IN KENYA. SECTORS THAT ARE ABSENT INCLUDE THOSE INVOLVING INDUSTRIAL GASES, MINING, TRANSPORT AND MUNICIPAL WASTE MANAGEMENT, THE FORMER TWO DUE TO THE LACK OF SUCH ACTIVITIES IN KENYA AND THE LATTER PERHAPS BECAUSE THEY TRADITIONALLY FALL UNDER THE PUBLIC SECTOR AND HAVE MORE COMPLEX INSTITUTIONAL REQUIREMENTS.

FIGURE 2: DISTRIBUTION OF CDM PROJECT AND PROGRAMME PIPELINE IN KENYA BY TYPE



THE REGIONAL BREAKDOWN OF CDM PROJECTS AND CDM PROGRAMMATIC ACTIVITIES (CPAs) UNDER A PoA IN KENYA IS PROVIDED BELOW, AND IS SOMEWHAT REPRESENTATIVE OF WHERE RENEWABLE ENERGY RESOURCES (FOR POWER PLANTS) AND HIGHER POPULATION DENSITIES (FOR HOUSEHOLD EFFICIENCY PROJECTS) ARE FOUND. THERE IS A NOTABLE ABSENCE OF PROJECTS IN COAST PROVINCE, WHICH DOES HAVE GOOD CDM POTENTIAL IN AREAS SUCH AS FUEL SWITCH IN INDUSTRY, WASTE HEAT RECOVERY, RENEWABLE ENERGY, CEMENT, BIOMASS COGENERATION AND HOUSEHOLD ENERGY EFFICIENCY. COAST PROVINCE DOES, HOWEVER, HAVE A NUMBER OF VOLUNTARY MARKET CARBON PROJECTS AND IS EXPECTED TO ENTER THE CDM PIPELINE SOON AS DEVELOPERS MOVE TO BEAT THE 2012 "DEADLINE" FOR CDM REGISTRATION.

NAME OF PROVINCE

NUMBER OF PROJECTS OR PROGRAMMES IN CDM PIPELINE

CENTRAL	10
COAST	0
EASTERN	6
NAIROBI	0
NORTH EASTERN	0
NYANZA	1
RIFT VALLEY	3
WESTERN	4
MORE THAN ONE PROVINCE	4

OF THE FOUR REGISTERED CDM PROJECTS IN KENYA THAT INVOLVE SUBSTANTIAL INVESTMENT, THREE ARE ALREADY COMMISSIONED AND OPERATIONAL. THE INVESTMENT COSTS OF THESE AS PER THE CDM PROJECT DOCUMENTATION ARE AS FOLLOWS:

- » \$20 MILLION – 35 MW BAGASSE BASED COGENERATION PROJECT AT MUMIAS
- » \$76.3 MILLION – 48 MW OLGARIA III PHASE II GEOTHERMAL EXPANSION PROJECT
- » \$90.2 MILLION – 35 MW OLGARIA II GEOTHERMAL EXPANSION PROJECT

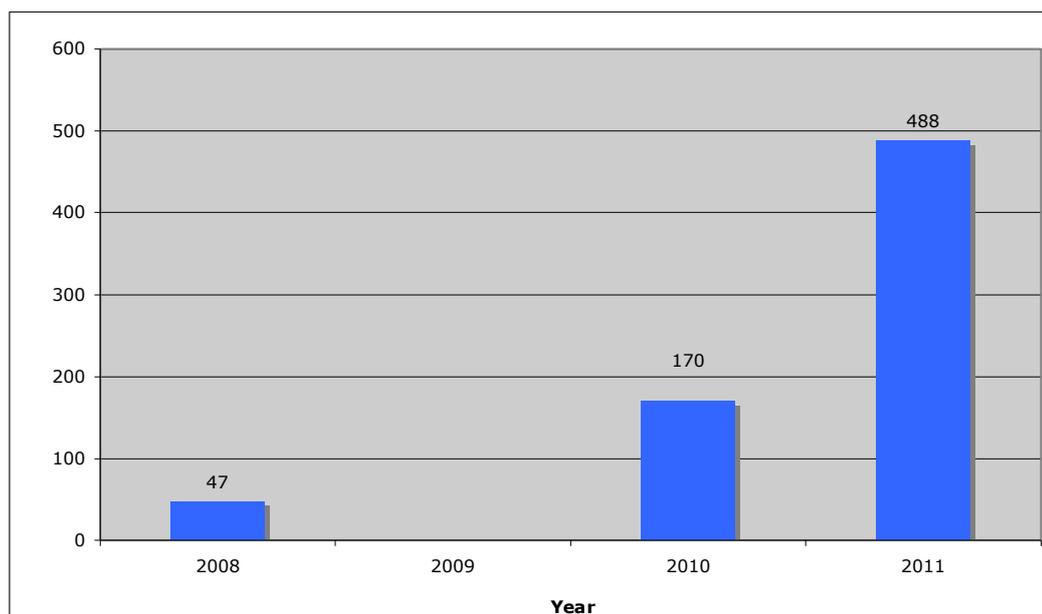
AS SUCH, TO DATE MORE THAN \$185 MILLION OF INVESTMENT IN RENEWABLE ENERGY IN KENYA HAS BEEN FACILITATED IN PART BY THE CDM. LOOKING FORWARD, IF ALL OTHER PROJECTS IN THE KENYAN CDM PIPELINE ARE SUCCESSFULLY REGISTERED BY 2012 AND IMPLEMENTED, THIS WOULD LEAD TO ADDITIONAL INVESTMENT OF AT LEAST – SINCE NOT ALL INFORMATION IS AVAILABLE FOR ALL PROJECTS – \$887 MILLION BY 2013. AS THE CDM PIPELINE IS EXPECTED TO INCREASE BY 35 OR MORE FROM THE CURRENT LEVEL TO BEAT THE 2012 REGISTRATION DEADLINE, IT IS POSSIBLE THAT TOTAL PROJECT FINANCING UNDER THE CDM IN KENYA COULD REACH \$1.5 BILLION BY 2020. HOWEVER, PROJECT DEVELOPERS WILL HAVE TO WORK DILIGENTLY AND THE KENYAN DNA MAY NEED TO FAST-TRACK ITS APPROVAL PROCEDURES IN ORDER TO ACHIEVE THIS POTENTIAL.

IN TERMS OF TOTAL REVENUE FROM THE COMMERCIALIZATION OF CERs IN KENYA, IF WE ASSUME A VERY CONSERVATIVE PRICE OF 5.00 PER CER, FOR PROJECTS ALREADY REGISTERED BY THE CDM ALONE AGGREGATE ANNUAL INCOME WILL BE MORE THAN 6 MILLION AND WILL EXCEED 52 MILLION IN TOTAL BY 2020.

IF CDM PROJECTS AND PROGRAMMES OF ACTIVITIES WITH FIRST CPAs UNDER VALIDATION OR REQUESTING REGISTRATION ARE INCLUDED, TOTAL EMISSION REDUCTIONS BY 2020 IN KENYA WILL REACH 18 MILLION tCO₂e AND GENERATE MORE THAN EUR 90 MILLION IN REVENUE.

THE ABOVE FIGURES DO NOT CONSIDER CARBON CREDIT REVENUE FROM VOLUNTARY MARKET PROJECTS, SO WITH THE CONSERVATIVE PRICE IT IS REASONABLE TO ASSUME MORE THAN EUR 100 MILLION IN CARBON CREDIT INCOME TO PROJECTS IN KENYA BY 2020.

FIGURE 3: INVESTMENT IN UNDERLYING PROJECTS IN THE CDM PIPELINE IN KENYA ACCORDING TO PROJECT DESIGN DOCUMENT DATA AND TIMELINES



4.2. VOLUNTARY MARKET PROJECTS

THE TWO VOLUNTARY MARKET STANDARDS MOST WIDELY APPLIED IN DEVELOPING COUNTRIES AROUND THE WORLD ARE ALSO PREFERRED BY PROJECT DEVELOPERS IN HENYA, NAMELY THE GOLD STANDARD (GS) AND THE VERIFIED CARBON STANDARD (VCS). THE CLIMATE, COMMUNITY AND BIODIVERSITY ALLIANCE (CCBA) STANDARDS ARE ALSO OFTEN ADDED TO VCS FORESTRY PROJECTS TO PROVIDE THIRD-PARTY CERTIFICATION OF THE SOCIAL AND BIODIVERSITY BENEFITS.

A SMALL NUMBER OF CDM PROJECTS IN HENYA ARE PURSUING PARALLEL REGISTRATION UNDER VOLUNTARY MARKET STANDARDS TO ACHIEVE PRICE PREMIUMS, SUCH AS THE LAKE TURKANA 310 MW WIND POWER PROJECT (GOLD STANDARD), THE NAIROBI RIVER BASIN BIOGAS PROJECT (GOLD STANDARD) AND THE ABERDARES SMALL-SCALE REFORESTATION INITIATIVES (CCBA). THESE PROJECTS ARE, HOWEVER, THE EXCEPTION, ESPECIALLY AS THE ADDITIONAL VALUE OF CDM PLUS VOLUNTARY STANDARD REGISTRATION IS NOT WHAT IT USED TO BE (ALTHOUGH RECENTLY THE AVERAGE GOLD STANDARD CARBON PRICE EXCEEDED THAT OF SECONDARY MARKET CDM CERTIFICATES). INSTEAD, PROJECT DEVELOPERS IN HENYA WHO USE VOLUNTARY MARKET STANDARDS DO SO FOR OTHER REASONS:

- » NO APPLICABLE CDM METHODOLOGY EXISTS
- » PROJECT IS NOT LIKELY TO ACHIEVE CDM REGISTRATION (E.G. 2012 DEADLINE ISSUE)
- » LOWER CARBON PROJECT DEVELOPMENT COSTS
- » PROJECT IS TOO SMALL TO MAKE THE CDM WORTHWHILE
- » DEVELOPER HAS ALREADY TARGETED A VOLUNTARY MARKET BUYER OR EXPECTS A PRICE PREMIUM
- » PRE-REGISTRATION VERs RESULTING FROM START OF PROJECT IMPLEMENTATION EARLIER THAN CDM REGISTRATION

AS AN EXAMPLE OF THE VOLUNTARY MARKET POTENTIAL, THERE ARE CURRENTLY 14 GOLD STANDARD VERIFIED EMISSION REDUCTION (VER) PROJECTS IN THE PIPELINE, OF WHICH SIX ARE REGISTERED.

TABLE 4: REGISTERED GOLD STANDARD PROJECTS IN HENYA

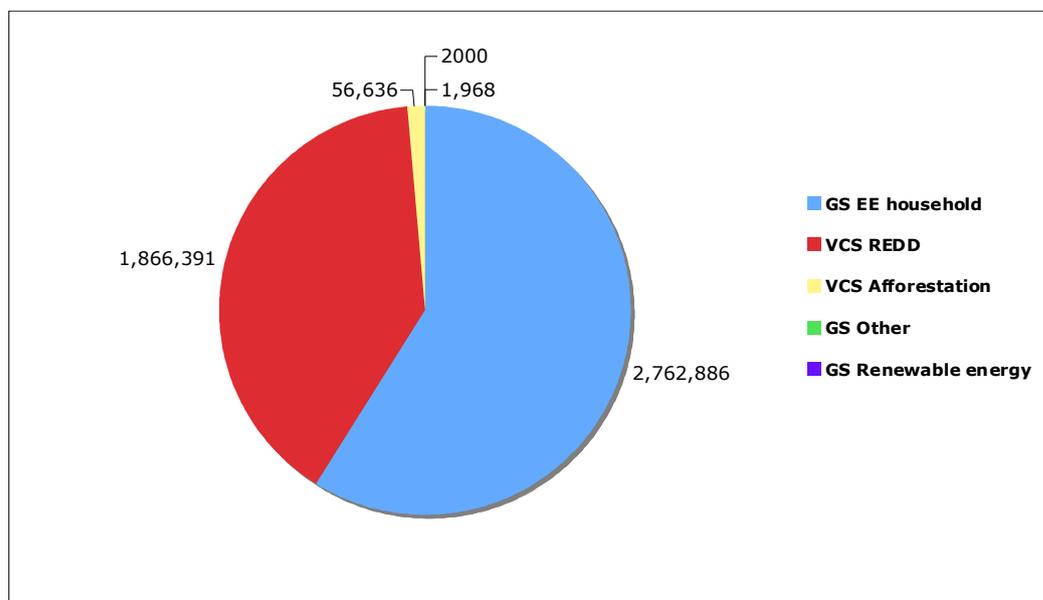
GOLD STANDARD ID	NAME	TYPE	REGISTRATION DATE	PROVINCE	ANNUAL EMISSION REDUCTIONS (TCO ₂ E)	CARBON DEVELOPER
462	GACHIKI COMMUNITY SMALL HYDRO, KENYA	MINI HYDRO	25 OCT 2010	CENTRAL	1,968	JP MORGAN
824	SHIMBA HILLS IMPROVED COOKSTOVES	EENERGY EFFICIENCY (EE) HOUSEHOLD	24 JAN 2011	COAST	41,944	CO2BALANCE

825	LIHONI IMPROVED COOKSTOVES	EE HOUSEHOLD	24 JAN 2011	COAST	4,924	CO2BALANCE
827	SHIMONI IMPROVED COOKSTOVES	EE HOUSEHOLD	24 JAN 2011	COAST	4,922	CO2BALANCE
843	KISUMU IMPROVED COOKSTOVES	EE HOUSEHOLD	24 JAN 2011	NYANZA	30,149	CO2BALANCE
886	SUSTAINABLE DEPLOYMENT OF THE LIFE STRAW FAMILY IN RURAL KENYA	EE HOUSEHOLD	4 FEB 2011	WESTERN	2,073,328	VESTERGAARD FRANSEN

EVEN THOUGH EMISSION REDUCTION OR SEQUESTRATION PROJECTS APPLYING VOLUNTARY MARKET CARBON STANDARDS ARE SOMETIMES SEEN AS BEING OF SECONDARY IMPORTANCE TO THE CDM, THEY ARE PIONEERING CARBON TRANSACTIONS IN SECTORS OF RELEVANCE TO KENYA, SUCH AS AVOIDED DEFORESTATION, AND ON A CASE-BY-CASE BASIS ARE DELIVERING REAL EMISSION REDUCTIONS AND ATTRACTING CARBON FINANCE TO KENYA. A GOOD EXAMPLE OF THE CARBON POTENTIAL IS THE PRIVATELY-DEVELOPED RUKINGA REDD+ PHASE I PROJECT NEAR TSAVO IN KENYA THAT IS JOINTLY VCS AND CCBA-CERTIFIED, HAS ANNUAL EMISSION REDUCTIONS OF APPROXIMATELY 250,000 tCO₂e AND IS THE FIRST PROJECT IN THE WORLD TO HAVE ISSUED VCS VERIFIED CARBON UNIT (VCU) CERTIFICATES. BOTH NEDBANK AND BNP PARIBAS HAVE SIGNED CARBON OFFTAKE AGREEMENTS WITH THE PROJECT.

AS THE CHART BELOW SHOWS, THE VOLUNTARY CARBON MARKET IS PLAYING A PARTICULARLY IMPORTANT ROLE IN THE DOMESTIC ENERGY EFFICIENCY (E.G. COOKSTOVES AND WATER FILTERS) AND FORESTRY SECTORS IN KENYA, WHICH ARE SOMETIMES RELATED AS THEY REDUCE THE UNSUSTAINABLE CONSUMPTION OF NON-RENEWABLE BIOMASS.

FIGURE 4: PROJECTED ANNUAL AVERAGE EMISSION REDUCTIONS (IN tCO₂e) FROM VOLUNTARY PROJECT PIPELINE IN KENYA BY TYPE AND STANDARD



IN ADDITION TO THE ABOVE, THERE ARE PILOT ACTIVITIES IN KENYA TO PREPARE AGRICULTURAL AND SOIL CARBON PROJECTS. THE FIRST IS CALLED THE KENYA AGRICULTURAL CARBON PROJECT THAT IS BEING IMPLEMENTED BY A SWEDISH NGO, VI AGROFORESTRY, WITH SUPPORT FROM THE WORLD BANK AND PARTICIPATION IN CARBON CREDIT OFF-TAKE FROM THE WORLD BANK'S BIO-CARBON FUND. THE SECOND IS BEING LED BY THE WORLD AGROFORESTRY CENTRE (ICRAF) IN DRYLAND AREAS OF KENYA.

WHILE THE VOLUNTARY MARKET FOCUS TO DATE IS ON THE GENERATION OF CARBON CREDITS FOR BUYERS OUTSIDE OF KENYA, RECENTLY A NUMBER OF KENYAN COMPANIES HAVE ALSO BEGUN MEASURING THEIR CARBON FOOTPRINT AND OFFSETTING VIA CDM AND VOLUNTARY MARKET PROJECTS. FOR EXAMPLE, KENYA AIRWAYS IN MID-2011 LAUNCHED A CARBON OFFSET PROGRAM FOR ITS PASSENGERS IN COOPERATION WITH THE INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA) AND IS PLANNING TO OFFSET INITIALLY VIA PRE-CDM VOLUNTARY EMISSION REDUCTIONS (VERs) FROM GEOTHERMAL PROJECTS IN KENYA.

4.3. CARBON DEVELOPERS AND BUYERS

THERE ARE A GOOD AND INCREASING NUMBER OF CARBON CREDIT DEVELOPERS AND CARBON BUYERS ACTIVE IN KENYA, BOTH IN THE CDM AND VOLUNTARY MARKETS. MOST OF THESE HAVE ENTERED THE MARKET IN THE LAST THREE YEARS, ALTHOUGH CLIMATECARE, CAMCO, ECM CENTRE AND THE WORLD BANK IN PARTICULAR ARE NOTABLE FOR THEIR LONGER PRESENCE AS CARBON ACTORS IN KENYA. PRIVATE ENTITIES MAKE UP THE MAJORITY OF BOTH DEVELOPERS AND BUYERS, ALTHOUGH A SMALL NUMBER OF DONOR, NGO AND SOVEREIGN DEVELOPER AND BUYER INSTITUTIONS ARE INVOLVED. A NUMBER OF CARBON DEVELOPERS HAVE THEIR HEADQUARTERS IN NAIROBI AND CAN BE CONSIDERED TO BE LOCALLY BASED. FOUR OR FIVE OF THESE ARE KENYAN-OWNED AND OPERATED.

TABLE 5: SELECT LIST OF CARBON DEVELOPERS AND BUYERS ACTIVE IN KENYA

NAME	TYPE	RELEVANT OFFICE(S)	1 ST YEAR OF CARBON INTEREST OR PRESENCE IN KENYA	CARBON STANDARDS
CLIMATECARE	DEVELOPER, BUYER	NAIROBI, LONDON	2007	CDM, GS
CAMCO HENYA	DEVELOPER, BUYER	NAIROBI, LONDON	2002	CDM
VIABILITY AFRICA	DEVELOPER	NAIROBI	2010	CDM, GS
CARBON AFRICA	DEVELOPER	NAIROBI	2009	CDM, GS
ECM CENTRE	DEVELOPER	NAIROBI	2005	CDM
CO2BALANCE	DEVELOPER	NAIROBI, MOMBASA, LONDON	2008	GS
CLIMATE PAL / CARBON MANNA	DEVELOPER	NAIROBI	2009	CDM
COOL NRG	DEVELOPER	NAIROBI	2011	CDM
LOW CARBON DEVELOPMENT	DEVELOPER	NAIROBI	2010	CDM
ATMOSFAIR	DEVELOPER	GERMANY	2005	GS
MYCLIMATE	DEVELOPER	SWITZERLAND	2002	GS
HIVOS/SNV	DEVELOPER	NETHERLANDS	2010	CDM, GS
UGANDA CARBON BUREAU	DEVELOPER	KAMPALA	2009	CDM, GS, PLAN Vivo
AFRICAN DEVELOPMENT BANK (AFDB)	DEVELOPER, BUYER	TUNIS	N/A	CDM
HfW	BUYER	NAIROBI	N/A	CDM
THE PARADIGM PROJECT	DEVELOPER	NAIROBI	2010	GS
JP MORGAN	BUYER	NAIROBI, LONDON	2009	CDM, GS
ENBW	PROJECT OWNER, DEVELOPER, BUYER	GERMANY	2009	CDM
STANDARD BANK	DEVELOPER, BUYER	LONDON	2009	CDM
WORLD BANK	DEVELOPER, BUYER	WASHINGTON	2005	CDM
JAPAN CARBON FINANCE	BUYER	JAPAN	2007	CDM
WILDLIFE WORKS	DEVELOPER	NAIROBI	N/A	VCS, CCBA
CLEAN AIR ACTION CORPORATION	DEVELOPER	USA	2007	VCS, CCBA
BEA INTERNATIONAL	DEVELOPER	NAIROBI	2005	CDM

PROMETHIUM CARBON	DEVELOPER	JOHANNESBURG	2008	CDM
KENGEN	PROJECT OWNER, DEVELOPER	NAIROBI	2002	CDM

5. BARRIERS TO CDM PROJECT DEVELOPMENT

SINCE 2008, KENYA HAS WITNESSED UPWARD MOMENTUM IN THE DEVELOPMENT OF CARBON PROJECTS AND PROGRAMMES, BOTH UNDER THE CDM AND VOLUNTARY MARKET STANDARDS. HOWEVER, THERE ARE ALSO A SIGNIFICANT NUMBER OF POTENTIAL CDM PROJECTS THAT HAVE EITHER NOT COMMENCED AS EXPECTED OR WERE STALLED OR ABANDONED PRIOR TO SUCCESSFUL REGISTRATION.

FOR EXAMPLE, IN 2007, BEFORE KENYA HAD ITS FIRST REGISTERED CDM PROJECT, A GTZ REGIONAL REPORT AND THE CDM PIPELINE DATABASE IDENTIFIED AT LEAST 16 PROJECTS SEEKING CDM REGISTRATION. OF THESE, AS OF 1ST NOVEMBER 2011, THREE (ALL BACKED BY THE WORLD BANK) HAD ACHIEVED CDM REGISTRATION, TWO ARE STILL UNDER VALIDATION, EIGHT HAD FAILED TO PROCEED, TWO WERE REJECTED/TERMINATED DURING CDM VALIDATION AND ONE OPTED FOR VOLUNTARY MARKET CERTIFICATION. IN 2011, A REFORESTATION PROJECT BECAME KENYA'S THIRD PROJECT TO FAIL DURING THE CDM VALIDATION PHASE.

TABLE 6: CURRENT STATUS OF PROJECTS IN KENYA THAT WERE CONSIDERING THE CDM AS OF 2007

	Project name or description	Location	Annual CERs	Project proponent	Status as of November 2011
1	30 MW wind farm	Kinangop	n/a	Ecogen Windfarm Ltd	Project sold to new owners, under validation
2	Charcoal from sugar cane bagasse	n/a	n/a	Cheng Yong Company Ltd	Project failed
3	Replacement of fuel oil with renewable biomass	Meru	100,000	Michimukuru & Kiegyo tea factories	Project failed, now considering a wind farm
4	Small-scale reforestation	Country wide	n/a	TIST	Registered under voluntary market standards
5	Oil to biomass fuel switch in factories	n/a	n/a	n/a	Unknown
6	Jatropha biofuel	Migori and Malindi	n/a	n/a	Project under development but in Malindi not as a carbon project
7	50 MW wind farm	Ngong Hills	n/a	n/a	Project still under development
8	Jatropha biofuel	Msambweni	n/a	n/a	Project failed
9	Replacement of motorized water pumps with treadle pumps	n/a	n/a	Kick Start?	CDM development stopped
10	7.5 MW sugar cane bagasse co-generation	Nyando	n/a	Chemilil Sugar Company	Project still under development, will likely not meet 2012 CDM deadline
11	Solar PV project	n/a	n/a	n/a	Project implemented but not as a carbon project. It is possible that the credits were bought by John Deer
12	Aberdares reforestation projects 1-7	Aberdares	Various	Greenbelt Movement	One of 7 sub-projects has been CDM registered
13	Olkaria III Geothermal	Hell's Gate	n/a	Kengen	CDM registered
14	Olkaria II Geothermal	Hell's Gate	n/a	Kengen	CDM registered
15	60 MW Sondu Miriu Hydro Power Project	Nyanza	211,000	Kengen	CDM validation negative
16	Conversion of Kipevu Open	Coast	45,000	PDD consultant	CDM validation terminated

THE ABOVE REVEALS A HISTORIC NO-START OR FAILURE RATE OF MORE THAN 50 , WHICH INDICATES THAT BARRIERS DO STILL REMAIN TO SUCCESSFUL CDM REGISTRATION AND/OR PROJECT DEVELOPMENT AND IMPLEMENTATION. AN OVERVIEW OF THE BARRIERS IS PROVIDED, ALTHOUGH IT SHOULD BE NOTED THAT SOME ARE UNIVERSAL TO THE CDM IRRESPECTIVE OF THE HOST COUNTRY AND ARE NOT SPECIFIC TO KENYA PER SE.

5.1. BARRIERS TO SUCCESSFUL CDM PARTICIPATION

LACK OF AWARENESS OF THE CDM REQUIREMENTS

WHILE AWARENESS RAISING ACTIVITIES AND TRAININGS WITH REGARDS TO THE CDM HAVE BEEN A REGULAR FEATURE IN KENYA FOR SOME YEARS AND THERE IS GENERAL AWARENESS OF CARBON CREDITS, THERE A LACK OF UNDERSTANDING OF THE CDM PROCESS AND ITS REQUIREMENTS. THIS LEADS CERTAIN PROJECT PROPONENTS TO NEGLECT THE CDM POTENTIAL OR NOT CONSIDER CARBON CREDITS UNTIL IT IS TOO LATE AND ON THE OTHER HAND LEADS TO RAISED OR UNREALISTIC EXPECTATIONS OF CARBON INCOME ON THE PART OF SOME DEVELOPERS.

HIGH CDM COSTS AND LACK OF FUNDS/APPETITE TO PAY FOR SUCH AND TAKE ON CDM RISKS

CDM INVESTMENT COSTS AND IN SOME CASES RISKS ARE RELATIVELY HIGH AND THIS IS AN EVIDENT BARRIER IN KENYA. ON THE ONE HAND, THERE ARE THOSE PROJECT DEVELOPERS WHO WISH TO APPLY FOR CDM REGISTRATION BUT LACK THE RESOURCES TO PAY FOR THE CDM CYCLE COSTS. EVEN WELL-ESTABLISHED INSTITUTIONS SOMETIMES DO NOT HAVE THE FUNDS TO UNDERTAKE CDM DEVELOPMENT. FOR EXAMPLE, THE KENYA ELECTRICITY GENERATING COMPANY (KENGEN) AS EARLY AS THE YEAR 2000 SUBMITTED CDM PROPOSALS TO BOTH THE JAPAN CARBON FUND AND THE GOVERNMENT OF BELGIUM, BUT WERE TOLD TO COVER THE CDM DOCUMENTATION COSTS FIRST. THIS WAS NOT AN OPTION FOR KENGEN AND HENCE THE PROJECTS DID NOT PURSUE CDM REGISTRATION. ON THE OTHER HAND, THERE ARE THOSE WHO HAVE THE NECESSARY CAPITAL BUT CHOOSE FOR ONE REASON OR ANOTHER (E.G. NO RISK APPETITE, OTHER INVESTMENT PRIORITIES) NOT TO UNDERTAKE CDM DEVELOPMENT.

ABSENCE OF APPROPRIATE METHODOLOGIES AND/OR BASELINE DATA

IN SOME SECTORS WITH GOOD POTENTIAL FOR EMISSION REDUCTIONS IN KENYA (SUCH AS TRANSPORT), THERE ARE NO APPROPRIATE APPROVED METHODOLOGIES THAT A PROJECT CAN APPLY TO GENERATE AND MONITOR CERs AND THE PROCESS OF DEVELOPING A NEW METHODOLOGY IS LONG, EXPENSIVE AND RISKY. SIMILARLY, FOR CERTAIN METHODOLOGIES AND PROJECT DEVELOPERS, UP-TO-DATE, OBJECTIVE AND TRANSPARENT DATA AND INFORMATION FROM RELIABLE SOURCES ON BASELINE EMISSIONS (E.G. ON TRADITIONAL BIOMASS USE) IS NOT READILY AVAILABLE AND THIS INTRODUCES BOTH COSTS OF OBTAINING SUCH DATA AND RISKS THAT THE PROJECT WILL BE REJECTED OR CARBON CREDIT VOLUMES WILL BE REDUCED DURING VALIDATION OR MONITORING AND VERIFICATION DUE TO A LACK OF SUPPORTING EVIDENCE.

MISTAKES IN CARBON DEVELOPMENT

THREE POTENTIAL CDM PROJECTS IN KENYA ENTERED THE VALIDATION STAGE (E.G. CONTRACTED AND PAID FOR AN EXTERNAL AUDITOR – WHICH IS EVIDENCE OF THEIR COMMITMENT TO REACH CDM REGISTRATION) AND FAILED BEFORE ACHIEVING REGISTRATION. TWO OF THESE WERE TERMINATED DURING VALIDATION LIKELY DUE TO THE REALIZATION THAT THEY WERE NOT ADEQUATELY ABLE TO REPLY TO THE AUDITOR'S QUESTIONS OR THAT THERE WERE FAULTS IN PROJECT DESIGN THAT COULD NOT BE RECTIFIED. THE THIRD RECEIVED A NEGATIVE VALIDATION OPINION.

IN ADDITION TO THE ABOVE PROJECTS THAT DID NOT PASS THE VALIDATION PHASE, A NUMBER OF CDM AND VOLUNTARY MARKET PROJECTS AND PROGRAMMES THAT ARE BEING PREPARED OR HAVE ENTERED VALIDATION HAVE WEAKNESSES WITH REGARDS TO ADDITIONALITY, CONSERVATIVENESS AND EMISSION REDUCTION CALCULATIONS. THIS IS OFTEN DUE TO PROJECT DEVELOPERS UNDERESTIMATING THE AUDITING REQUIREMENTS FOR CDM PROJECTS. WHILE VALIDATORS AND THE CDM EXECUTIVE BOARD MAY HAVE BEEN MORE LENIENT IN THE PAST IN AN EFFORT TO HELP FACILITATE MORE CDM DEVELOPMENT IN KENYA, IT CAN BE EXPECTED THAT QUALITY CONTROL WILL BECOME MORE STRINGENT AND THOSE PROJECTS WITH POORLY PREPARED CDM DOCUMENTATION WILL FACE MORE RISKS OF DELAYS OR REJECTION.

UNDERLYING PROJECT IS ABANDONED

IN A NUMBER OF CASES (SEE FOR EXAMPLE TABLE 6), THE CDM APPLICATION PROCESS DID NOT COMMENCE OR WAS HALTED BECAUSE THE UNDERLYING PROJECT THAT WOULD GENERATE THE CERs DID NOT MAKE IT PAST THE CONCEPTION, FEASIBILITY OR DEVELOPMENT PHASE.

5.2. BARRIERS TO UNDERLYING PROJECT DEVELOPMENT

WHILE THIS SHORT ANALYSIS IS NOT ABLE TO DESCRIBE IN DETAIL THE BARRIERS TO THE REALIZATION OF THE PROJECTS THAT COULD GENERATE CARBON CREDITS THEMSELVES, A SUMMARY OF THE MAIN ISSUES IS PROVIDED.

ACCESS TO FINANCE

WHILE ACCESS TO FINANCE IS IMPROVING AS MORE AND MORE INVESTORS (BOTH INDIGENOUS AND FOREIGN) LOOK TO AFRICA AS AN INVESTMENT DESTINATION, IT STILL REMAINS ONE OF THE MAIN BARRIERS. EARLY RISK STAGE CAPITAL FOR PROJECT DEVELOPMENT IS HARD TO COME BY, AS MANY

LOCAL ENTREPRENEURS LACK SUFFICIENT RESOURCES AND FOREIGN EARLY STAGE INVESTORS MAY HAVE UNREALISTIC EXPECTATIONS OF WHAT CAN BE ACCOMPLISHED WITHIN A CERTAIN TIMEFRAME. IN ADDITION, EARLY INVESTMENT IN OTHER VENTURES IN KENYA (SUCH AS REAL ESTATE) CAN PROVIDE HIGHER AND QUICKER RETURNS WITH LESS RISK THAN AN INVESTMENT IN A WIND FARM, A SOLAR LED LIGHT DISTRIBUTION PROJECT OR A REDD INITIATIVE. THE POTENTIAL AND RISKS OF SMALL SCALE OR DISTRIBUTED PROJECTS IS ALSO NOT WELL UNDERSTOOD BY MANY INVESTORS OR BANKS, AND THERE IS NOT MUCH LOCAL EXPERTISE TO ASSESS PROJECTS DEVELOPED ON A NON-RECOURSE BASIS. LASTLY, MANY PROJECTS REQUIRE AMOUNTS OF CAPITAL THAT ARE TOO SMALL TO ATTRACT LARGER INVESTORS BUT TOO BIG TO BE ELIGIBLE FOR MICROFINANCE OR DONOR SUPPORT.

LACK OF PROJECT DEVELOPER EXPERIENCE

PROJECT DEVELOPERS THEMSELVES ARE ALSO PARTIALLY TO BLAME FOR BEING UNABLE TO OVERCOME BARRIERS TO PROJECT DEVELOPMENT DUE TO A LACK OF EXPERIENCE. THIS IS AGAIN EVIDENT IN THE NUMBER OF PROJECTS THAT COULD SEE CDM REGISTRATION THAT HAVE DELAYED OR FAILED ALONG THE WAY. AS A FURTHER EXAMPLE IN THE RENEWABLE ENERGY SECTOR IN KENYA, MORE THAN 50 PROJECTS HAVE BEEN GRANTED A DEVELOPMENT LICENSE BY THE MINISTRY OF ENERGY FOR A SITE UNDER THE FEED-IN TARIFF POLICY, BUT NOT A SINGLE ONE OF THESE REACHED FINANCIAL CLOSURE.

POLITICAL AND INSTITUTIONAL BARRIERS

POLITICAL AND INSTITUTIONAL RISKS IN KENYA NEGATIVELY IMPACT ON THE ENABLING ENVIRONMENT AND ON THE DEVELOPMENT AND IMPLEMENTATION OF POTENTIAL CDM PROJECTS. THE KEY CONCERN RELATES TO THE UNCERTAINTY OF THE REGULATORY PROCESS IN SOME SECTORS AND THE LIKELIHOOD THAT IT CAN BE AFFECTED BY POLITICAL REGIME CHANGES. OTHER CONCERNS INCLUDE FAVORITISM, CRONYISM, CORRUPTION, LACK OF TRANSPARENCY IN DECISION MAKING, LACK OF ADHERENCE TO GUIDELINES AND REGULATIONS, AND THE POSSIBILITY OF HAVING PROJECT LICENSES REVOKED. A CASE IN POINT IS THAT IN WHICH A NEW SUGAR MILL HAS BEEN PERMITTED TO START OPERATIONS WITHIN CLOSE PROXIMITY OF AN EXISTING MILL, IN TOTAL DISREGARD OF EXISTING LAWS. THERE ARE ALSO 'INVISIBLE' RISKS SUCH AS THOSE OF POOR GOVERNANCE AND ENTRENCHED INTERESTS, WHICH CAN DELAY THE APPROVAL AND PERMITTING REQUESTS OF PROJECTS AT VARIOUS STAGES. PRIVATE SECTOR AND CIVIL SOCIETY PARTICIPATION IN CDM PROJECTS IN KENYA IS CURRENTLY ENCOURAGED BY THE GOVERNMENT BUT CERTAIN CHANGES UNDER CONSIDERATION IN KENYA (E.G. TAXATION AND REVENUE SHARE ON CER STREAMS) MAY RESULT IN INCREASED ADMINISTRATIVE BURDEN AND COSTS AND LOWER RETURNS FOR CDM DEVELOPERS AND BUYERS.

6. POTENTIAL FOR CARBON MARKET GROWTH

AS DESCRIBED ABOVE, BOTH THE CDM AND VOLUNTARY CARBON MARKETS IN KENYA HAVE SINCE 2008 SHOWN INCREASING ACTIVITY IN TERMS OF CARBON PROJECT DEVELOPMENT, SUCCESSFUL REGISTRATION AND TRANSACTIONS, CARBON CREDIT VOLUMES, CAPITAL INVESTMENT AND DIVERSIFICATION OF SECTORS AND SIZES OF PROJECTS. IN 2011 TO DATE ALREADY 11 NEW CDM PROJECTS AND PROGRAMMES HAVE ENTERED THE PIPELINE AS COMPARED TO ONLY ONE PROJECT IN 2006 AND 2007, AND 15 PROJECTS HAVE SUBMITTED CDM PRIOR CONSIDERATION FORMS IN THE 10 MONTHS FROM THE START OF THE YEAR. PROJECT DEVELOPERS ARE ALSO INCREASINGLY USING THE CDM PROGRAMME OF ACTIVITIES FRAMEWORK AS A PREFERRED APPROACH ESPECIALLY IN THE DISTRIBUTED HOUSEHOLD ENERGY EFFICIENCY AND RENEWABLE ENERGY SECTORS AS EVIDENCED BY THE FIVE PROGRAMMES THAT HAVE STARTED VALIDATION SINCE DECEMBER 2010. IN THE SHORT-TERM, KENYA IS POSITIONED TO BECOME AFRICA'S SECOND LARGEST PARTICIPANT IN THE CDM.

THIS RECENT GROWTH IS SUPPORTED IN PART BY NEW DEVELOPMENTS IN THE ENABLING ENVIRONMENT, SUCH AS THE ADOPTION OF THE KENYAN RENEWABLE ENERGY FEED-IN TARIFF POLICY IN 2008, AND LATER UPDATED IN 2010, WHICH HAS HELPED PROMOTE INVESTMENT IN PROJECTS THAT IN ALMOST ALL CASES MAY ALSO QUALIFY UNDER THE CDM.

TABLE 7 BELOW LISTS THOSE PROJECT TYPES WITH GOOD POTENTIAL FOR EMISSION REDUCTIONS AND CREDIT GENERATION UNDER THE CDM AND VOLUNTARY MARKETS.

TABLE 7: SECTORS WITH CARBON CREDIT POTENTIAL IN KENYA

SECTOR	PROJECT/ACTIVITY
ENERGY SUPPLY AND CONSUMPTION	<ul style="list-style-type: none"> » ENERGY EFFICIENCY (SUPPLY SIDE, DEMAND SIDE-DOMESTIC, INDUSTRIAL AND OUTDOOR) » FUELS SWITCHING » RENEWABLE ENERGY (HYDROPOWER, SOLAR, WIND, BIOMASS, GEOTHERMAL, BIOGAS)
MANUFACTURING	<ul style="list-style-type: none"> » FUELS SWITCHING IN INDUSTRIAL APPLICATIONS » INDUSTRIAL ENERGY EFFICIENCY » STRUCTURAL CHANGE TO LESS ENERGY/EMISSION INTENSIVE INDUSTRIES » CHARCOAL PRODUCTION (METHANE EMISSION REDUCTION, RENEWABLE CHARCOAL) » CEMENT INDUSTRY (WASTE ENERGY RECOVERY, CEMENT BLENDING) » METHANE AVOIDANCE AND RECOVERY IN ORGANIC LIQUID AND SOLID WASTE » RENEWABLE ENERGY FROM INDUSTRIAL WASTE (SAW DUST, COFFEE WASTES) » BIOFUEL PRODUCTION
AGRICULTURE AND FORESTRY	<ul style="list-style-type: none"> » AFFORESTATION AND REFORESTATION » REDD+ » BIOFUEL PRODUCTION » ANIMAL MANURE MANAGEMENT
TRANSPORT	<ul style="list-style-type: none"> » IMPROVED URBAN PLANNING AND TRAFFIC MANAGEMENT » IMPROVED VEHICLE EFFICIENCY » MODAL SHIFT IN TRANSPORT FROM ROAD TO RAIL » MASS RAPID TRANSIT SUCH AS IMPROVED PUBLIC TRANSPORT
RESIDENTIAL, COMMERCIAL AND GOVERNMENT BUILDINGS	<ul style="list-style-type: none"> » RENEWABLE ENERGY (SOLAR, WIND, HYDROPOWER) » FUEL SWITCHING IN HOUSEHOLDS » ENERGY EFFICIENT BUILDING DESIGN » ENERGY EFFICIENCY AND MANAGEMENT (EFFICIENT LIGHTING, BOILER INSULATION) » WASTE MANAGEMENT

APART FROM THE TRANSPORT AND WASTE MANAGEMENT SECTORS, CDM OR VOLUNTARY MARKET PROJECTS AND PROGRAMMES ARE BEING DEVELOPED OR PLANNED IN ALMOST ALL THE AREAS LISTED.

6.1. POST-2012

UNFORTUNATELY, THE RECENT GROWTH WITNESSED IN THE KENYA MARKET AND THE POTENTIAL FOR FURTHER PROJECT-BASED CARBON MARKET DEVELOPED IS SEVERELY THREATENED BY THE EU DIRECTIVE 2009/29/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 23 APRIL 2009, WHICH SUBSTANTIALLY REDUCES THE GLOBAL COMPLIANCE MARKET FOR CERs FROM KENYA. ACCORDING TO THE DIRECTIVE, IF NO BINDING INTERNATIONAL AGREEMENT IS REACHED BY THE END OF 2012, CERs FROM CDM PROJECTS IN NON-LEAST DEVELOPED COUNTRIES (LDCs) THAT ARE

NOT REGISTERED BY 2012 WILL NOT BE ACCEPTED INTO THE EU ETS, BY FAR THE WORLD'S BIGGEST CARBON MARKET. SUCH CERs WILL ONLY BE ACCEPTED IF THERE IS A SEPARATE BILATERAL AGREEMENT BETWEEN THE EU AND THE CDM HOST COUNTRY IN QUESTION.

THE IMPACT OF THIS DIRECTIVE IS ALREADY APPARENT AS THERE IS A RUSH BY PROJECT DEVELOPERS TO ACHIEVE CDM REGISTRATION IN KENYA BEFORE THE END OF 2012 AND CARBON BUYERS ARE LESS AND LESS INCLINED TO GIVE UPFRONT PAYMENTS FOR CERs IN KENYA FROM PROJECTS THAT FACE REGISTRATION RISKS.

NON-LDCs SUCH AS KENYA HOSTING POST-2012 REGISTERED CDM PROJECTS HAVE FOUR OPTIONS TO ENSURE CONTINUED MARKET ACCESS FOR SUCH CERs:

- » *AGREEMENT OF A BILATERAL TREATY WITH THE EU.* AS THE MODALITIES FOR SUCH AS TREATY HAVE NOT BEEN DEFINED, THIS IS NOT LIKELY TO BE A SOLUTION EARLIER THAN 2013/14.
- » *REQUEST FOR EXEMPTION OF AFRICAN NON-LDCs FROM THE DIRECTIVE.* KENYA COULD LOBBY WITH OTHER AFRICAN NON-LDCs FOR AN AMENDED OR EXEMPTION TO THE DIRECTIVE, ALTHOUGH THIS WOULD BE POLITICALLY DIFFICULT AS THE EU MAY NOT BE ABLE TO SUPPORT REGIONAL FAVORITISM.
- » *ENSURE THE REGISTRATION OF PROGRAMME OF ACTIVITIES BEFORE 2012.* IF A BROAD ENOUGH RANGE OF PROGRAMME OF ACTIVITIES COVERING DIFFERENT SECTORS AND METHODOLOGIES ARE REGISTERED BEFORE THE END OF 2012, POST-2012 CDM SUB-PROJECTS COULD IN THEORY BE ADDED TO THE PROGRAMME FOR A PERIOD OF 28 YEARS. THIS HAS BEEN CONFIRMED BY THE EC DG CLIMATE IN A 23 JUNE 2011 LETTER TO THE PROJECT DEVELOPER FORUM AND NUMBER OF CDM DEVELOPERS ARE ALREADY TAKING THIS APPROACH, ALTHOUGH THE EU HAS RESERVED THE RIGHT TO PLACE OTHER ELIGIBILITY RESTRICTIONS ON PROGRAMMES OF ACTIVITIES IN THE FUTURE IF IT THINKS IT IS WARRANTED.
- » *SEEK NON-EU-ETS MARKETS FOR KENYAN CERs.* EUROPEAN AND OTHER SOVEREIGN BUYERS WITH TARGETS UNDER THE KYOTO PROTOCOL, AS WELL AS THE AUSTRALIAN EMISSIONS TRADING SCHEME (TO BE OPERATIONAL FROM 2015) OFFER POSSIBLE ALTERNATIVES, ALBEIT WITH LOWER LEVEL OF DEMAND.
- » *SWITCH TO THE VOLUNTARY CARBON MARKET.* THIS IS A VIABLE OPTION FOR POST-2012 CARBON PROJECTS. HOWEVER, OTHER THAN THOSE PROJECTS THAT DELIVER 'BRANDED' (I.E. WELL-CERTIFIED) VERS, THE PRICE ATTRACTED IS LIKELY TO BE LOW.

ANOTHER FACTOR INFLUENCING THE POOR KENYAN CARBON MARKET OUTLOOK IS THE CURRENT UNCERTAINTY IN CARBON CREDIT VALUE, AS THE ECONOMIC EVENTS IN EUROPE HAVE PUSHED DOWN THE CER PRICE TO ITS LOWEST LEVELS EVER IN Q4 2011. WHILE ACCORDING TO MOST ANALYSTS PRICES ARE EXPECTED TO RISE POST-2012, THE LOW PRICE PROVIDES A NEGATIVE SIGNAL TO MANY POTENTIAL CDM PROJECT OWNERS AND CARBON BUYERS. IT ALSO MAKES FIXED-PRICE EMISSION REDUCTION PURCHASE AGREEMENTS (ERPAs) HARDER TO ACHIEVE, SO THAT CER REVENUE STREAMS CANNOT BE AS EASILY USED AS AN ASSET OR COLLATERAL TO LEVERAGE PROJECT FINANCE.

ALL OF THE ABOVE POINT TO A SIGNIFICANT REDUCTION IN THE POTENTIAL OF THE CDM TO DELIVER CARBON FINANCE AND FACILITATE PROJECT INVESTMENT IN KENYA. NEW MARKET PARTICIPANT ENTRY WILL SIMILARLY BE CURTAILED AND EXISTING CDM PROJECT DEVELOPERS WILL FOCUS ON ENSURING DELIVERING OF EXISTING CDM ASSETS AND DIVERSIFYING INTO NEW AREAS.

6.2. NEW INITIATIVES UNDERWAY OR PROPOSED TO ATTRACT CARBON OR CLIMATE FINANCE

IN CONTRAST TO THE NEGATIVE OUTLOOK FOR THE CDM MARKETS, A NUMBER OF NEW DEVELOPMENTS ARE OCCURRING IN KENYA THAT PROVIDE SOME EXAMPLES OF WHAT THE CLIMATE FINANCE LANDSCAPE MIGHT INCLUDE (APART FROM REGISTERED CDM PROJECTS AND PROGRAMMES) POST-2012.

ESTABLISHMENT OF A CARBON OR CLIMATE EXCHANGE

MARCH 2011 SAW THE ESTABLISHMENT OF THE AFRICA CARBON EXCHANGE (ACX) IN KENYA, THE SECOND ON THE CONTINENT AFTER THE AFRICAN CARBON CREDIT EXCHANGE IN LUSAKA, ZAMBIA. THE ACX, WHICH IS A PRIVATE INITIATIVE WITH CLOSE TIES TO THE GOVERNMENT, HAS REPLACED EARLIER INFORMAL DISCUSSIONS AMONG A RANGE OF STAKEHOLDERS REGARDING A NAIROBI CARBON EXCHANGE. THE EXCHANGE AIMS TO REPLICATE THOSE IN PLACE ELSEWHERE IN THE WORLD AND FACILITATE THE TRANSACTION OF GREENHOUSE GAS ALLOWANCE TRADING WITH PRICE TRANSPARENCY. THE PLAN IS TO HAVE A REGISTRY AND TRADING PLATFORM THAT SEEKS TO MATCH ORDERS FOR BUYING AND SELLING, NOT ONLY FOR PROJECTS IN KENYA BUT FOR ALL AFRICAN COUNTRIES. AT PRESENT THE LEGAL AND TECHNICAL INFRASTRUCTURE OF THE EXCHANGE ARE STILL BEING DEVELOPED AND THERE ARE NO ACTIVE PARTICIPANTS FROM EITHER THE BUY OR THE SELL SIDE.

THE POTENTIAL OF THE IDEA OF A CLIMATE EXCHANGE IN KENYA IS GOOD. HOWEVER, A NUMBER OF CRITICAL QUESTIONS REMAIN, SUCH AS:

- » HOW EXACTLY WILL THE EXCHANGE'S INFRASTRUCTURE WORK – WILL IT BE A REAL EXCHANGE OR MORE OF A CLEARING HOUSE LIKE THE CDM BAZAAR?
- » IS THERE REALLY ENOUGH SUPPLY OF CARBON CREDITS AND LIQUIDITY ON THE MARKET TO WARRANT AN EXCHANGE?
- » WHAT WILL BE THE ROLE OF THE GOVERNMENT IN PARTICIPATING IN OR REGULATING THE EXCHANGE?
- » HOW WILL THE EXCHANGE DEAL WITH SMALLER CARBON CREDIT VOLUMES AND ADDRESS THE TRANSACTION COSTS FOR MARKET PARTICIPANTS?

- » HOW WILL THE EXCHANGE ENSURE QUALITY CONTROL AND TRANSACTION SECURITY?
- » WILL THE EXCHANGE BE EXCLUSIVELY FOCUSED ON CARBON CREDITS (CERs AND VERs) OR WILL IT ALSO AIM TO PLAY A ROLE IN ATTRACTING FUTURE PUBLIC CLIMATE FINANCE?
- » HOW WILL THE EXCHANGE ADDRESS THE ADMINISTRATIVE REQUIREMENTS REGARDING THE OWNERSHIP AND TRANSFER OF CERs UNDER CDM RULES?

A WELL THOUGHT-OUT AND PROPERLY DEVELOPED EXCHANGE COULD HELP TO INCREASE BUYER AWARENESS OF PROJECTS IN KENYA AND LOCAL PROJECT PARTICIPATION IN THE CARBON MARKETS. IT COULD ALSO BE A POTENTIAL CONDUIT FOR FUTURE PUBLIC FINANCE AND POSSIBLY FOR THE MONITORING, REPORTING AND VERIFICATION OF EMISSION REDUCTION ACTIVITIES. HOWEVER, THE ABOVE QUESTIONS REMAIN TO BE ANSWERED AND IT WILL LIKELY BE THREE TO FOUR YEARS BEFORE A REAL EXCHANGE COULD BECOME FUNCTIONAL AND ATTRACTIVE TO PARTICIPANTS.

GOVERNMENT-LED SECTORAL EFFORTS, POLICY PoAs AND NAMAs

THERE ARE A NUMBER OF EFFORTS UNDERWAY TO INCREASE GOVERNMENT INVOLVEMENT IN EMISSION REDUCTION ACTIVITIES IN KENYA. CONCRETE PROGRAMMES INCLUDE FOR EXAMPLE A DRAFT REGULATION THAT WILL REQUIRE ALL NEW BUILDINGS IN KENYA TO INSTALL SOLAR WATER HEATERS AND A BROAD INITIATIVE FROM THE PRIME MINISTER'S OFFICE FOR A HEROSENE-FREE KENYA. THESE AND OTHER ACTIVITIES COULD BE DEVELOPED UNDER A "POLICY" CDM PROGRAMME OF ACTIVITIES AND HENCE APPLY FOR CARBON CREDITS (KEEPING IN MIND THE 2012 REGISTRATION DEADLINE), OR COULD BECOME PART OF FUTURE NATIONALLY APPROPRIATE MITIGATION ACTIONS (NAMAs) THAT THE GOVERNMENT IS PREPARING WITH SUPPORT FROM CONSULTANTS. SECTORAL APPROACHES MAY ALSO FACILITATE THE PARTICIPATION OF CERTAIN EMISSION REDUCTION ACTIVITIES THAT HAVE BEEN ABSENT UNDER THE CDM IN KENYA, SUCH AS IN THE TRANSPORT SECTOR.

FOREST CONSERVATION FUNDS

IN JULY 2010, THE MINISTER OF FINANCE GAZETTED THE WATER TOWERS CONSERVATION FUND, WITH AN INITIAL CAPITALIZATION OF KSH 50 MILLION (- 500,000) AND THE PRIMARY AIM OF ALLOCATING FUNDING TO THE PRESERVATION OF THE MAU FOREST COMPLEX AND OTHER THREATENED PRIMARY FORESTS IN KENYA. WHILE THE INITIAL MONIES FOR THE FUND COME FROM PUBLIC SOURCES (GOVERNMENT AND DONOR), THERE IS SCOPE FOR ANY REVENUES FROM CARBON CREDIT COMMERCIALIZATION FROM AVOIDED DEFORESTATION ACTIVITIES TO BE REINVESTED IN THE FUND. THERE ARE NOW FURTHER ATTEMPTS IN THE EXPLORATORY PHASES TO SET UP LARGER FOREST FUNDS FOR KENYA THAT WILL LIKELY INCLUDE PLANNED CARBON AND CLIMATE FINANCE FROM PRIVATE AND PUBLIC MONIES.

VOLUNTARY MARKET PROJECTS

AS DESCRIBED ABOVE, KENYA HOSTS THE WORLD'S FIRST REGISTERED REDD+ PROJECT THAT HAS BEEN ISSUED VCUs UNDER THE VOLUNTARY CARBON STANDARD. THE COUNTRY ALSO BOASTS THE WORLD'S FIRST AGRICULTURAL SOIL CARBON PROJECT, WHICH HAS INKED AN AGREEMENT WITH THE WORLD BANK'S BIOCARBON FUND. THESE EXAMPLES SHOW THAT EVEN AS THE CDM IS LIKELY TO LOSE ITS IMPORTANCE AS A CARBON FINANCE MECHANISM IN KENYA, THERE MAY BE ALTERNATIVE PROJECT-BASED APPROACHES, ALTHOUGH IN THE SHORT-TERM THESE ARE STILL LIKELY TO BE DEVELOPED ON AN AD HOC BASIS RATHER THAN UNDER A BROADER NATIONAL OR GLOBAL FRAMEWORK THAT WOULD ALLOW FOR MORE CERTAINTY IN ATTRACTING CLIMATE FINANCE AND IN THE MONITORING OF EMISSION REDUCTIONS.

7. RECOMMENDATIONS

IN ORDER TO OVERCOME THE EXISTING BARRIERS TO CDM PROJECT DEVELOPMENT, IMPROVE THE CARBON MARKET OUTLOOK AND ENSURE THAT THE PRIVATE SECTOR HAS CONTINUED INCENTIVE TO PARTICIPATE IN THE EVOLUTION OF GREENHOUSE GAS EMISSION REDUCTION ACTIVITIES IN KENYA (SUCH AS THE SHIFT FROM PROJECT TO SECTORAL APPROACHES AND THE INCREASE IN THE IMPORTANCE OF PUBLIC CLIMATE FINANCE, GOVERNMENT PARTICIPATION AND MONITORING AND VERIFICATION), THE FOLLOWING RECOMMENDATIONS ARE PROPOSED:

<p>LOBBY WITH OTHER NON-LDC AFRICAN COUNTRIES FOR AN EU EXEMPTION TO DIRECTIVE 2009/29/EC</p>	<p>WHILE THIS MIGHT NOT BE POSSIBLE TO ACHIEVE IMMEDIATELY AND IS SUBJECT TO POLITICAL SENSITIVITIES, IT COULD BE VERY USEFUL FOR AN AFRICAN NON-LDC BLOC TO START SUCH DISCUSSIONS WITH THE EU, PERHAPS EVEN AT THE DURBAN CONFERENCE OF THE PARTIES.</p>
<p>ESTABLISH SEED CAPITAL FUNDING FOR CARBON AND UNDERLYING PROJECT DEVELOPMENT</p>	<p>THERE ARE A NUMBER OF DONOR-FUNDED INITIATIVES TO PROVIDE CDM DEVELOPMENT FUNDING (E.G. THE AFRICAN CARBON ASSET DEVELOPMENT FACILITY AND THE AfDB) AND PROJECT DEVELOPMENT CAPITAL (E.G. THE AFRICA ENTERPRISE CHALLENGE FUND AND THE ENERGY AND ENVIRONMENT PARTNERSHIP AFRICA) TO WHICH KENYAN PROJECTS CAN APPLY, BUT THESE COULD BE SUPPLEMENTED.</p>
<p>INCREASE DNA'S ACTIVITIES IN CDM PROMOTION ACTIVITIES, INCLUDING EMISSION BASELINE SETTING AND CDM AWARENESS CREATION ACTIVITIES</p>	<p>THE KENYAN DNA WORKING WITH OTHER RELEVANT ENTITIES (E.G. MINISTRY OF FORESTS FOR BIOMASS, MINISTRY OF TRANSPORT FOR TRANSPORT) COULD CONDUCT UPDATED STUDIES ON BASELINE GHG EMISSIONS IN DIFFERENT SECTORS, WHICH COULD BE RELEVANT NOT ONLY FOR CDM AND VOLUNTARY MARKET PROJECTS BUT ALSO FOR THE DEVELOPMENT OF NATIONALLY APPROPRIATE MITIGATION ACTIONS. ALSO, THE DNA SHOULD PROVIDE SECTORAL AWARENESS AND PROMOTIONAL ACTIVITIES, AND, WITH AN INCREASING NUMBER OF CDM PROJECTS ENTERING THE PIPELINE, SHOULD INSTALL PROCEDURES (E.G. MORE FREQUENT COMMITTEE MEETINGS) TO FAST-TRACK ISSUANCE OF LETTERS OF APPROVAL</p>
<p>DNA DESIGNATION OF CERTAIN PROJECTS AS AUTOMATICALLY ADDITIONAL</p>	<p>WITH REGARDS TO SMALL OR MICRO-SCALE PROJECTS IN THE RENEWABLE ENERGY AND OTHER SECTORS, THE DNA COULD DESIGNATE A LIST OF TECHNOLOGY TYPES THAT ARE AUTOMATICALLY ADDITIONAL UNDER THE CDM. IF THIS IS NOT DONE SOON IT MAY HAVE LITTLE IMPACT ON CDM DEVELOPMENT, BUT AGAIN IT COULD BE A USEFUL EXERCISE LINKED TO FUTURE NAMA ACTIVITIES.</p>
<p>PROVIDE FINANCIAL INCENTIVES TO PROJECT OWNERS FOR INVESTMENT IN UNDERLYING PROJECTS THAT REDUCE OR REMOVE GHG EMISSIONS</p>	<p>SUCH INCENTIVES COULD INCLUDE TAX BREAKS AND CONCESSIONS AND MORE FAVOURABLE IMPORT TARIFFS ON FOR EXAMPLE TECHNOLOGIES THAT REDUCE GHG EMISSIONS, SOMETHING THAT HAS BEEN CONSIDERED FOR A LONG TIME BY THE GOVERNMENT BUT ONLY PARTIALLY IMPLEMENTED TO DATE.</p>
<p>ENABLING POLICY FRAMEWORK SHOULD PROMOTE BOTH PUBLIC AND PRIVATE SECTOR PARTICIPATION</p>	<p>THE DRAFT CARBON EMISSIONS AND TRADING POLICY AND LAW SHOULD BE FORMULATED TO PROMOTE CONTINUED PARTICIPATION OF BOTH THE PUBLIC AND PRIVATE SECTORS. THE PRIVATE SECTOR HAS GAINED SIGNIFICANT EXPERIENCE IN DEVELOPING AND MANAGING CARBON ASSETS AND CAN HELP TO ENSURE CONTINUED ACCESS TO CARBON AND CLIMATE FINANCE AND MONITORING AND VERIFICATION FOR SUCH</p>
<p>DESIGN "POLICY PoAs" BASED ON THE CDM THAT CAN BE CONVERTED INTO NAMAs IN THE FUTURE</p>	<p>QUICK WIN POLICY CDM PoAs COULD BE DEVELOPED BY PUBLIC AND/OR PRIVATE ACTORS BASED ON EXISTING CDM RULES AND METHODOLOGIES AND THESE COULD GENERATE CERs AND BE THE PRECURSOR OF NAMA ACTIVITIES THAT WOULD ATTRACT MORE PUBLIC CLIMATE FINANCE IN THE FUTURE. A POLICY PoA COULD BE A GOOD WAY FOR THE PUBLIC AND PRIVATE SECTORS TO COOPERATE AND DEFINE THEIR RESPECTIVE ROLES. HOWEVER, TIME IS RUNNING OUT FOR SUCH A PoA.</p>
<p>PROVIDE FINANCIAL OR OTHER SUPPORT TO LOCAL BANKS TO LEND TO CDM AND CLIMATE MITIGATION PROJECTS</p>	<p>WHILE A SMALL NUMBER OF LOCAL BANKS HAVE EXPERIENCE IN PROJECT FINANCE AND A LARGER NUMBER IN MICRO OR TRADE FINANCE, MANY ARE RELUCTANT TO LEND TO RENEWABLE ENERGY, ENERGY EFFICIENCY AND OTHER POTENTIAL CDM PROJECTS. BANKS COULD BE ENCOURAGED TO PROVIDE DEBT TO SUCH PROJECTS THROUGH, FOR EXAMPLE, CREDIT SUPPORT FACILITIES.</p>
<p>INCLUDING CLIMATE/CARBON FINANCE AND PROJECT DEVELOPMENT TRAINING IN UNIVERSITY CURRICULA IN KENYA</p>	<p>RELEVANT POST-SECONDARY SUBJECTS SUCH AS IN FINANCE, ECONOMICS, ENGINEERING AND PROJECT MANAGEMENT COULD INCLUDE CARBON PROJECT DEVELOPMENT, MONITORING AND CLIMATE FINANCE</p>