AFRICA-LEDS PROJECT

UNEP

Africa LEDS project: achievements & next steps – component 2

Presentation for Côte d'Ivoire

BY: Dr. Alain Serges KOUADIO

AFRICA LEDS Partnership
Advancing climate-resilient low emission development in Africa

LEDS GLOBAL PARTNERSHIP

European Commission

Background of modeling actions

Component 2 Objectives

- Establish modeling and analytical capacity to inform the decision making process for NDC implementation
- Develop an integrated modeling framework to assess simultaneously GHG emissions and socio-economic impacts
- Test the integrated modelling framework for the impact assessment of the demonstration project (Component 1)

Background of modeling actions

Linkage with the NDC

- 28% Emission reduction compared to BAU by 2030
- Cost of Implementation: 17.65 billion USD
- GHG Coverage: CO_2, CH_4, N_2O
- **Sectors: Agriculture, Energy, Waste, Forestry & Other Land Use**

Background of modeling actions

Assessed Impacts (integrated modelling system capability)

- Direct (micro-economic) Impacts:
  - Climate Impacts (GHG emissions reductions)
  - Net societal costs/savings
- Indirect (socio-economic/macroeconomic) impacts:
  - Net job generation potential
  - Gross regional product

Background of modeling actions

Choice of models

- Models were chosen by the modelling team with backstopping by technical experts (Center for Climate Strategies) based on:
  - In country, already established capability and expertise
  - Model availability (free of charge, open source) to ensure replicability and scaling up for NDC implementation

Background of modeling actions

Integrated Modeling System

- **Ex-ACT** (Ex-Ante Carbon Tool): for assessing non-energy LEDS actions

- **LEAP-IBC (**Long-Range Energy Alternatives Planning – Integrated Benefits Calculator): for building an energy systems model

- **CCS Toolkit** (Center for Climate Strategies (CCS) MS-Excel based support tools) for macroeconomic assessment, filling LEAP and EX-ACT gaps, training, and quality assurance

Background of Demonstration Project

- Rice is the most consumed cereal grain in Côte d'Ivoire
- Domestic production –
  - Current: ~2.0 million tons of milled rice
  - By-product: ~500,000 tons of rice husk
  - Expected Growth by 2030: significant (greater than >50%) with a goal of self-sufficiency
- Common cultivation practices –
  - Continuously-flooded rice system
  - Synthetic nitrogen fertilization
  - Burning of crop residue (rice straw) in the field
  - Low yield varieties and planting techniques

Background of Demonstration Project

- Rice husk is a by-product of rice milling
- Rice husk makes up ~20% by weight of paddy rice
- At small rural mills (less than <2 tonnes/day capacity), it is a low value by-product (e.g. used as animal bedding)

Background of Demonstration Project

- Like elsewhere in sub-Saharan Africa, unsustainable removal of wood from the forest for use as cooking fuel is a key driver of deforestation and forest degradation

Firewood collection in Kenya. Source - Penn State University
https://news.psu.edu/story/507274/2018/02/26/research/wood-fuels-key-easing-food-insecurity-situation-sub-saharan-africa

Basic Small-Producer Rice Value Chain

Planting & Cultivation

- Input - Seed varieties and planting methods
- Input - Synthetic and organic fertilizers
- Input - Water (continuous or intermittent flooding)
- Input – Labor for planting and cultivation

Harvesting

- Input – Labor for harvest
- Input – Labor for crop straw management (burned, left on the field, removed for other use)
- Output – Paddy rice

Milling & Retail Sale

- Input - Paddy rice
- Input – Energy (electricity or fuel)
- Output – Milled rice for sale locally
- Output – Rice husk for local sale as low-value animal bedding

Achievement

- Côte d'Ivoire Team applied the integrated modelling system to the assessment of 3 scenarios within the rice value chain:
  1. Rice husk briquette production for consumption as a local cooking fuel
  2. Smart practices for irrigated rice cultivation
  3. Combination of 1 and 2 scenarios (overlap and integration)

Scenario 1. Rice Husk Briquetting and Use as a Cooking Fuel

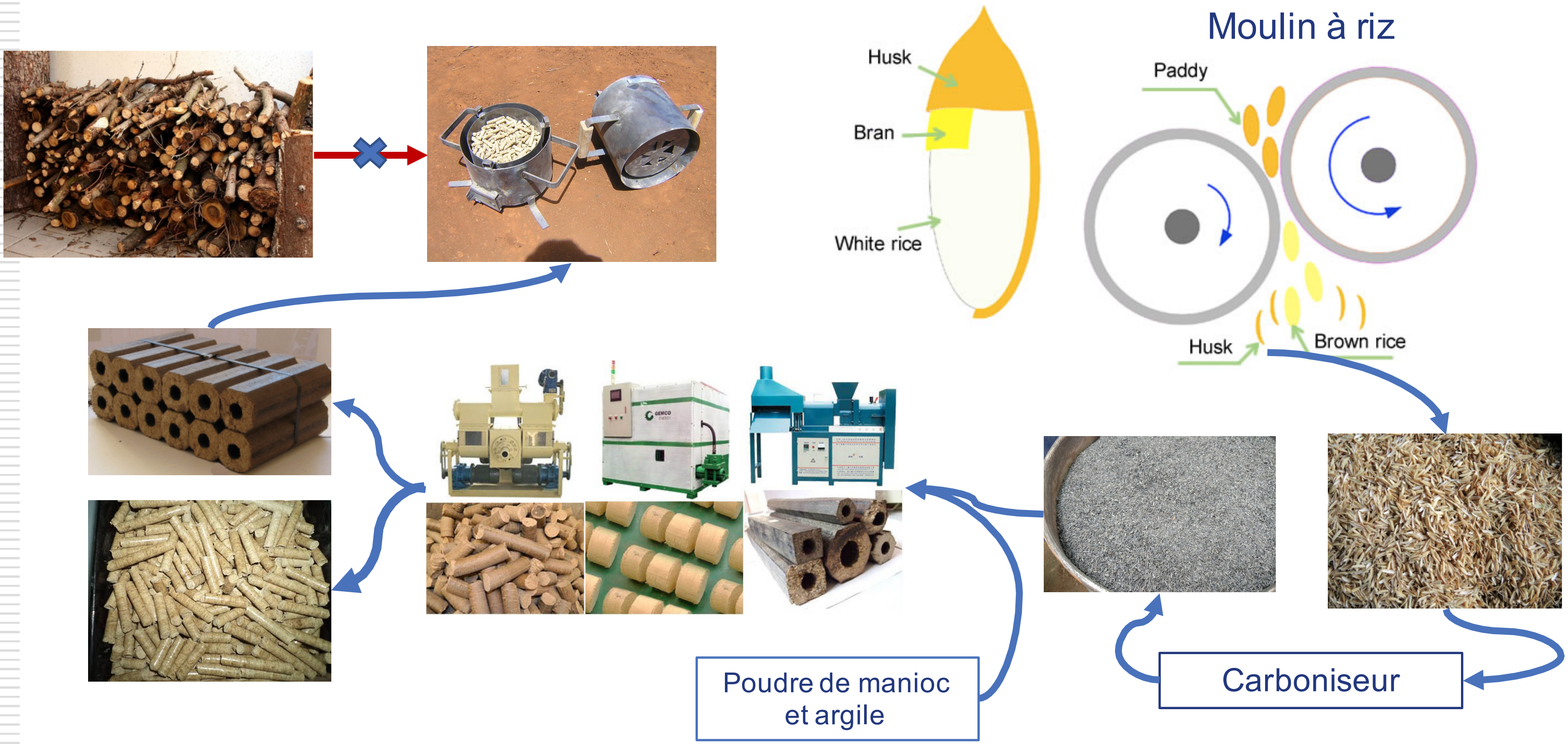
Key Interventions:

a) Obtain necessary equipment:
- Rice husk carbonizer
- Briquette press
- Briquette dryer

b) Obtain other process inputs and produce bio-briquettes:
- Binding agents – powdered clay and starch
- Water
- Electrical power for the press

c) Market and sell the bio-briquettes locally to offset the use of kerosene and charcoal cooking fuels

Scenario 1. Rice Husk Briquetting and Use as a Cooking Fuel



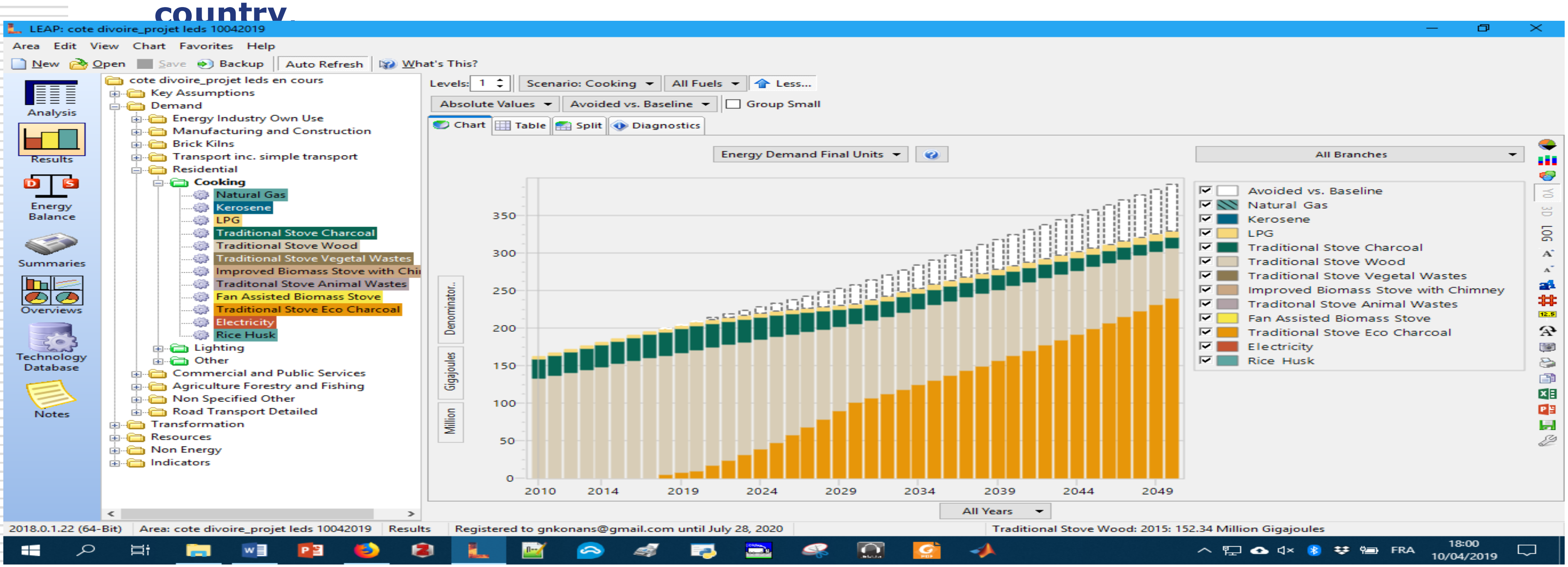
Citations pour les images: http://www.knowledgebank.irri.org/step-by-step-production/postharvest/rice-by-products/rice-husk
http://www.briquette-machine.com/uploads/allimg/rice-husk-briquette-press.jpg
http://stoves.bioenergylists.org/files/picture_jiko_bomba_003b.jpg.
https://upload.wikimedia.org/wikipedia/commons/thumb/b/be/Brennreisig.JPG/1200px-Brennreisig.JPG.

Achievement: Scenario 1

- EX-ACT: Forest carbon
- LEAP-IBC: Energy and emissions impacts
- CCS Micro-Analysis Tool: societal costs/savings and quality assurance
- CCS Macro-Indicators Tool: ratings potential for GRP growth tied to six separate macroeconomic indicators related to direct implementation costs

Achievement: Scenario 1

- LEAP Screenshot: Local fuel use displacement with bio-briquettes (national scale)
- In LEAP, to include fuel (briquettes) in energy demand, it must be produced or imported. So, there is an interdependence between household briquette consumption and briquette production.
- The simulation of the production was carried out after modification of the LEAP tree, since this activity did not exist in basic structure. In this scenario, the proportions of use of the different fuels are defined, and serve as a basis for the projection.
- The use of rice husk briquette is a powerful tool for reducing greenhouse gas emissions as shown in the figure below. **These emissions are reduced by 63k eq-CO2 by 2050 for households. For all sectors of activity and all the processes that lead to its use, the reduction is 2300k eq-CO2 and those for the whole country.**



Achievement: Scenario 1

- CCS Micro-Analysis Tool screenshot: pilot project direct costs

Coûts sociaux nets
Net Societal Costs

Conditions habituelles: coûts directs — BAU Direct Costs

	An / Year	Coûts de gestion de la balle de riz / Rice Husk Management Cost	Autre coût / Other Cost	Autre coût / Other Cost	Valeur du produit en balle de riz / Value of Rice Husk Product
92		XOF	XOF	XOF	XOF
93	2019	XOF 0	XOF 0	XOF 0	(XOF 2,700,000)
94	2020	XOF 0	XOF 0	XOF 0	(XOF 2,754,000)
99	2025	XOF 0	XOF 0	XOF 0	(XOF 3,040,639)
104	2030	XOF 0	XOF 0	XOF 0	(XOF 3,357,111)
109	2035	XOF 0	XOF 0	XOF 0	(XOF 3,706,521)
114	2040	XOF 0	XOF 0	XOF 0	(XOF 4,092,299)
119	2045	XOF 0	XOF 0	XOF 0	(XOF 4,518,229)
124	2050	XOF 0	XOF 0	XOF 0	(XOF 4,988,490)
125	**Somme**	**XOF 0**	**XOF 0**	**XOF 0**	**(XOF 119,412,980)**

Scénario du programme pilote: coûts directs — Pilot Program Scenario (PS): Direct Costs

	An / Year	Coûts d'équipement de production de briquettes / Briquette Production Equipment Costs	Coûts d'équipement annualisés / Annualized Equipment Costs	Production de briquettes: travail / Briquette Production Labor	Autres intrants de production / Other Production Input Costs	Coûts d'électricité / Electricity Cost	Bénéfice de l'opérateur d'une rizière sur les ventes de briquettes / Rice Mill Operator Profit on Briquette Sales	Coût évité du kérosène / Avoided Cost of Kerosene	Coût évité du charbon de bois / Avoided Cost of Charcoal
92		XOF	XOF	XOF	XOF	XOF	XOF	XOF	XOF
93	2019	XOF 3,814,800	XOF 418,845	XOF 33,120	XOF 414,000	XOF 163,033	XOF 360,149	(XOF 6,259,680)	(XOF 274,569)
94	2020		XOF 418,845	XOF 33,782	XOF 422,280	XOF 166,294	XOF 364,420	(XOF 6,384,874)	(XOF 280,061)
99	2025		XOF 418,845	XOF 37,298	XOF 466,231	XOF 183,602	XOF 387,092	(XOF 7,049,416)	(XOF 309,209)
104	2030		XOF 418,845	XOF 41,181	XOF 514,757	XOF 202,711	XOF 412,123	(XOF 7,783,125)	(XOF 341,392)
109	2035		XOF 0	XOF 45,467	XOF 568,333	XOF 223,810	XOF 293,163	(XOF 8,593,199)	(XOF 376,925)
114	2040		XOF 0	XOF 50,199	XOF 627,486	XOF 247,104	XOF 323,676	(XOF 9,487,586)	(XOF 416,155)
119	2045		XOF 0	XOF 55,424	XOF 692,795	XOF 272,823	XOF 357,364	(XOF 10,475,062)	(XOF 459,469)
124	2050		XOF 0	XOF 61,192	XOF 764,902	XOF 301,218	XOF 394,559	(XOF 11,565,315)	(XOF 507,291)
125	**Somme**	**XOF 3,814,800**	**XOF 6,282,668**	**XOF 1,464,799**	**XOF 18,309,990**	**XOF 7,210,474**	**XOF 11,643,776**	**(XOF 276,847,053)**	**(XOF 12,143,377)**

Coûts sociétaux directs nets

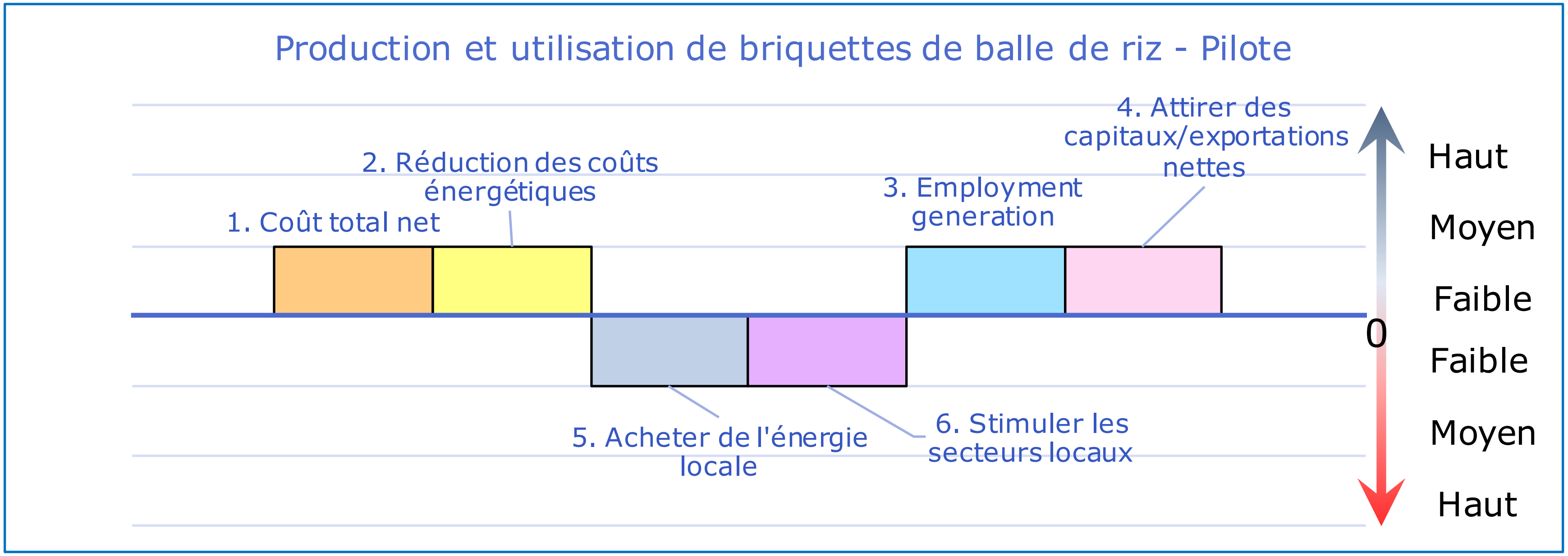
	An / Year	Total des coûts du programme / Total Program Costs	Total des coûts du programme actualisés / Total Discounted Policy Costs	Efficacité des coûts / Cost Effectiveness
130		XOF	2019 XOF	2019 XOF / tCO_2e
131	2019	(XOF 2,445,102)	(XOF 2,445,102)	
132	2020	(XOF 2,505,313)	(XOF 2,338,292)	
137	2025	(XOF 2,824,919)	(XOF 1,867,354)	
142	2030	(XOF 3,177,791)	(XOF 1,487,750)	
147	2035	(XOF 4,132,829)	(XOF 1,370,364)	
152	2040	(XOF 4,562,978)	(XOF 1,071,570)	
157	2045	(XOF 5,037,896)	(XOF 837,925)	
162	2050	(XOF 5,562,244)	(XOF 655,225)	
163	**Somme**	**(XOF 124,665,742)**	**(XOF 44,255,954)**	**(XOF 143)**

Net Costs = Pilot Scenario – BAU

Net societal savings: ~ 44 million CFA

Achievement: Scenario 1

CCS Macro-Indicators Tool screenshot



Drawing from the streams of direct costs/benefits: the following indicators showed potential for local economic stimulus:

1. Reduction in total net societal costs (reduced business as usual costs)
2. Reduction in local energy costs (displacement of kerosene by bio-briquettes)
3. Net increase in labor intensity and local employment for the bio-briquetting operation and process inputs
4. Reduction in imports of electricity and fuels and improved local financial flows

The following indicators showed potential for local economic contraction:

5. Local energy purchasing: reduction in local fuelwood and charcoal demand
6. Local sector stimulation: net expected impact of local bio-briquette stimulus versus local fuelwood sourcing.

Scenario 2: Climate Smart Rice Cultivation

Key Interventions:

a) Use improved seed varieties and planting methods
b) Change irrigation scheme from continuous flooding to intermittent flooding
c) Change from residue burning to straw removal and composting with manure
d) Replace synthetic nitrogen fertilizers with organic fertilizer (compost)

Scenario 2: Climate Smart Rice Cultivation

	Without project		With project
Water Management	Rice irrigated permanently (1)	Irrigated rice intermittently (2)	Irrigated rice intermittently (3)
Water regime before cultivation	Preseason not flooded <180 days	Preseason not flooded <180 days	Preseason not flooded <180 days
Type of amendment	Burnt rice straw	Burnt rice straw	Compost (rice straw and manure)
Area	(1) : 89,5 Ha (2) : 61 Ha	(1) : 89,5 Ha (2) : 61 Ha	(3) : 150,5 Ha
Cultivation period	150 days	150 days	100 days

Achievement: Scenario 2

- EX-ACT: Resource and GHG impacts for changes to crop residue management and nitrogen input
- CCS Micro-Analysis Tool: integration of direct costs and GHG impacts
- CCS Macro-Indicators Tool: potential for significant GRP impacts

Achievement: Scenario 2

EX-ACT Screenshot on GHG emissions

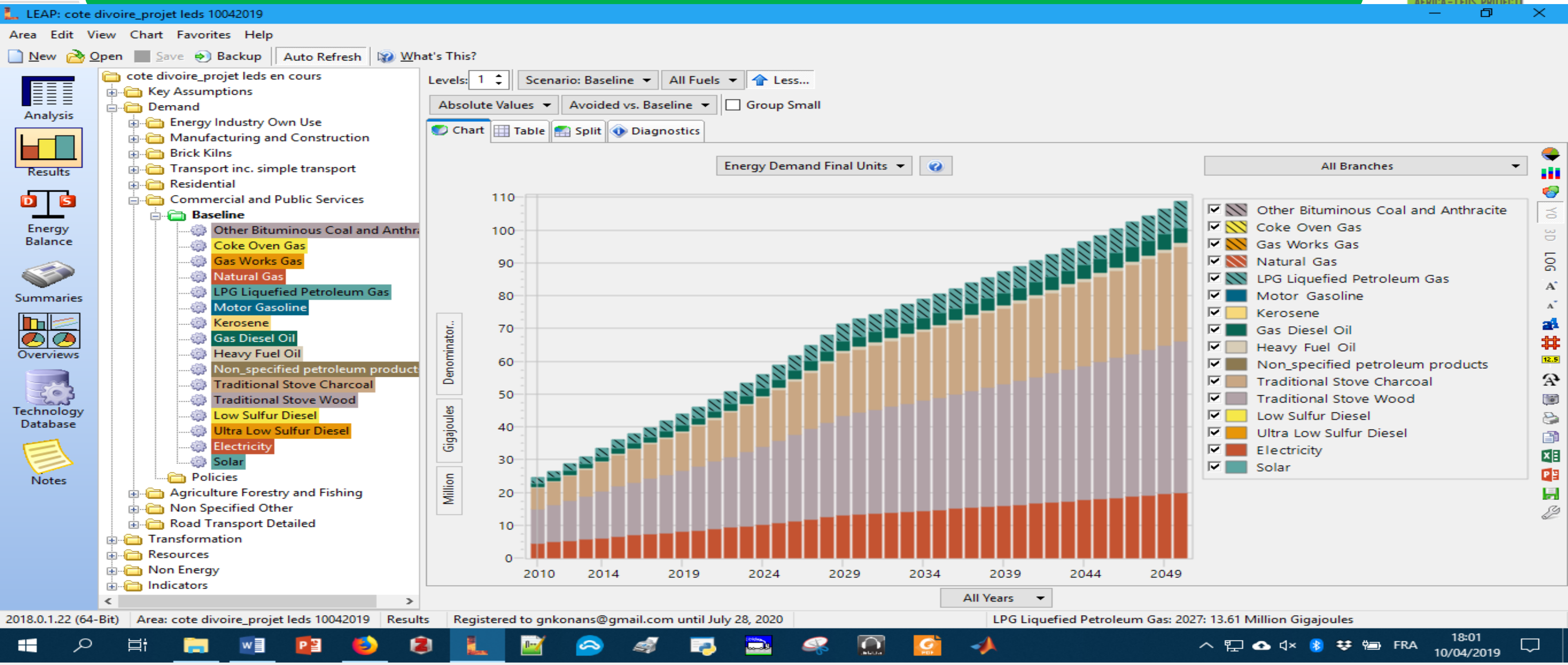
Nom du Projet	projet Gagnoa	Zone climatique	Tropical (Humide)	Durée du Projet (en années)	20,00
Continent	Afrique	Type de sol dominant	Sols à argiles 1:1	Surface totale (ha)	3 150,50

Composantes du projet	Flux bruts Tous les GES en tCO2eq Positif=émission / négatif=puits Sans	Avec	Bilan	Répartition du blian par type de GES Tous les GES en tCO2eq CO2 Biomasse	Sol	Autre	N2O	CH4	Résultats par an Sans	Avec	Bilan
Changements d'Usage											
Déforestation	#########	#########	##########	#########	-167 746,98		-793,47	-	#######	48 912,65	########
Boisement	-	-	-	-	-		-	-	-	-	-
Autres CUT	-	-	-	-	-		-	-	-	-	-
Agriculture											
Annuelle	-	-	-	-	-		-	-	-	-	-
Pérenne	-	-	-	-	-		-	-	-	-	-
Riz	13 227,09	7 012,96	-6 214,13	-	-		-248,64	-5 965,49	661,35	350,65	-310,71
Patûrage & bétail											
Patûrage	-	-	-	-	-		-	-	-	-	-
Bétail	-	-	-				-	-	-	-	-
Dégradation et gestion	-	-	-	-	-		-	-	-	-	-
Coastal wetlands	-	-	-	-	-		-	-	-	-	-
Intrants & Investissements	20,41	175,67	155,27			-8,45	163,71	-	1,02	8,78	7,76
Fishery & Aquaculture	-	-	-			-	-	-	-	-	-
Total	#########	985 441,68	#########	#########	-167 746,98	-8,45	-878,40	-5 965,49	#######	49 272,08	########
Par hectare	624,72	312,79	-311,93	-257,01	-53,24	-0,00	-0,28	-1,89			
Par hectare et par an	31,24	15,64	-15,60	-12,85	-2,66	-0,00	-0,01	-0,09	31,24	15,64	-15,60

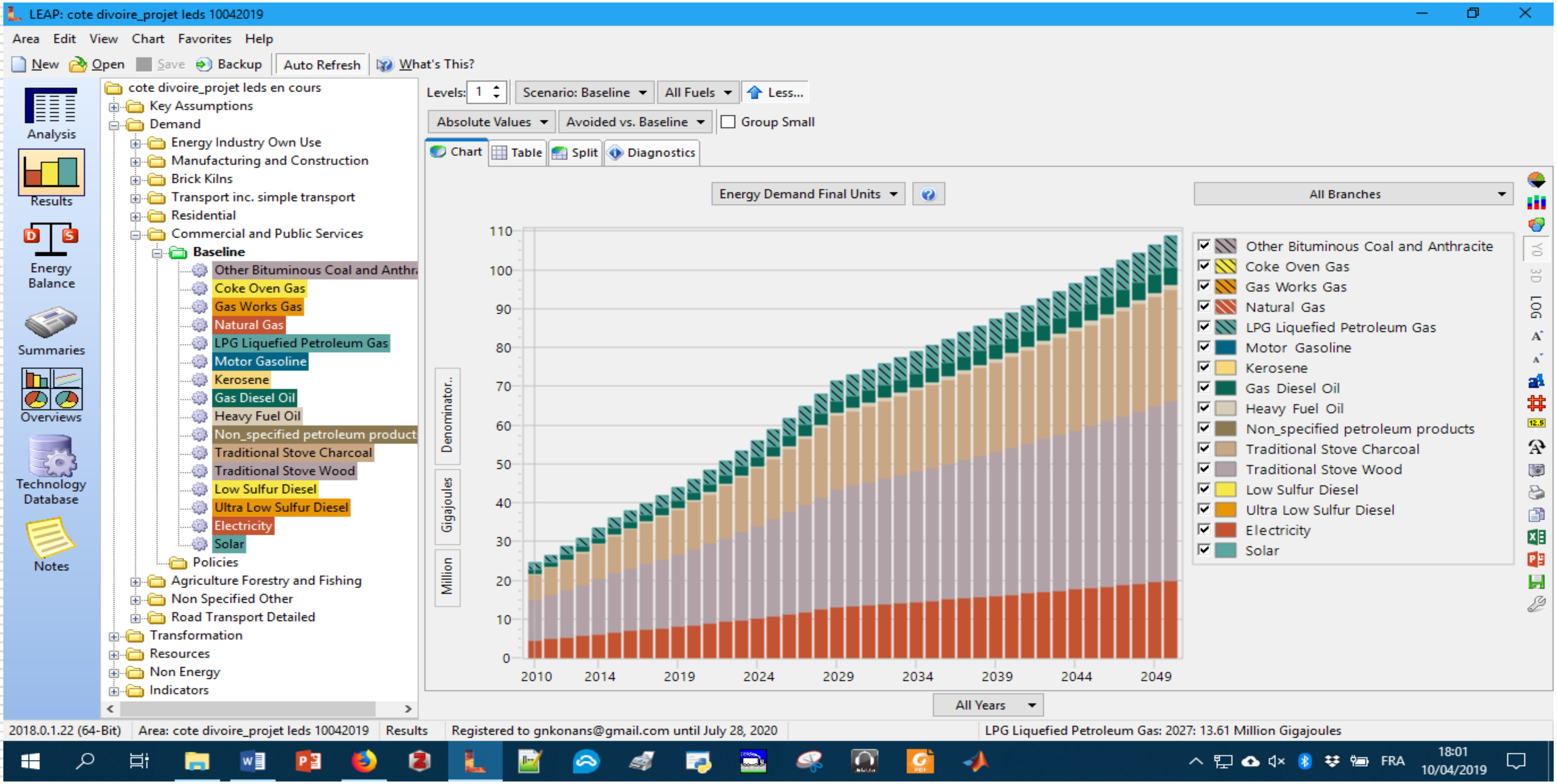
Bilan carbone = **-982 724,97 teq CO_2**

Facteur d'émission = **15,60 CO_2**

Scenario : Baseline (LEAP)

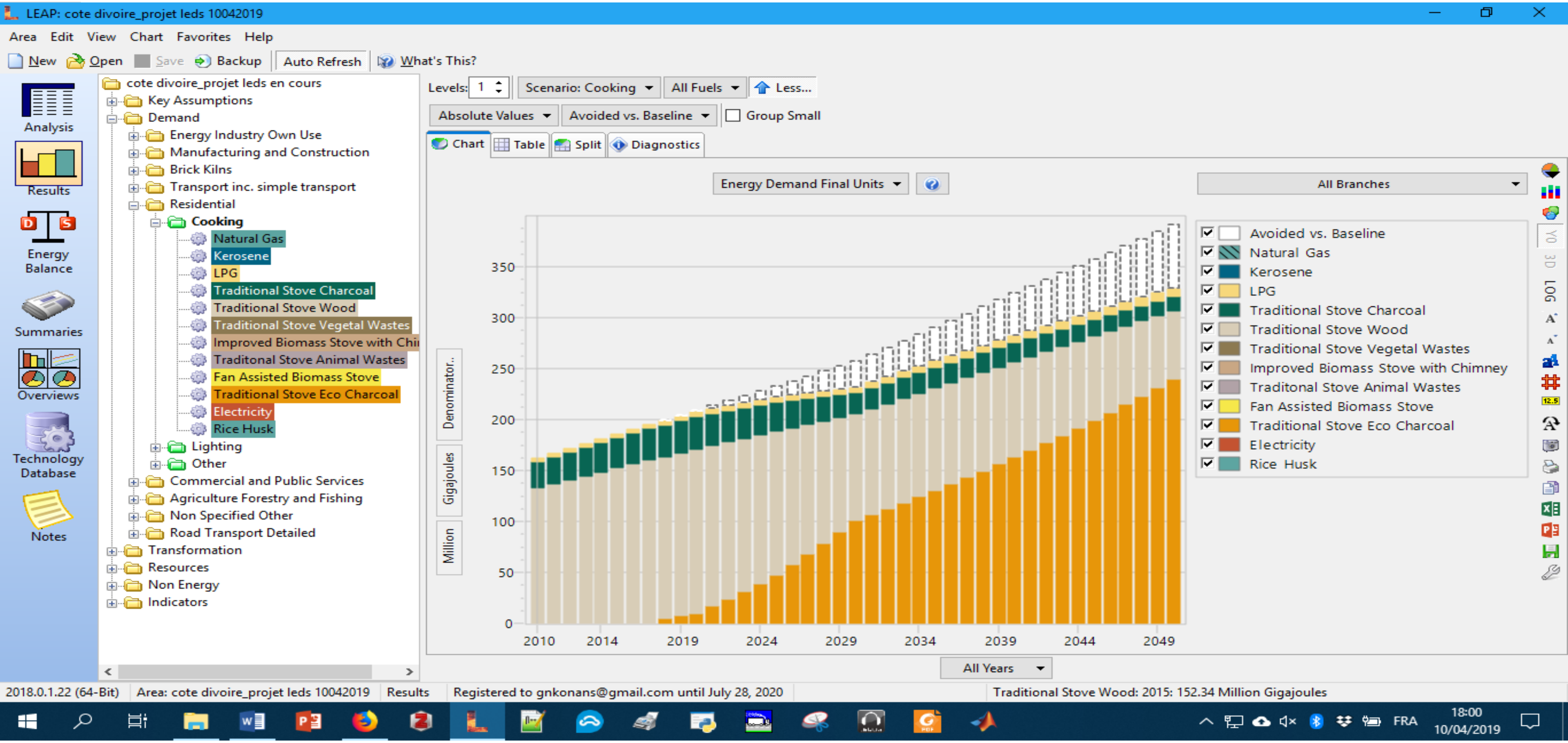


It includes Côte d'Ivoire's 2010 energy demand (base year) for the residential sector, businesses and utilities. The results of the energy demand projection up to 2050. Before moving to the use of agricultural residue-based briquette, it is necessary to make the raw material available, so the scenario Agriculture was, elaborate. The details of the Baseline's fuel share are given in the following figure. Wood and charcoal are the most consumed fuels in households and represent 62k terajoules and 321k terajoules respectively.



The following figure shows the amount of household energy through the use of briquettes reduced compared to current practices (Baseline). It revealed a 340k terajoule reduction compared to the Baseline by 2050 if this practice is extended to the whole country.

USE OF RICE HUSK BRIQUETTE FOR REDUCING GAS EMISSIONS.



The use of rice husk briquette is a powerful tool for reducing greenhouse gas emissions as shown in the figure below. These emissions are reduced by 63k eq-CO2 by 2050 for households. For all sectors of activity and all the processes that lead to its use, the reduction is 2300k eq-CO2 and those for the whole country.

Achievement: Scenario 2

CCS Tool screenshot on costs results

Coûts sociaux nets
Net Societal Costs

Conditions habituelles: coûts directs
BAU Direct Costs

	An / Year	Coûts matériels: semences et engrais / Material costs: seeds and fertilizer	Main d'oeuvre de plantation / Planting Labor	Main d'oeuvre de culture et de récolte / Cultivation and harvesting labor	Valeur du riz paddy / Value of Paddy Rice
92		XOF	XOF	XOF	XOF
93	2019	XOF 71,818,600	XOF 301,000	XOF 2,257,500	(XOF 73,745,000)
94	2020	XOF 73,254,972	XOF 307,020	XOF 2,302,650	(XOF 75,219,900)
99	2025	XOF 80,879,408	XOF 338,975	XOF 2,542,312	(XOF 83,048,848)
104	2030	XOF 89,297,402	XOF 374,256	XOF 2,806,918	(XOF 91,692,638)
109	2035	XOF 98,591,547	XOF 413,208	XOF 3,099,064	(XOF 101,236,082)
114	2040	XOF 108,853,035	XOF 456,216	XOF 3,421,617	(XOF 111,772,815)
119	2045	XOF 120,182,546	XOF 503,699	XOF 3,777,741	(XOF 123,406,219)
124	2050	XOF 132,691,242	XOF 556,124	XOF 4,170,932	(XOF 136,250,437)
125	**Somme**	**XOF 3,176,323,348**	**XOF 13,312,336**	**XOF 99,842,519**	**(XOF 3,261,522,298)**

Scénario du programme pilote: coûts directs
Pilot Program Scenario (PS): Direct Costs

	An / Year	Coûts matériels: semis et engrais / Material costs: seedlings and fertilizer	Main d'oeuvre de plantation / Planting Labor	Main d'oeuvre de culture et de récolte / Cultivation and harvesting labor	Valeur du riz paddy / Value of Paddy Rice
92		XOF	XOF	XOF	XOF
93	2019	XOF 49,528,026	XOF 391,300	XOF 3,762,500	(XOF 147,490,000)
94	2020	XOF 50,518,587	XOF 399,126	XOF 3,837,750	(XOF 150,439,800)
99	2025	XOF 55,776,602	XOF 440,667	XOF 4,237,186	(XOF 166,097,695)
104	2030	XOF 61,581,876	XOF 486,532	XOF 4,678,196	(XOF 183,385,277)
109	2035	XOF 67,991,367	XOF 537,171	XOF 5,165,106	(XOF 202,472,164)
114	2040	XOF 75,067,963	XOF 593,080	XOF 5,702,695	(XOF 223,545,629)
119	2045	XOF 82,881,097	XOF 654,809	XOF 6,296,236	(XOF 246,812,438)
124	2050	XOF 91,507,428	XOF 722,962	XOF 6,951,553	(XOF 272,500,874)
125	**Somme**	**XOF 2,190,477,490**	**XOF 17,306,037**	**XOF 166,404,199**	**(XOF 6,523,044,596)**

Coûts sociétaux directs nets
Net Direct Societal Costs

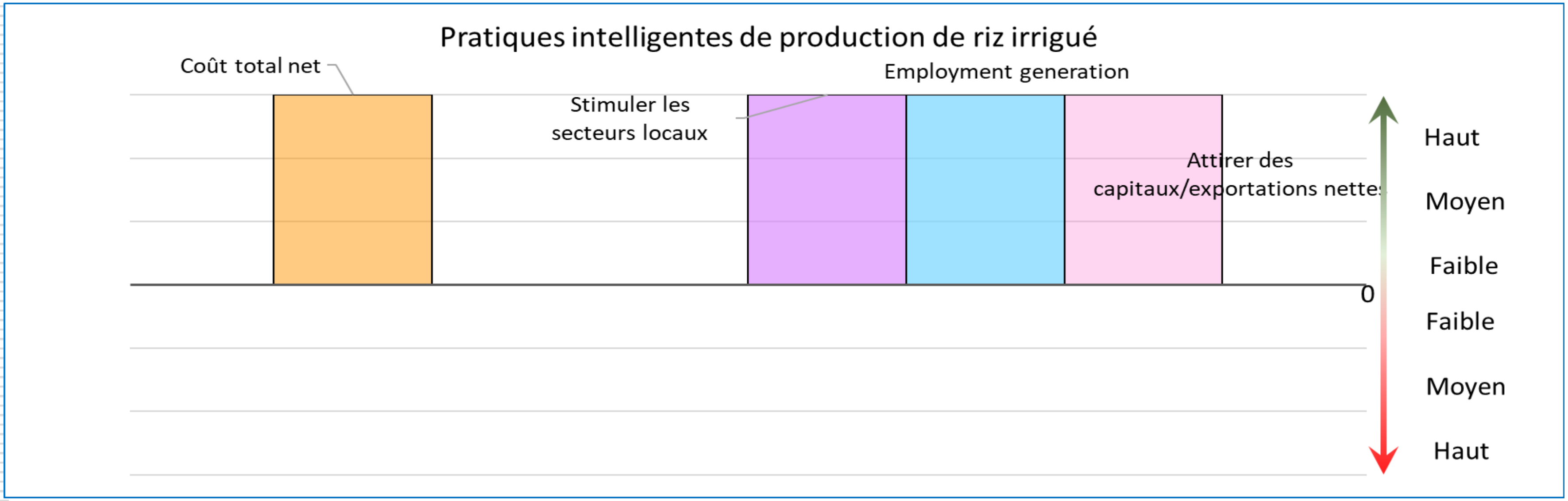
	An / Year	Total des coûts du programme / Total Program Costs	Total des coûts du programme actualisés / Total Discounted Policy Costs	Efficacité des coûts / Cost Effectiveness
130		XOF	2019 XOF	XOF2019/tCO₂e
131	2019	(XOF 94,440,274)	(XOF 94,440,274)	
132	2020	(XOF 96,329,079)	(XOF 89,907,140)	
137	2025	(XOF 106,355,087)	(XOF 70,303,821)	
142	2030	(XOF 117,424,610)	(XOF 54,974,801)	
147	2035	(XOF 129,646,258)	(XOF 42,988,116)	
152	2040	(XOF 143,139,944)	(XOF 33,615,003)	
157	2045	(XOF 158,038,065)	(XOF 26,285,600)	
162	2050	(XOF 174,486,793)	(XOF 20,554,297)	
163	**Somme**	**(XOF 4,176,812,776)**	**(XOF 1,559,845,468)**	**(XOF 102,028)**

Net Costs/Saving = Pilot Scenario – BAU

Net Social Savings: ~1.5 trillion CFA

Achievement: Scenario 2

CCS Tool screenshot on macro assessment



Drawing from the streams of direct costs/benefits: the following indicators showed strong potential for local economic stimulus:

1. Reduction in total net societal costs (reduced business as usual costs)
2. Stimulation of local sectors (composting operations, savings on imported materials (nitrogen fertilizers)
3. Jobs: Net increase in labor intensity and local employment for changes in cultivation (planting and cultivation, composting operations)
4. Reduction in imports and improved local financial flows: higher value of paddy rice from higher yields

Achievement: Scenario 3

- CCS Micro-Analysis Tool Screenshot on GHG emissions & Implementation Costs (Pilot Program Scale)

74		Changement net: énergie, matériaux et émissions Energy & Emissions Change				
75		Scenario 2 Pilote			Scenario 1 Pilote	Scenario 3: Les deux pilotes
76		Engrais azoté chimique appliqué	Paille de riz brûlée	Total des impacts de GES	Total des impacts de GES	Total des impacts de GES
77	An	N Fertilizer Use	Rice Straw Burned	Total GHG Impacts	Total GHG Impacts	Total GHG Impacts
78	Year	kg N	kg	tCO_2e	tCO_2e	tCO_2e
79	2019	(14,147)	(312,127)	(716)	(19,293)	(20,009)
80	2020	(14,147)	(312,127)	(716)	(19,293)	(20,009)
85	2025	(14,147)	(312,127)	(716)	(19,293)	(20,009)
90	2030	(14,147)	(312,127)	(716)	(19,293)	(20,009)
95	2035	(14,147)	(312,127)	(335)	(19,293)	(19,628)
100	2040	(14,147)	(312,127)	(335)	(19,293)	(19,628)
105	2045	(14,147)	(312,127)	(335)	(19,293)	(19,628)
110	2050	(14,147)	(312,127)	(335)	(19,293)	(19,628)
111	**Somme**	**(452,704)**	**(9,988,071)**	**(15,288)**	**(617,374)**	**(632,663)**

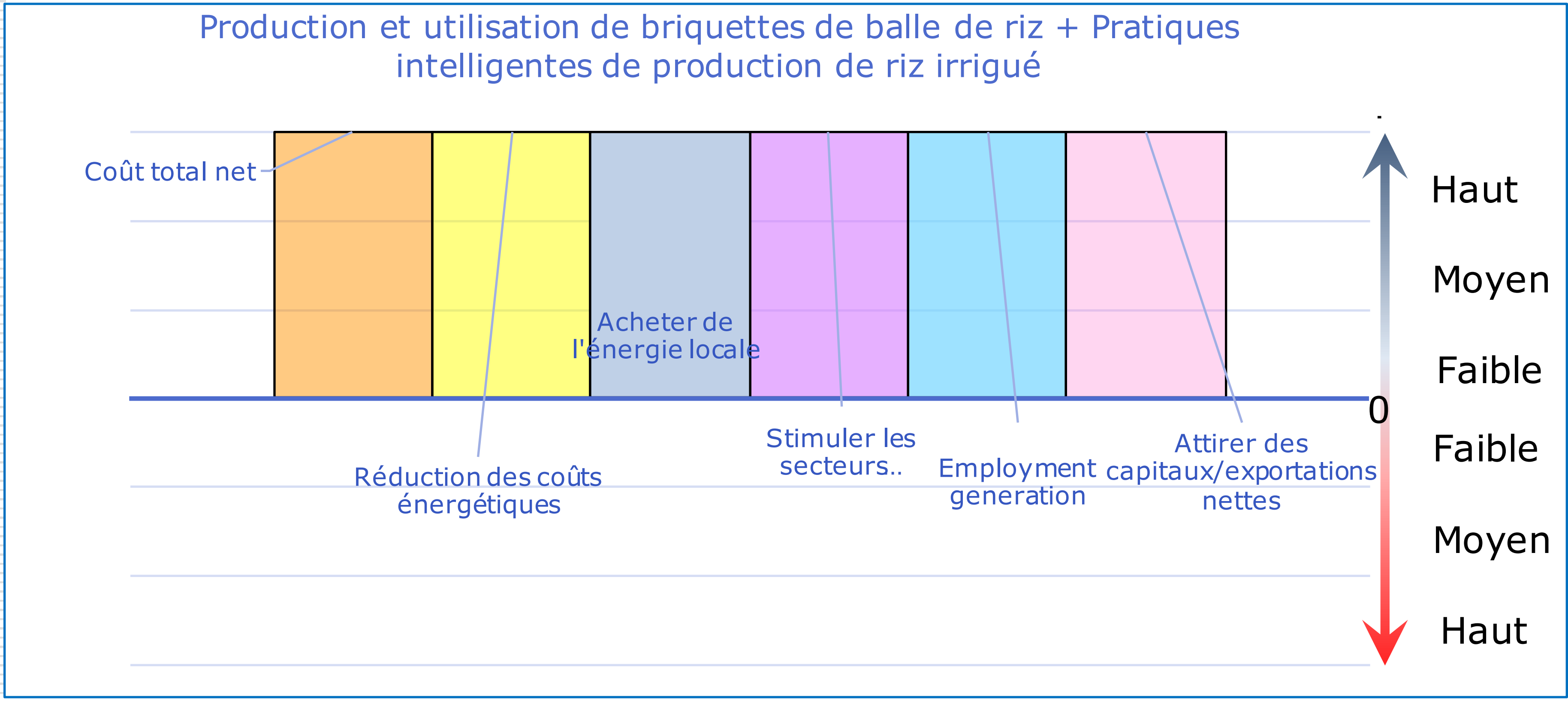
153		Coûts sociétaux directs nets Net Direct Societal Costs			Scénario 3	Scénario 3
154		Scénario 2	Scénario 1	Scénario 1	Les deux scénarios	Les deux scénarios
155	An	Total des coûts du programme actualisés	Total des coûts du programme actualisés	Total des coûts du programme actualisés	Total des coûts du programme actualisés	Efficacité des coûts Cost Effectiveness
156	Year	XOF 2019	XOF	XOF 2019	XOF 2019	XOF 2019/tCO_2e
157	2019	(XOF 94,440,274)	(XOF 8,009,049)	(XOF 8,009,049)	(XOF 102,449,322)	
158	2020	(XOF 89,907,140)	(XOF 8,183,471)	(XOF 7,637,906)	(XOF 97,545,046)	
163	2025	(XOF 70,303,821)	(XOF 9,109,322)	(XOF 6,021,528)	(XOF 76,325,349)	
168	2030	(XOF 54,974,801)	(XOF 10,131,537)	(XOF 4,743,292)	(XOF 59,718,093)	
173	2035	(XOF 42,988,116)	(XOF 11,972,180)	(XOF 3,969,736)	(XOF 46,957,852)	
178	2040	(XOF 33,615,003)	(XOF 13,218,254)	(XOF 3,104,177)	(XOF 36,719,179)	
183	2045	(XOF 26,285,600)	(XOF 14,594,021)	(XOF 2,427,343)	(XOF 28,712,943)	
188	2050	(XOF 20,554,297)	(XOF 16,112,978)	(XOF 1,898,086)	(XOF 22,452,383)	
189	**Somme**	**(XOF 1,559,845,468)**	**(XOF 375,027,132)**	**(XOF 137,157,767)**	**(XOF 1,697,003,235)**	**(XOF 2,682)**

Combined Direct Results:

1. Total GHG Reductions (2019-2050): >600,000 tCO_2e
2. Total Societal Benefits (2019-2050): ~1.7 trillion 2018 CFA saved
3. 530 tons bio-briquettes produced
3. 71 hectares of forest preserved
4. 3,000 tons of CO_2 sequestered in forests
5. 453 tons of chemical nitrogen (fertilizer) avoided

Achievement: Scenario 3

CCS Macro-Indicators Tool screenshot



Drawing from the streams of direct costs/benefits: the combined results from Scenarios 1 & 2 showed strongly positive potential for local economic stimulus

Feedback to policy

Contribution of the LEDS project to the implementation of NDCs in Côte d'Ivoire

NDC priorities Sectors	NDC Strategic orientations	Actions planned in the NDCs	Contribution of component 2 of the LEDS project
Agriculture / Forestry	Consistency of national planning and rural spatial planning to develop agriculture and the forestry sector	Consistency of National Agricultural Investment Plans (NAIP) with strategies to limit deforestation (REDD + process) through a master plan for land use planning in 2030 (securing land) in consultation with each agricultural sector and the territories	• Help, through the integrated LEDS model, an assessment of the climatic and socioeconomic benefits related to the integration of these two strategies • Assist in determining the best low carbon action scenarios associated with this integrated framework
	Agricultural development without extension on the remaining forest areas and less emitting GHGs	Decoupling of agricultural production and deforestation through the promotion of intensive agricultural practices with reduced impacts on the environment and agroforestry	* Assist in the determination of the best low carbon scenarios with proven benefits linked to the promotion of intensive and intelligent farming practices (especially in the rice sector)

Testimonials

"The ministry of planning as the Ministry in charge of national planning through the definition of the national development plan, the national prospective study and the national statistics, will play its full role so that each sector appropriates the results of the project LEDS in particular the sectors of energy, agriculture and industry. It is for us to capitalize not only the LEDS modeling models and tools but the integrated ones in the corpus of national governance tools".

Mr. KOYA JEAN CLAUDE,

Technical Advisor to the Minister of Planning and Development in charge of environmental issues and sustainable development.

Testimonials

"LEDS project, in its conception was for us, a great asset, a first approach in the implementation of the NDC, because it allowed us finally to decline our NDC in a concrete and well-structured project in the case of pilot project that has implemented in the rice sector. So for us, it's to see how we could decline our NDC into projects that could eventually be scaled up".

Dr Eric ASSAMOI,

Director of the fight against climate change

The EC-UNEP Africa LEDS project, provided us with the opportunity to understand how we can practically implement our NDCs in a way that lowers emissions and creates socioeconomic opportunities for our country. By this, it provides the full package of building climate resilience covering both socioeconomic & environmental/ climate aspects. We are going to build on the great outcomes we achieved to ensure that we implement climate actions within an informed policy trajectory that informs maximized investments – all thanks to the analytical tool and the practical case studies this project has helped develop for our country

Prof Joseph Séka SEKA,

Minister of the Environment and Sustainable Development

Conclusion

- Capture whether work was concluded successfully and how it will be of benefit to the country in driving both NDCs implementation and the socioeconomic priorities – food security, income & job opportunities, creation of enterprises – and cumulatively drive realisation of the Sustainable Development Goals (SDGs).

Next steps

- Complete QA among modeling tools
- Conduct scale-up of demonstration project to the national level
- Conduct additional capacity-building to transition from CCS Micro-analysis tool to LEAP for costs assessment
- Expand the number of modelling team members
- Apply the integrated modeling system to other NDC policy options to strengthen capacity

AFRICA-LEDS PROJECT

UNEP

Thank You!

Dr. Alain Serges KOUADIO

AFRICA LEDS Partnership
Advancing climate-resilient low emission development in Africa

LEDS GLOBAL PARTNERSHIP

European Commission