

*République du Sénégal*

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*Un peuple- Un But- Une Foi*



**Ministère de l'Énergie  
et du Développement des Énergies Renouvelables**

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**Direction des Hydrocarbures**

**SENEGAL DOMESTIC BIOGAS NAMA  
« BIOGAS AS WOOD ALTERNATIVE SOLUTION AND  
AGAINST SOIL DEGRADATION IN SAHELIAN  
AREA »**

**DOMESTIC NATIONAL BIOGAS SENEGAL (PNB-SN)**

**By** : Mor NDIAYE Communication & Marketing Officer

**Date**:: December, 6th

**Lieu**: Casablanca

# Why NAMA PROPOSAL?

• OPPORTUNITY FROM UNEP RISOE WITH SUPPORT  
MINISTRY OF ENVIRONNEMENT

Two projects choosen:

**Domestic NAMA BIOGAS**

and **Minigrid PHOTOVOLTAIC**

Projects rejected: **Mini-Grip Wind Power Plants**

**REASON OF CHOICE: HIGH SOCIO-ECONOMIC IMPACT  
PILOT PHASE EVALUATION**

Choice of Carbon Finance: **Self financing and durability**

• **FUNDING NEEDED TO REINFORCE PNB-SN ACTIONS**

○ **IN PRIVATE SECTOR DEVELOPMENT,**

○ **SUPPORT FOR FARMERS**

✓ **IN ORGANIC AGRICULTURE AND**

✓ **INTEGRATION OF AGRICULTURE AND LIVESTOCK  
BREEDING**

# STATUS OF THE PROJECT DESIGN

- **NAMA DESIGN DOCUMENT REDACTION COMPLETED**

- **AJUSTEMENTS TO BE DONE BY REDACTION TEAM** BEFORE SENDING TO START APPROVAL PROCESS ( MINOR REMARKS FROM PROGRAM OFFICER OF UNEP RISOE TO BE INTEGRATED) :

- **TWO LEVELS: NATIONAL LEVEL AND INTERNATIONAL LEVEL (UNEP RISOE)**

- **REDACTION TEAM:**  
MATAR SYLLA (team leader),  
LAMINE DIOP,  
EIH MBAYE DIAGNE

# **MONITORING REQUIREMENTS AND ORGANISATION**

## **MOST INDICATORS UNDER CONTROL:**

- Biogas production
- Green house gas reduction
- Wood consumption reduction (monitoring by survey)
- Number of household with biogas devices
- Increment of crops production (Research Program with ISRA/CIRAD)
- Credit and investments
- Job creation
- Household satisfaction
- Increment of household revenues
- Companies Net sales of BCEs and Devices Fabricants

# MONITORING REQUIREMENTS AND ORGANISATION

## **METHODS OF DATA COLLECTION:**

SURVEY (annual), DATA ROUTING

## **DATA MANAGEMENT:**

INFORMATION SYSTEM

## **ORGANIZATION**

**Level 01:** BCE to build digesters for famers

**Level 02:** Implementing partners (IP's) for each region to follow up actions under process (BCE's, farmers, local partners)

**Level 03:** PNB-SN regional antennas with biogas and extension technicians to follow BCE's, IP's, farmers activities

**Level 04:** PC office for National Coordination with all actors

# SOURCES AND QUANTITIES OF EMISSIONS REDUCTIONS

## **Emissions calculus Methodology:**

“Indicative Programme, Baseline, and Monitoring Methodology for Small Scale Biogas 3001007”

## **Emissions Factors:**

Tier 1 (IPCC 2006),

## **Sources of emissions considered:**

- Emissions due to livestock manure management
- Wood Combustion
- emissions due to biogas use

## **•Sources of emissions not considered:**

- Agriculture emissions
- Enteric fermentation

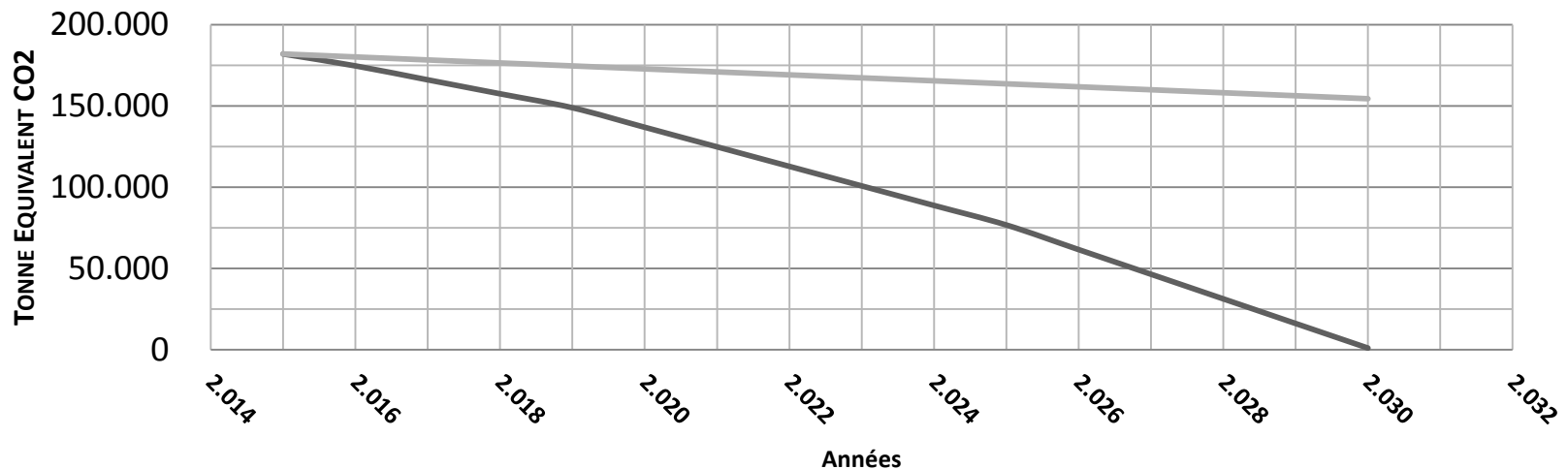
# SOURCES AND QUANTITIES OF EMISSIONS REDUCTIONS

**Période:** 2015-2030

**Target:** 60 664 biodigesters for rural households

Target Maximum emissions reduction (at 2030) : 293 392 Teq CO<sub>2</sub>/year

Total emissions reduction calculated: 1 975 264 Teq CO<sub>2</sub>



— TOTAL ÉMISSIONS DES MÉNAGES SCÉNARIO 2 TEQ CO<sub>2</sub>

— TOTAL DES ÉMISSIONS SCÉNARIO 1 (RÉFÉRENCE)

# **MOST DIFFICULT CHALLENGES UP TO NOW**

- **SOCIO-ECONOMICAL DATAS COLLECTION**  
(household level):
  - ✓ Agriculture (production, period, region, type)
  - ✓ Livestocks breeding (heads, type, transhumance period)
  - ✓ Water availability;
  - ✓ Financial capacity ( analysis finally based on spending)
  
- **ADOPTION STRATEGY BY ALL ACTORS:**  
to fix What to do? By Whom? And When?



**THANK YOU FOR  
YOUR ATTENTION**

