

# Renewable Energy – Exploiting Energy Resources at the District Level



*Presented by:*

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**(Vice President - BAG)**

**Venue: AICC**

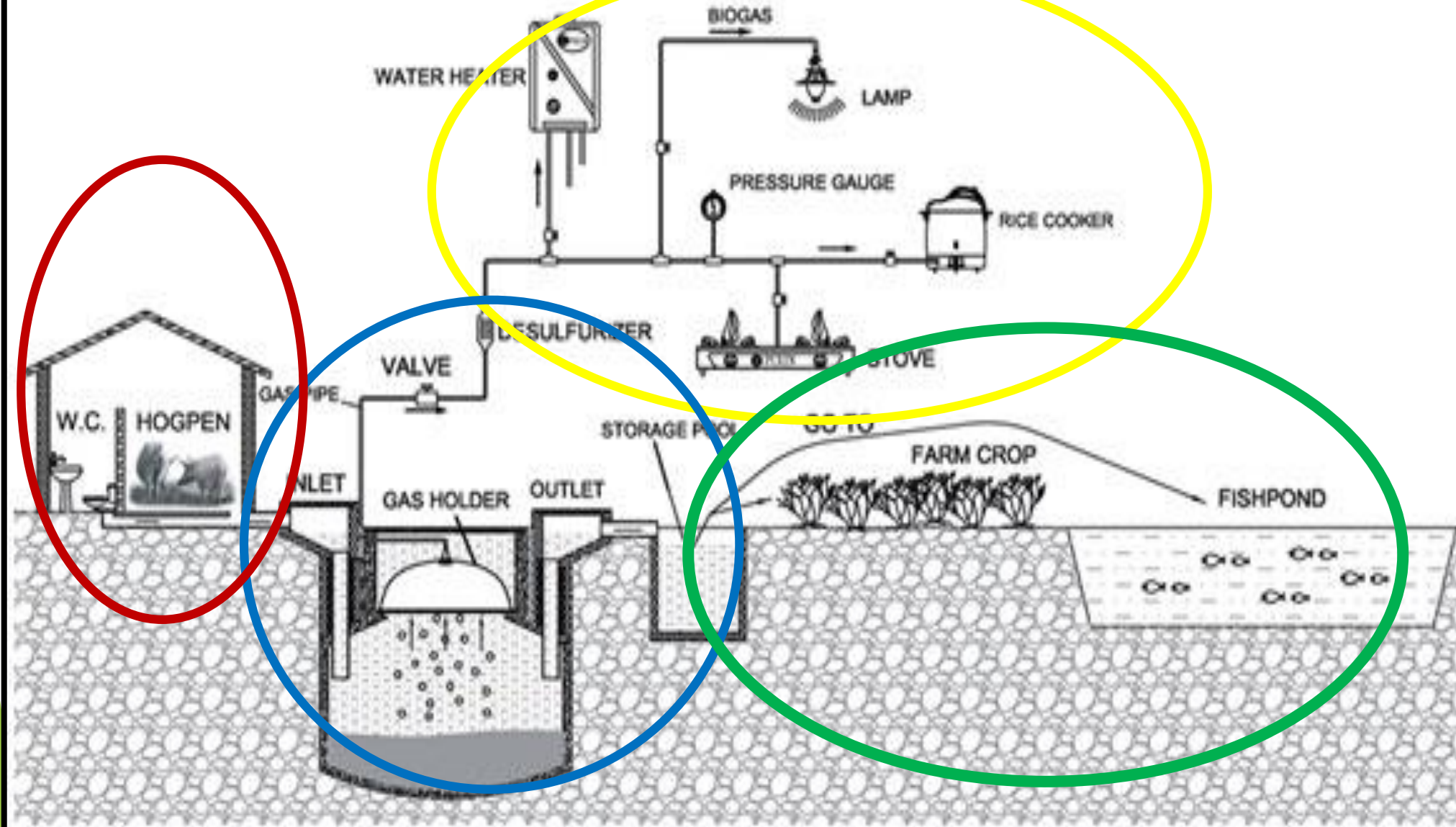
**Date: 9-11 October, 2018**

# Job Creation Opportunities in the Biomass Space – BAG's CALL

## Thematic Areas for Presentation

- ▶ The Biomass Value Chains
- ▶ A VISIBLE & REAL Challenge identified - the 21<sup>st</sup> Century Approach!
- ▶ Practical Solutions and Real Opportunities - the CI Mechanism
- ▶ Basic Financial and Mathematical Equations
- ▶ A well-managed waste stream: - A Case for Sustainable Business Development and Employment Creation!

## THE BIOMASS VALUE CHAIN

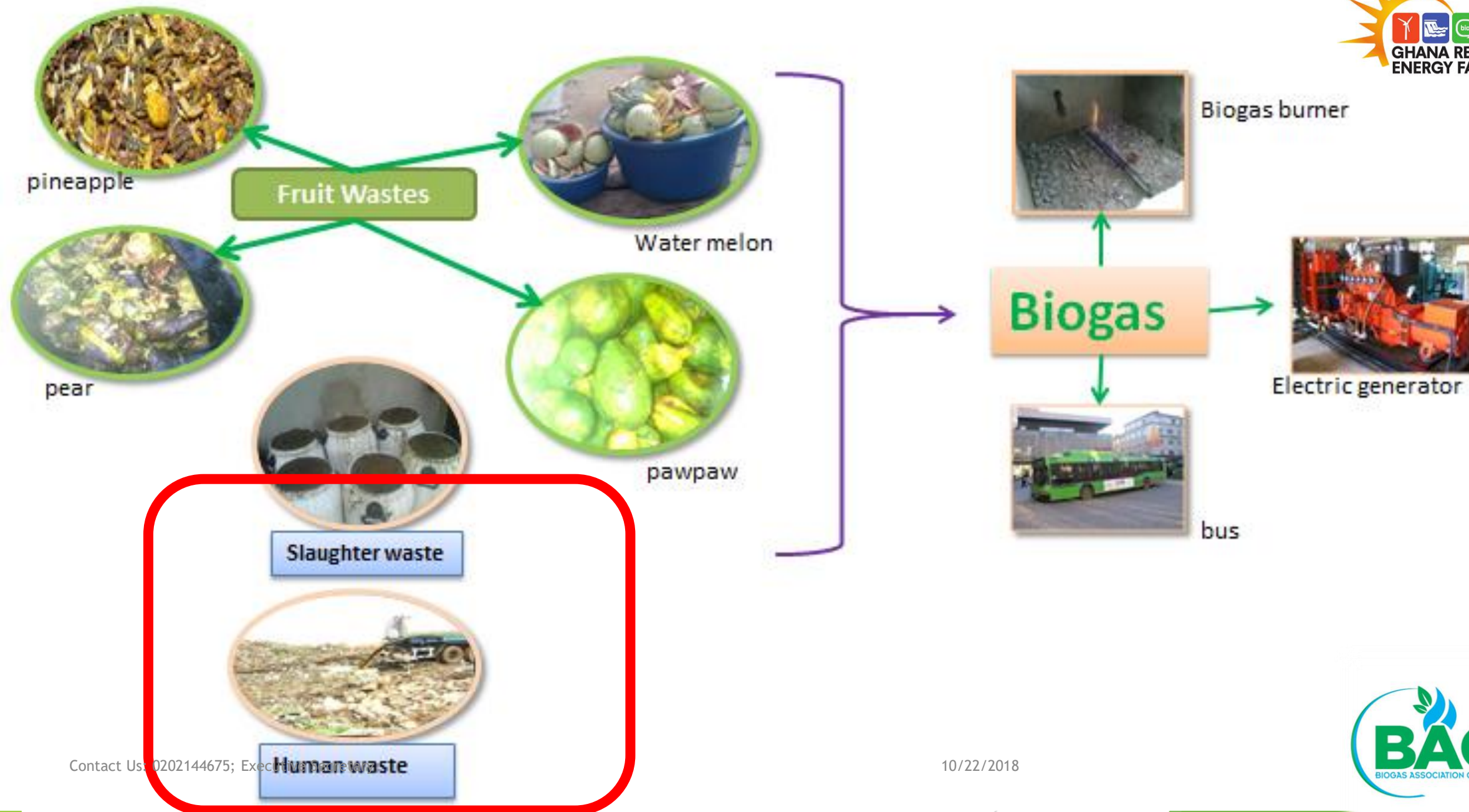


# BAG's Mandate

Actively Encourage the use of “Biogas” Technologies for:

- ✓ **Sanitation purposes - Treating human and organic wastes**
- ✓ **Energy purposes - Utilising Biogas from bio-digesters as energy supplementation**
- ✓ **Agricultural purposes - Effluents used as soil enhancing materials for Crop production**
- ✓ **Enhancing afforestation by encouraging tree planting**
- ✓ **Climate change mitigation**
- ✓ **Assured Business & Livelihood Opportunities**







CHANGE POLICY  
**NOW**

ABOLISH SEPTIC  
TANK SYSTEMS

Contact Us: 0202144673; Executive Secretary



# A MISMANAGED WASTE SYSTEM IS A NATIONAL SECURITY THREAT!!!

“Buying food to eat without making adequate financial provision for your poopoo is an irresponsibility.” DOB (2018)

Target Population	No.	20,000,000				
Human Excreta per Capita	kg	0.3		1Million Cubic/day - Biogas		
Annual quantity	ton	2,160,000		200MWh per day - electricity		
Cost per waste handling (current rate)	Ghc/ton	2,000				
Average Cost per annum	GHC				4,320,000,000	0.96

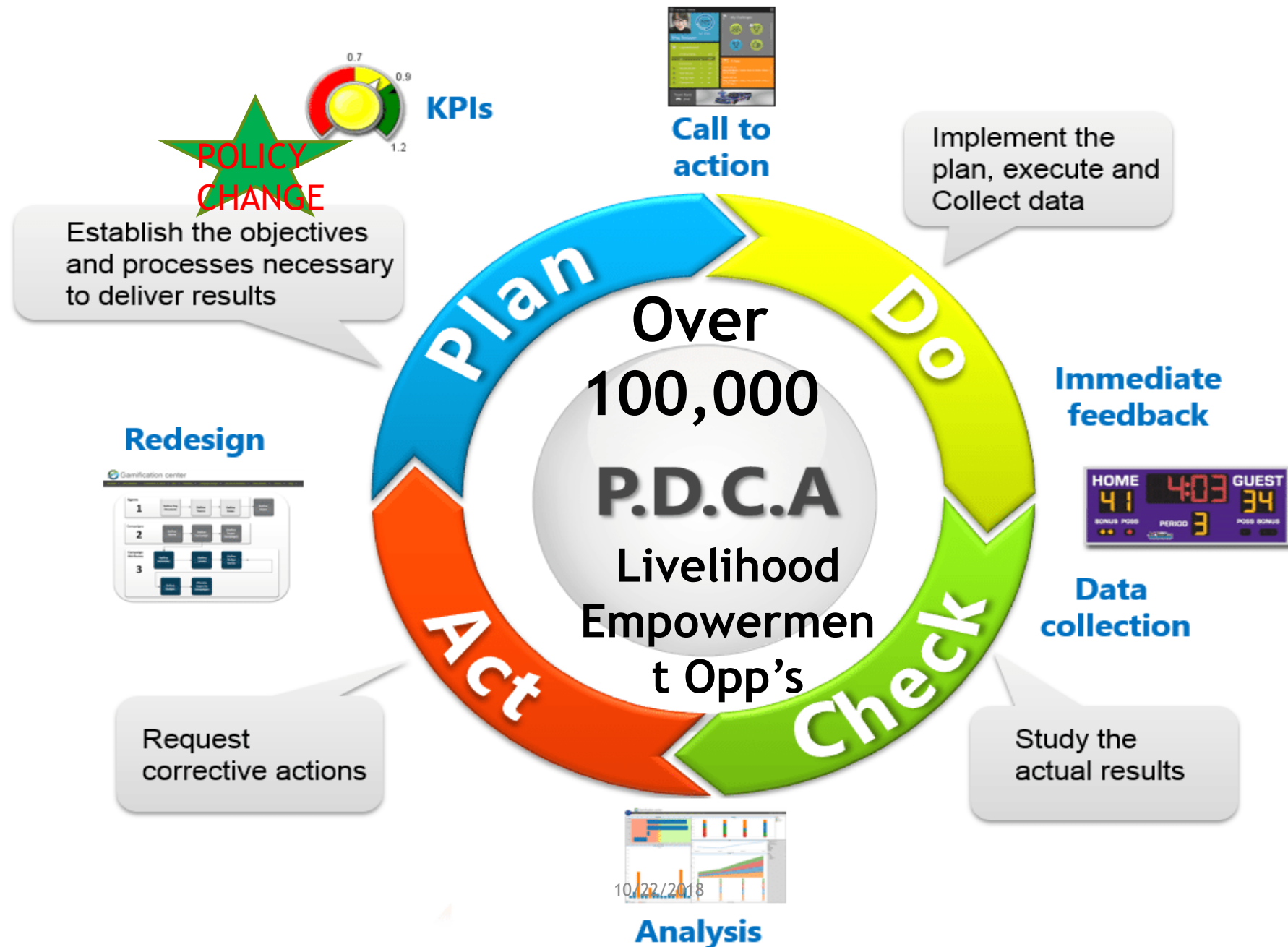


# THE BAG WHEEL

UNLOCK  
UNLEASH

THE  
LIVELIHOOD  
POTENTIAL

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# National Biogas Program - a humbe act of Policy Change

The SHIT MATH!



KEY RESOURCE AREA	Regional	Business Opportunity Potential (Nationwide)	Subtotal (No.)	Business Volume Potential (GHC)	BUSINESS VOLUME (GHC)	
No. of Target Districts	275					
Corporate Members SMEs per region (In direct construction)	10	2,750	2,750	100,000	275,000,000	
Teams Developed per Corporate Member	10				-	
Trained Artesans per team	3				-	
No. of Skilled/Semi-Skilled Artesans nation-wide		82,500			-	
Let each Corporate Member engage 2No. COW	2	5,500	88,000	12,000	66,000,000	
					-	
R&D Engagements	5	50	50	36,000	1,800,000	
					-	
Bio-fertiliser Sector (per District)	30	8,250	8,250	24,000	198,000,000	
					-	
Methanization Application (2No. Per District)	50	13,750	13,750	24,000	330,000,000	
					-	
Biogas-related accessories (5No. Per District)	5	1,375	1,375	24,000	33,000,000	
					-	
Spin-off (Health, Forestry, CDM, Building materials, Academia,etc, etc)					-	
Sustainable Business/Wealth Creation/Assured livelihood			114,175		903,800,000	20%
Annual Business Volume					4,519,000,000	100%
Per Capita benefit					7,916	

Agribiz

Curb deforestation

Clean Cook stoves

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# Assured Business & Livelihood Opportunities

- ✓ **Sanitation purposes** - Treating human and organic wastes
- ✓ **Energy purposes** - Utilising Biogas from bio-digesters as energy supplementation
- ✓ **Agricultural purposes** - Effluents used as soil enhancing materials for Crop production
- ✓ **Enhancing afforestation by encouraging tree planting**
- ✓ **Climate change mitigation**

WHY LOOK ANY FURTHER?

- THE JOB CREATION OPPORTUNITY IS RIGHT WITHIN!!!

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# A well-managed waste stream: - A Case for Sustainable Business Development and Employment Creation!

- ▶ Over 100,000 Start-up Livelihood Opportunities?
- ▶ Potential to Scale up Job/Business Opportunities 10X?
- ▶ Direct impact on SDG's?
- ▶ Direct impact on Access to ALTERNATE domestic energy/power?
- ▶ Direct impact on the health of Women and Children?
- ▶ Direct impact on our forest?
- ▶ Direct impact on Agri-Biz and food security?
- ▶ Direct impact on Climate Change Issues?

# About the Biogas Association of Ghana.

- ▶ Formed on the 27<sup>th</sup> July, 2016
- ▶ Spearheaded by the Ghana National Cleaner Production Centre (GNCPC) of EPA under the SWITCH AFRICA GREEN (SAG) Project
- ▶ It is the umbrella body of ALL Biogas and biomass technology practitioners in Ghana



Welcome to the

# BIOGAS ASSOCIATION of GHANA



Cleaning the Environment, Creating Sustainable  
Livelihoods Opportunities!

# Share in Our Vision

## Join Us, Visit Us, Sponsor a Good & Sustainable Course



Website: [Biogasassociationgh.org](http://Biogasassociationgh.org)

Facebook: [Biogasassociationgh.org](http://Biogasassociationgh.org)

Tweeter: [Biogasassociationgh.org](http://Biogasassociationgh.org)

WhatsApp:

# *The Beginning of a New Dawn is HERE!*

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