



AGENDA

WEBINAR

CBG from Napier Grass & Paddy Straw

20 Dec 2024

9 sessions (9:00 AM To 5:00 PM)

CBG from Napier Grass & Paddy Straw

AGENDA - OVERVIEW

TIME	THEME	EXPERTS
9:00 am to 9:15 am	Introduction & Status of CBG plants based on Napier Grass & Paddy Straw	Narasimhan Santhanam (EAI)
9:15 am to 9:30 am	Introduction of participants	Moderator from EAI
9:30 am to 9:50 am	Supply chain for paddy straw	Suhas Baxi (Biofuel Circle)
9:50 am to 10:10 am	Supply chain for Napier Grass	Shashi Hegde (Hycons)
10:10 am to 10:30 am	Q&A	Som Narayan (Moderator)
10:30 am to 10:50 am	Yields of CBG, Fertilizer & CO2	Sai Hivarkar (RED)
10:50 am to 11:10 am	Technologies & Solutions to improve CBG yields	Sankalp Pathak(GPS Renewables)
11:10 am to 11:30 am	Q&A	Moderator from EAI
11:30 am to 11:50 am	Special focus on pre-treatment of feedstock	Suresh Patil (Hycons)
11:50 am to 12:10 pm	Special focus on pre-treatment of feedstock	Atul Akolkar (Primov Engineering)
12:10 pm to 12:30 pm	Q&A	Narasimhan Santhanam (Moderator)
12:30 pm to 1:00 pm	Market development for CBG	Jay C Shiv (RED)
1:00 pm to 2:00 pm	LUNCH	
2:00 pm to 2:40 pm	Methanation and biogas generation	Joseph Vimal & Dr.Hans Friedmann (JF Biogas / FOV Biogas)
2:40 pm to 3:10 pm	Infrastructure required & costs	Srinivas Kasulla (Arka Brenstech Pvt Ltd)
3:10 pm to 3:30 pm	Q&A	Moderator
3:30 pm to 4:30 pm	Real life case study of operational CBG plant	Shankar Narayanan, Nagendran S & Kern Agarwal (SWMS & Carbon Loops)
4:30 pm to 5:00 pm	Q&A and final thoughts from EAI	Narasimhan Santhanam (EAI)

CBG from Napier Grass & Paddy Straw

INDUSTRY EXPERTS



Sankalp Pathak
GPS Renewables



Jay C. Shiv
REnergy Dynamics



Suhas Baxi
Biofuel Circle



Dr. Hans Friedmann
JF Biogas



Som Narayan
Carbon Masters



Atul Alokari
Primov Engineering



Srinivas Kasulla
Arka Brenstech



Joseph Vimal
JF Biogas



Sankar Narayanan
SWMS



Sai Hivarkar
REnergy Dynamics



Suresh Patil
Hycons



Shashi Hegde
Hycons



Kern Agrawal
Carbon Loops



Narasimhan Santhanam
EAI



Manohar Namasivayam
CLIXOO



Nagendran
ADBUTA CLEANTECH

CBG from Napier Grass & Paddy Straw

AGENDA

20 Dec: 9:00 am - 5 pm

Timing

Session Theme

EXPERTS

9:00 am - 9:15 am

Introduction

Introduction & Status of CBG plants based on Napier Grass & Paddy Straw

- SATAT overview & targets
- Prominent CBG plants in operation
- Feedstock used by operational plants
- Early trends from plants using paddy straw / napier grass

Narasimhan
Santhanam (EAI)

9:15 am - 9:30 am

Introduction to participants

9:30 am - 9:50 am

Supply Chain

Supply chain for Paddy Straw

- Determinants of yield
- Innovations that can increase yields
- Typical FOM / LFOM yields and their characteristics from Paddy Straw

Suhas Baxi
(Biofuel Circle)

9:50 am - 10:10 am

Supply chain for Napier Grass

- Sources of supply and stakeholders in the supply chain
- Optimal regions for setting up the plant
- Types of transport needed
- Types of storage needed
- Key challenges and risks in the supply chain

Shashi Hegde
(Hycons)

10:10 am - 10:30 am

Q&A

Moderator from EAI

10:30 am - 10:50 am

Yields and Technology

Yields of CBG, Fertilizer & CO₂ from Paddy straw / Napier grass based CBG

- Yields of CBG from Napier grass combined with food waste or cow dung / poultry waste
- Determinants of yield
- Innovations that can increase yields
- Typical FOM / LFOM yields and their characteristics from Napier Grass

Sai Hivarkar
(RED)

CBG from Napier Grass & Paddy Straw

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20 Dec: 9:00 am - 5 pm

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10:50 am - 11:10 am

Technologies & Solutions to improve CBG yields

- Innovations in pre-treatment
- Innovations in digestion
- Technology solutions for improved separation – membrane vs PSA
- Solutions to improve the digestate FOM & LFOM for fertilization applications

Sankalp Pathak
(GPS Renewables)

11:10 am - 11:30 am

Q&A

Som Narayan
(Moderator)

11:30 am - 12:10 pm

Stages & Feedstock

Special focus on pre-treatment of feedstock

- Overview of pre-treatment
- Types of pre-treatment for napier grass & paddy straw – mechanical, chemical, thermal, enzymatic
- Results from the current methods of pre-treatment
- Technologies needed for pre-treatment

Suresh Patil
(Hycons Pune)

Atul Akolkar
(Primov Engineering)

12:10 pm - 12:30 pm

Q&A

Narasimhan Santhanam
(Moderator)

12:30 pm - 1:00 pm

Market Development

Market development for CBG

- Current and future trends in the market
- Potential for off-take agreements
- Case studies of successful projects

Jay C Shiv
(RED)

1:00 pm - 2:00 pm

Lunch

CBG from Napier Grass & Paddy Straw

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20 Dec: 9:00 am - 5 pm

Timing

Session Theme

EXPERTS

2:00 pm - 2:40 pm

Methanation and biogas generation

Methanation and biogas generation in digester using Paddy straw / Napier Grass

- Pre-Treatment Methods
- Anaerobic Digestion Process
- Design of the Biogas Digester
- Biogas Production
- Challenges and Solutions
- Co-Digestion Opportunities

Joseph Vimal &
Dr.Hans Friedmann
(JF Biogas / FOV Biogas)

2:40 pm - 3:10 pm

Costs & Economics

Infrastructure required & costs for setting up and running the plant

Capital Costs

- Overview of pre-treatment
- Types of pre-treatment for napier grass & paddy straw – mechanical, chemical, thermal, enzymatic
- Results from the current methods of pre-treatment
- Technologies needed for pre-treatment

Operational Cost

- Power
- Labour
- Water
- Other consumables such as enzymes

Srinivas Kasulla
(Arka Brenstech Pvt Ltd)

3:10 pm - 3:30 pm

Q&A

Moderator

CBG from Napier Grass & Paddy Straw

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3:30 pm - 4:30 pm

Real life case studies

Real life case study of an operational CBG plant

- Plant Design and Technology
- CBG Production Capacity
- Infrastructure and Logistics
- Economic Aspects
- Environmental Impact
- Challenges Faced
- Solutions and Innovations

Shankar Narayanan,
Nagendran S &
Kern Agarwal
(SWMS & Carbon Loops)

4:30 pm - 5:00 pm

Q&A and final thoughts from EAI

Narasimhan Santhanam
(EAI)