

ASN Fuels Pvt Ltd



ASN Fuels Private Limited

an

Indomitable Technocrat Company

With great passion in converting

Agriculture Waste

Feedstock to useful

Energy!



Scientist Speaks:

“BioEthanol Production – No more a 24 x 7 Process....

...It is Smart Engineering Now!”





“Innovation through insight; Leading a collaborative era to facilitate any Nation towards freedom devoid of geopolitical clutches of the oil lobby.”

D M Giri
Founder & Chairman



“Unlocking the inherent potential of any agriculture dominant economy to produce Bioethanol from cluster based approach towards Agri-industry’s residual biomass and domestic crop residue.”

G V Sumanth
Co-founder & Managing Director

Key Promoter



India's Major Oil Giant Equity Investment partner

Key Collaborator



Industry-Academia Collaboration

About us

Over a decade ago, the will to address growing issues and concerns like converting agricultural waste to useful fuels (2G – Ethanol) , promoters have laid the foundation to ASN Fuels Private Limited. In this esteemed journey, the quest to comprehend the piling concerns like industrial process non-feasibility, logistic imbalance and economic non-viability came into light after having met the 2G – Ethanol entrepreneurs /academicians. Meanwhile Government of India has initiated the Biofuel policy with of achieving 20 % Ethanol blending targets with fossil based fuels. These industrial predicament situations and nation's environment concern fostered us to develop a sustainable economic balance technology which could be a turnkey solution to address fuel concerns of our nation.

At this juncture, the assimilation of thought to overcome the failures of existing technology was undertaken. The expedition is now directed towards meeting prominent people across the globe who are carrying out extensive research both at industry level and academic level. The information garnered helped us to evolve technology that could be a turnkey solution. The founders perseverance and collaborative approach resulted in a key technical collaboration with Indian Institute of Technology Tirupati which is one of the premium technological institute in India and developed a cutting edge technology to produce 2G Bioethanol which is feasible and economically more viable. Besides this, Founders travelled extensively across India with feed stock centric field survey, met many agri industry players and evolved an innovative cluster based approach methodology implying to plan the ethanol plants right in the middle of Agri processing industry clusters to address the logistical issues.

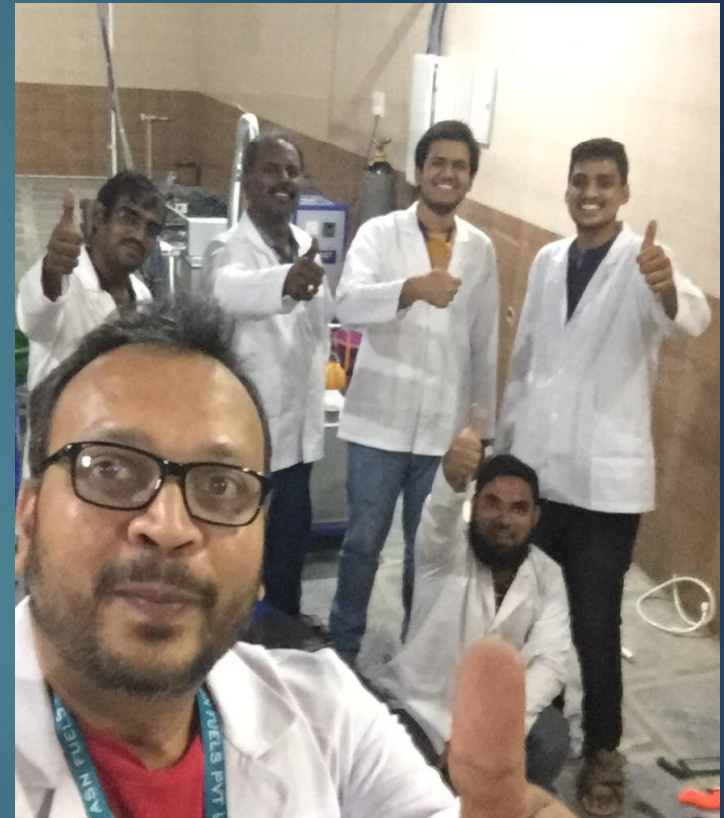
Further in the quest of fund raising , we presented our approach and methodology to Hindustan Petroleum Corporation Limited, a major oil giant organization in India. HPCL after careful scrutiny of our work readily accepted and picked up equity stakes enhancing our ability to achieve our innovative targets much earlier.

ASN - Research Team

A vehement passionate team mixed up with young and vast experienced people who really are dedicated and topped up with diversified expertise in both science and technological areas such as Process Design & Fabrication, Process Modelling, Process Optimization, Structural Design, Microbiology, Machine Design, Process Integration, Process Retrofitting & Refurbishment etc.,

It has been a great practice of ASN to nurture research and development in the field of science and technology and to foster the ideas that are generated in the ignited minds of team members.

We as a group ardently strive hard to work and develop eco-friendly technologies that could convert agricultural waste feed stock to useful energy. A major prominence is given to provide turnkey solutions that could meet the needs and requirements of clients.

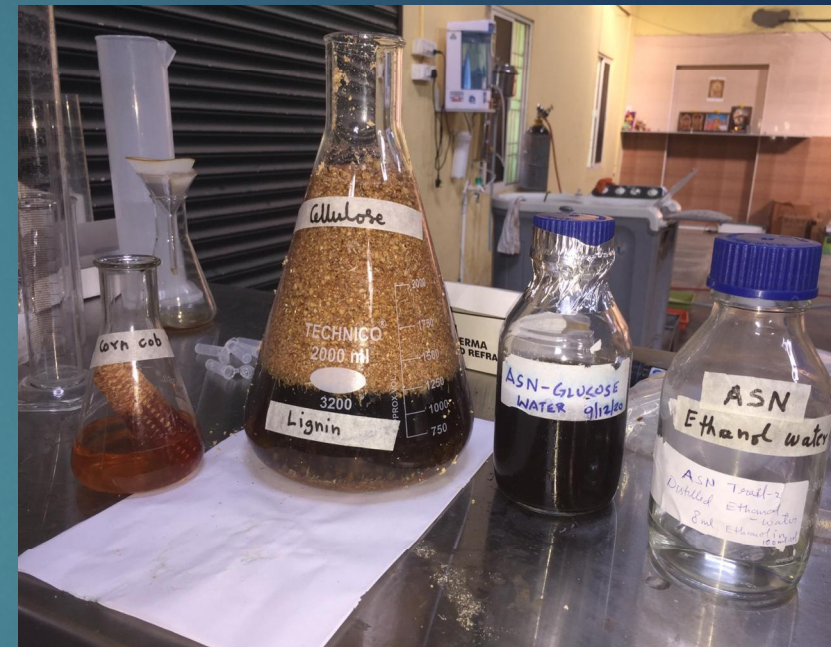


ASN - Research & Development Activities

ASN R & D centre is one of the concrete platform that always fosters to express and transform ideas from on paper illustration to hands on studies from bench scale level to pilot plant level. This really gives us a pathway to perceive greater insights of the process and helps in spanning the technology that could meet the needs and demands of futuristic aspects.

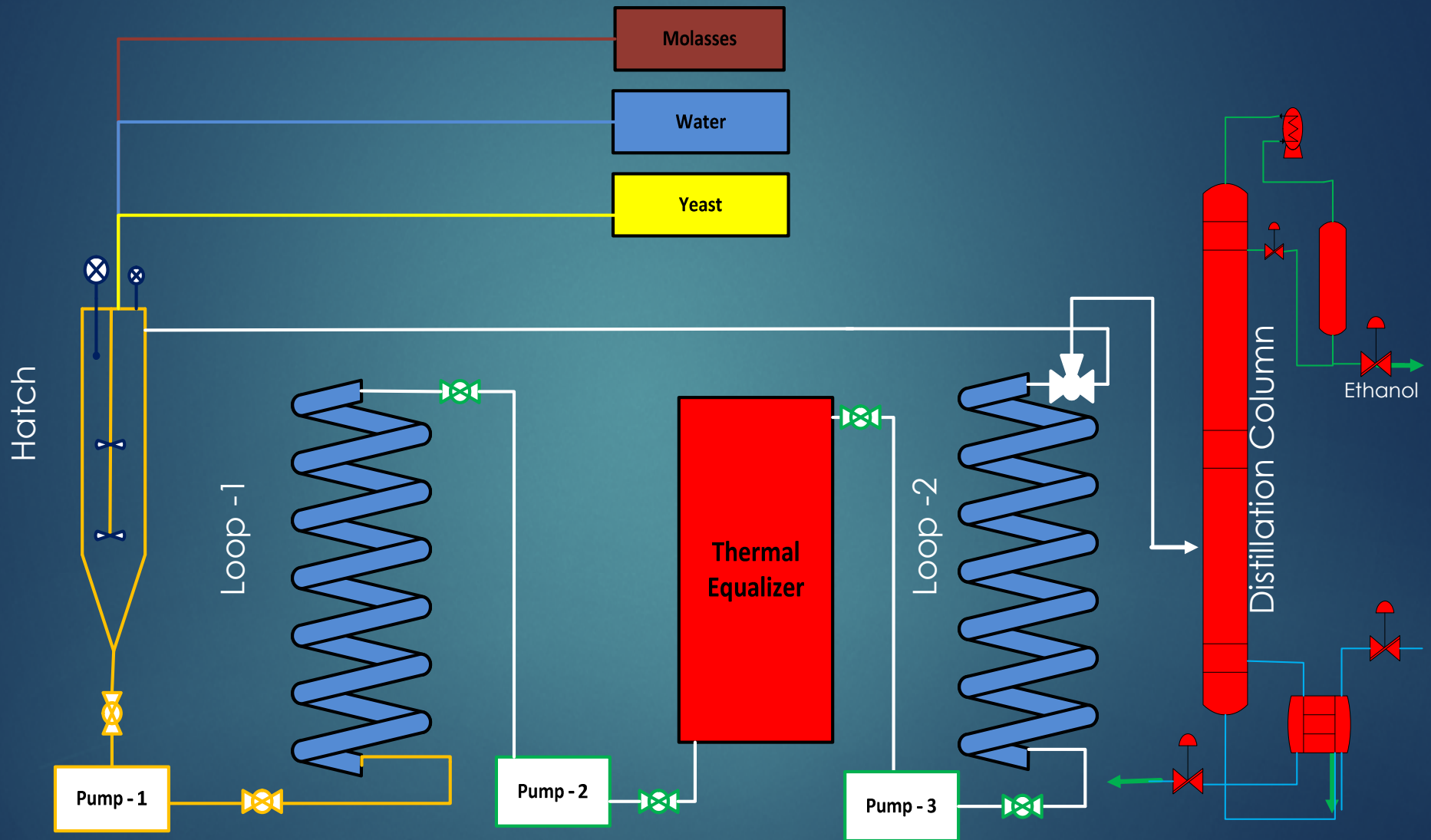
We do carry out extensive studies about the past and present existing research and try to implement State of the Art methodology which could help us ameliorate the technological barriers both on lab scale and pilot scale.

We are fascinated enough to manoeuvre our ideas in developing In-House Technology that could lead us designing some of the equipment which are independent of third party source. One such is ASN – SUPATSU, a state of art prefermenter. This clearly marks ASN as the quintessence of Biofuel technology



ASN – Loop Reactor Technology: Molasses to Ethanol

5



Why ASN – Loop Reactor Technology?

6

ASN R & D centre is successful in developing strategically the loop reactor technology to ferment variety of feedstocks to Bioethanol. It has got a strategy to provide value added solutions for most of the fermentation processes. It will definitely be a turnkey solution in various aspects of the process concerned. The salient features of this technology can be listed in various ways in comparison to existing conventional technology.

Conventional Processes

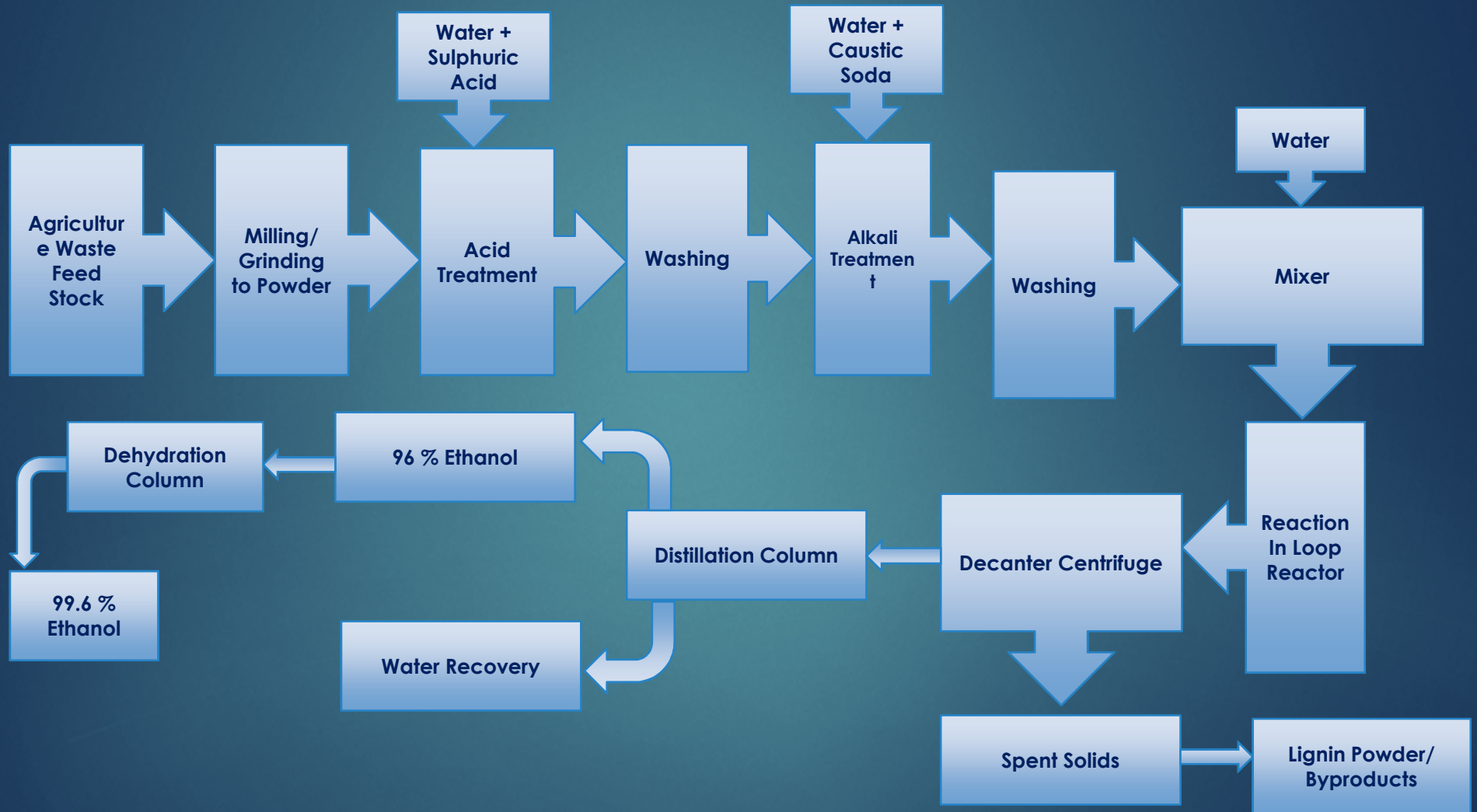
- Process Complexity (Man Power is High & Difficulty in maintaining shift operations)
- Difficult in achieving Process Feasibility
- 4 – 5 acres of land availability is required to commission 50 KLPD Plant.
- Present Opex is about Rs. 35-40 per litre
- Capex investment is high
- High environmental hazardous effluents

ASN Strategy

- Simplified Process (Less Man Power and Easy Shift Operations)
- Easy to make Process and more feasible
- 30 – 40 % of reduction in foot print.
- Opex can be reduced by 20 – 30 %
- Capex can be reduced by 30 - 35 %
- Hazardless and ZLPD Optimised Plant can be a reality

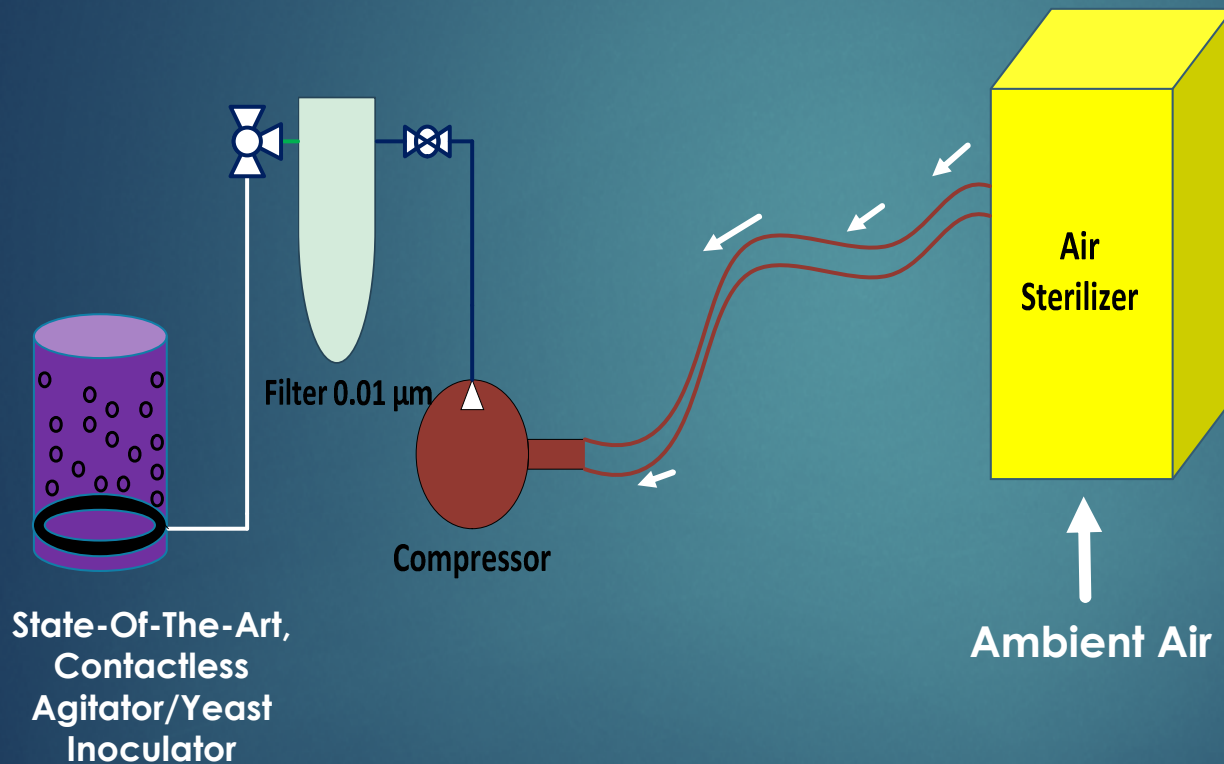
ASN - Process Flow Diagram For Ethanol Production

7



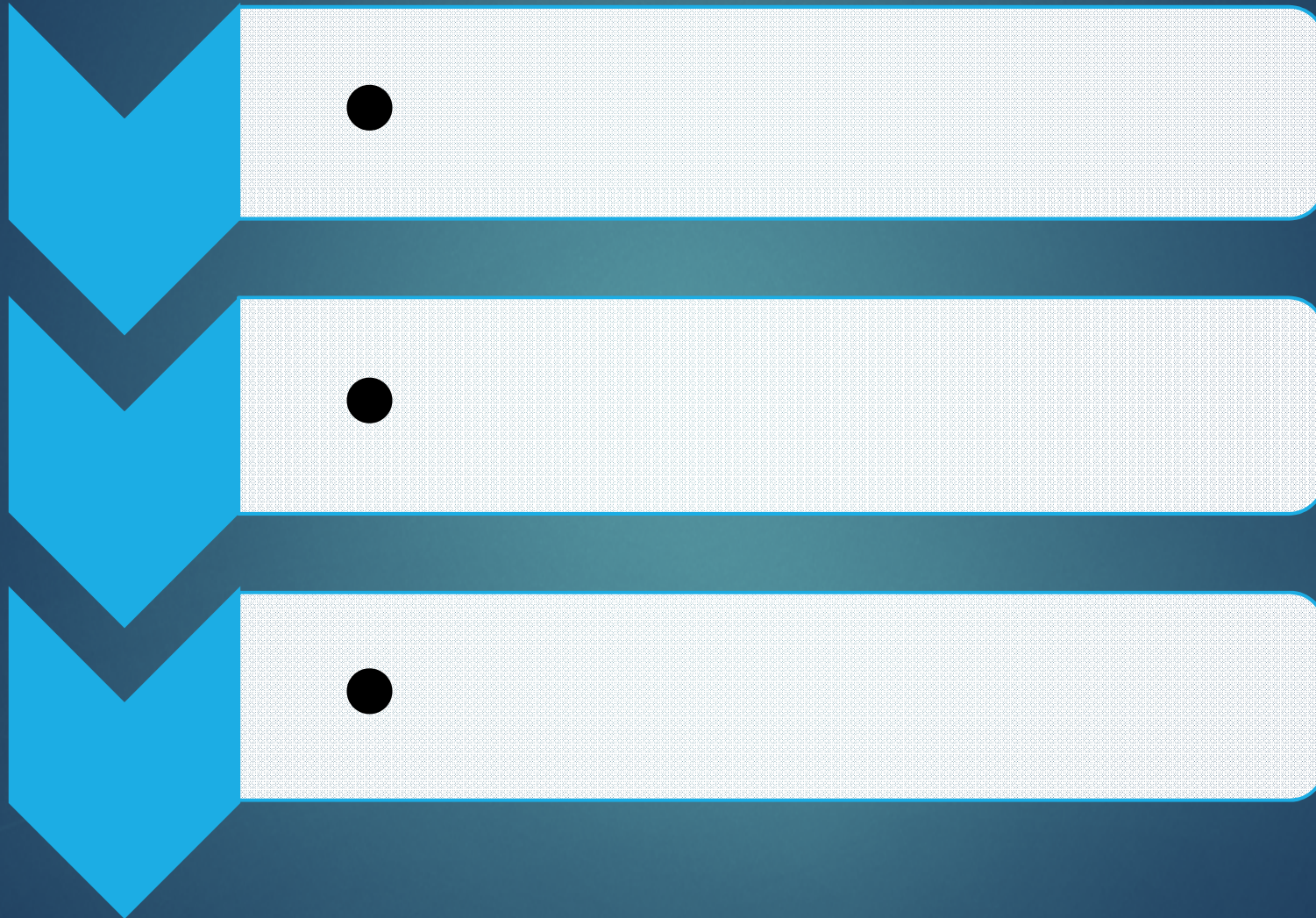
ASN – SUPATSU For Pre-Fermentation

8



- Developed In-House using state of art methodology at ASN Fuels R & D Centre.
- Tested and applied for fermentable sugar reactions.
- Stands out with feasible results that could match with any existing fermentation technology
- It is easy to establish and operate and has greater advantage in the reduction of cost by 50 % in comparison to modern existing pre fermentation technology.

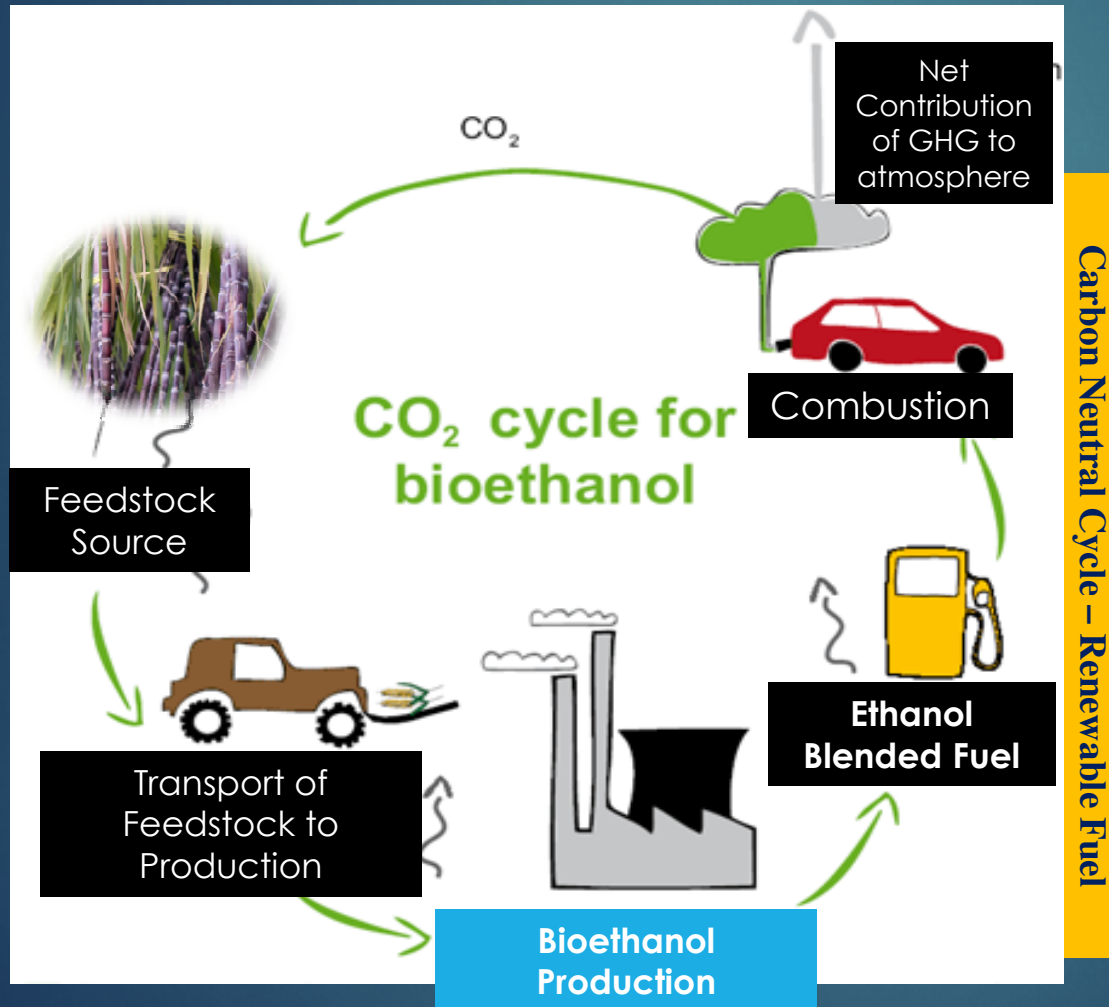
Discussion Sheet:



Three horizontal white bars with rounded ends, each preceded by a blue arrowhead pointing right. Each bar contains a black dot at its starting point, indicating a space for a bullet point.

-
-
-

How BioEthanol Leads to Sustainable CO₂ in Atmosphere?



Contact

Corporate Office: ASN Fuels Pvt Ltd

#18, 2nd Floor,
KHB Main Road,
Adarshnagar,
Sultanpalya, RT Nagar,
Bangalore – 560032
Karnataka

ASN R & D Centre

E9, Industrial Estate,
APIIC – Tirupati,
Chittoor – 517506
Andhra Pradesh

Email: ceo@asnfuels.com
Mobile No: +91-8073873401
www.asnfuels.com