

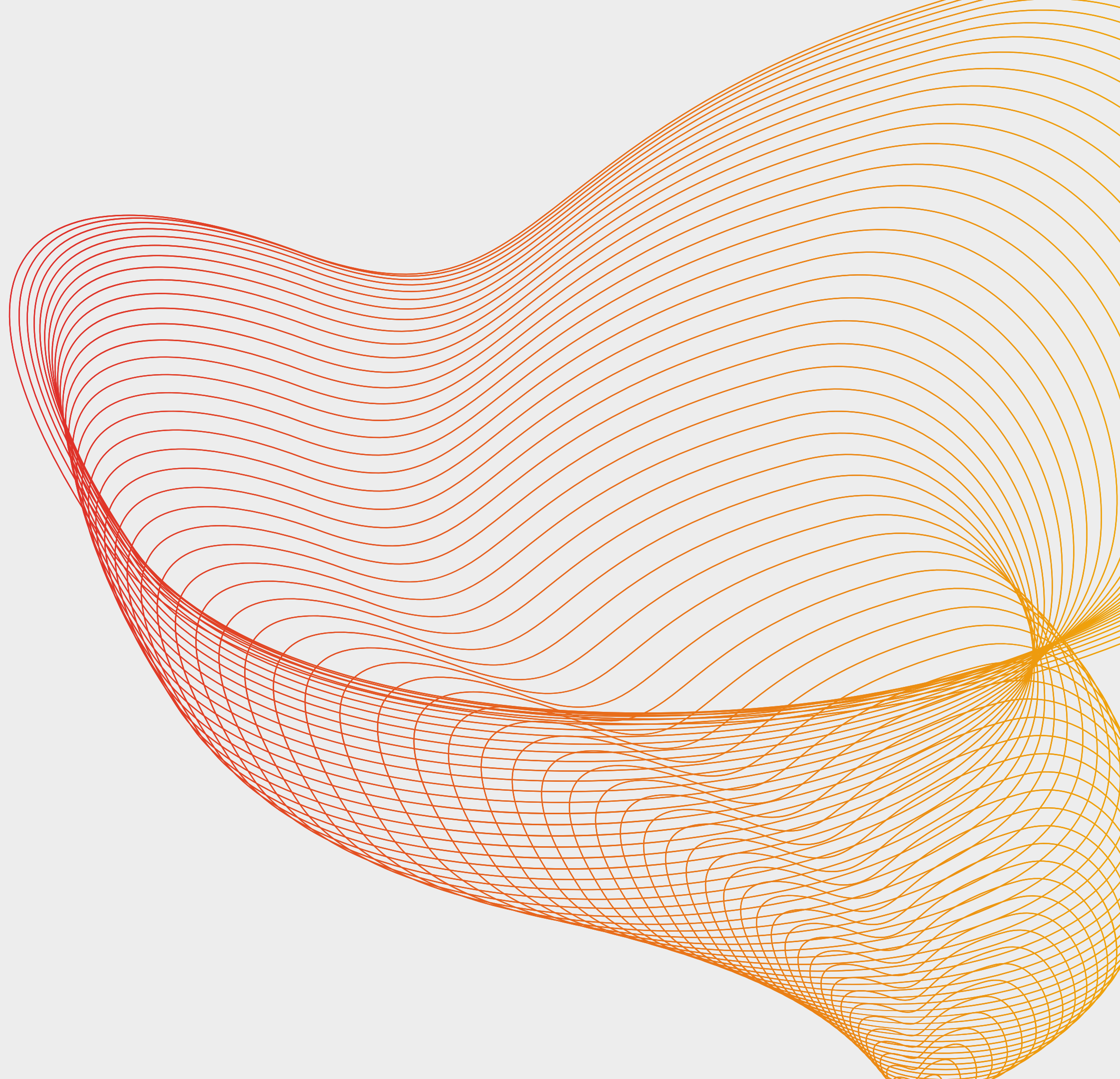
Manifesting Perpetual Energy ...



ETHANOL / BIOFUELS / RENEWABLES

January 2025

www.covalent.co.in



Contents



- Sustainable Development Goals
- Global Energy Crisis
- Challenges in Biofuels & Renewables
- Covalent Vision
- About Covalent
- Ethanol Process
- Events & Updates



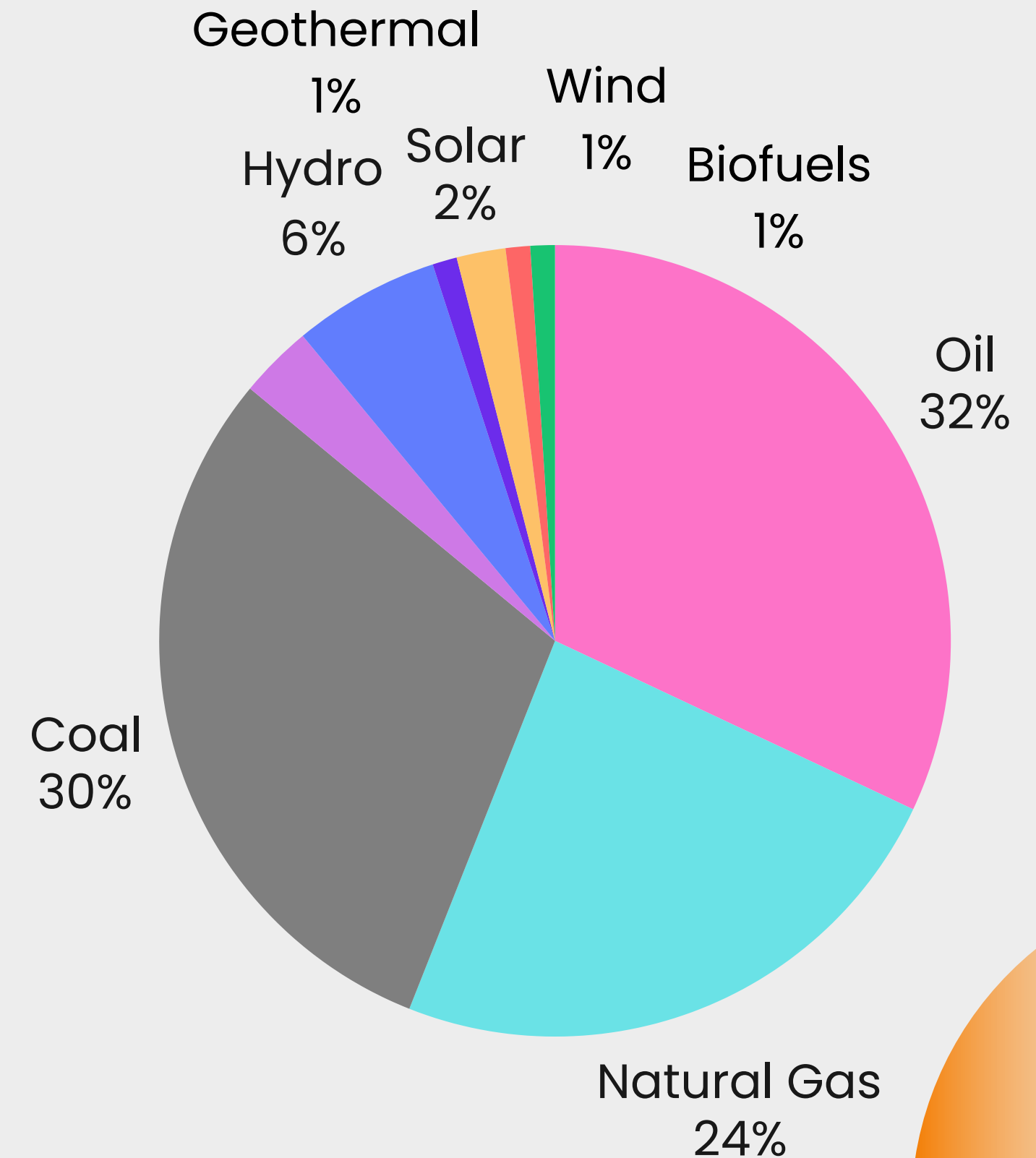
Development Goals of Mankind

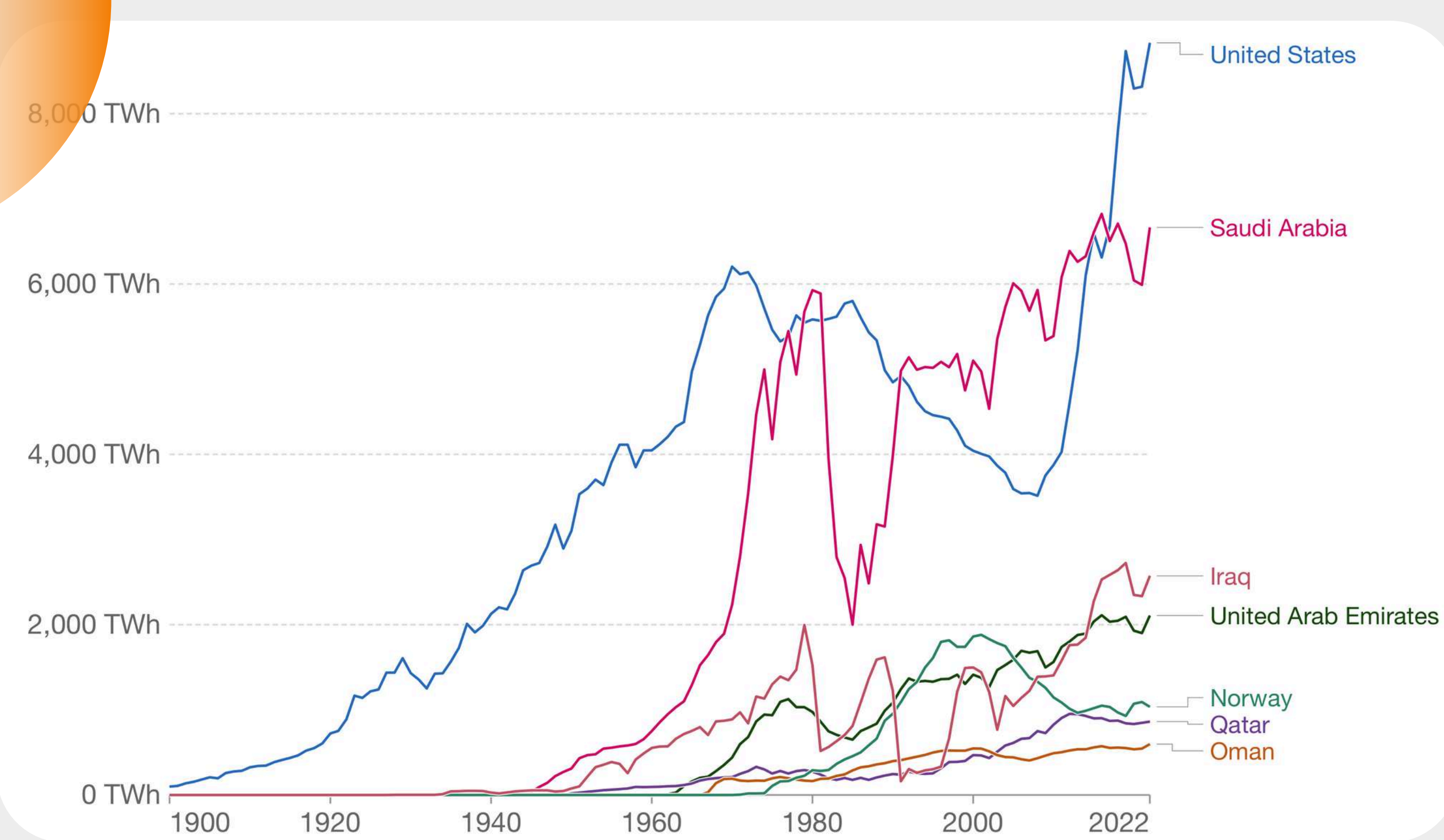


To achieve sustainable development goals, human being totally depends on Energy.

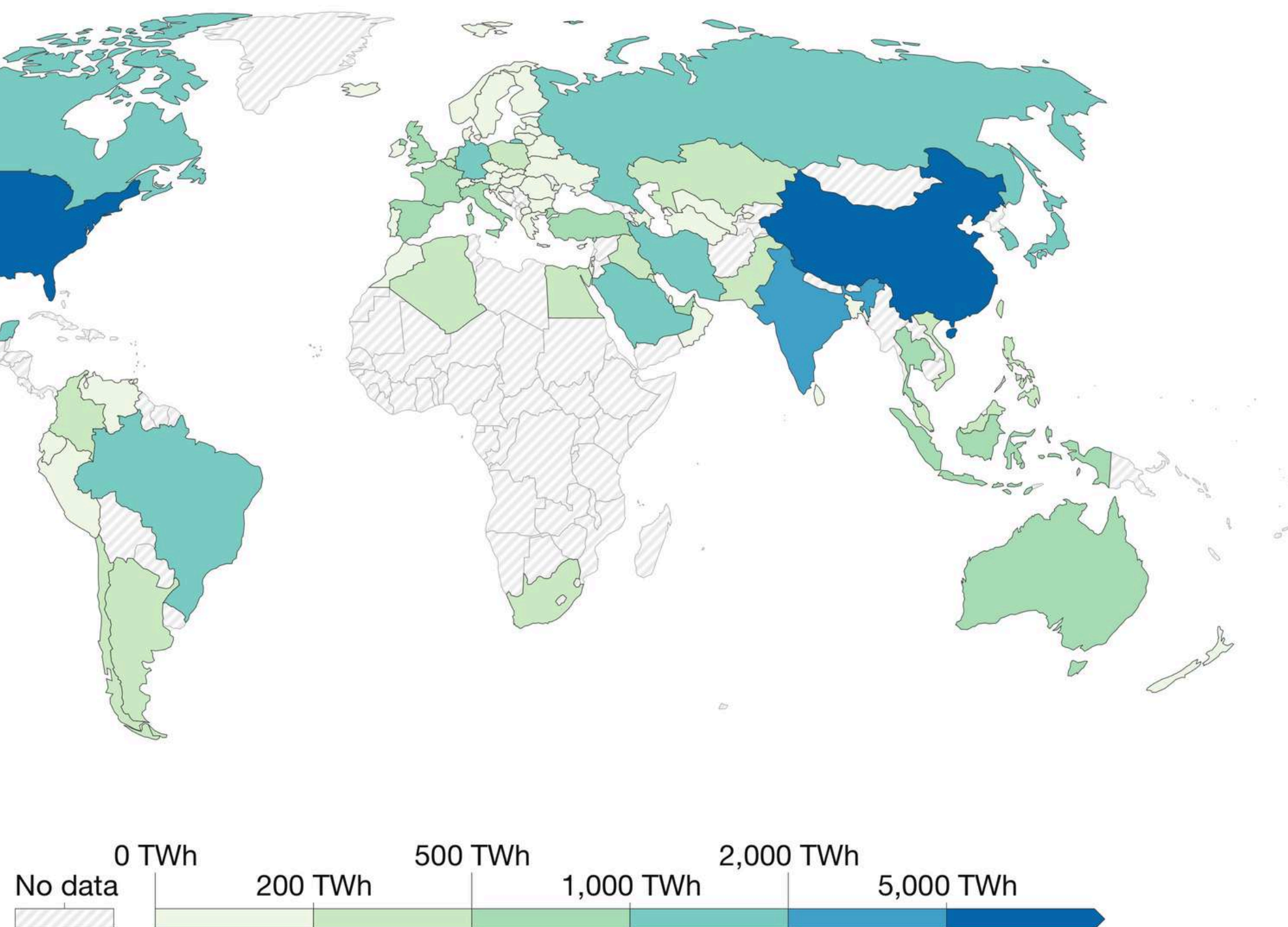
Global Energy Source Pattern

- Non Renewable / Fossil – **89%**
- Renewable Energy – **11%**
- For the sake of development, there is an irreversible harm caused to the environment & ecology.
- Exploitation of mother earth .

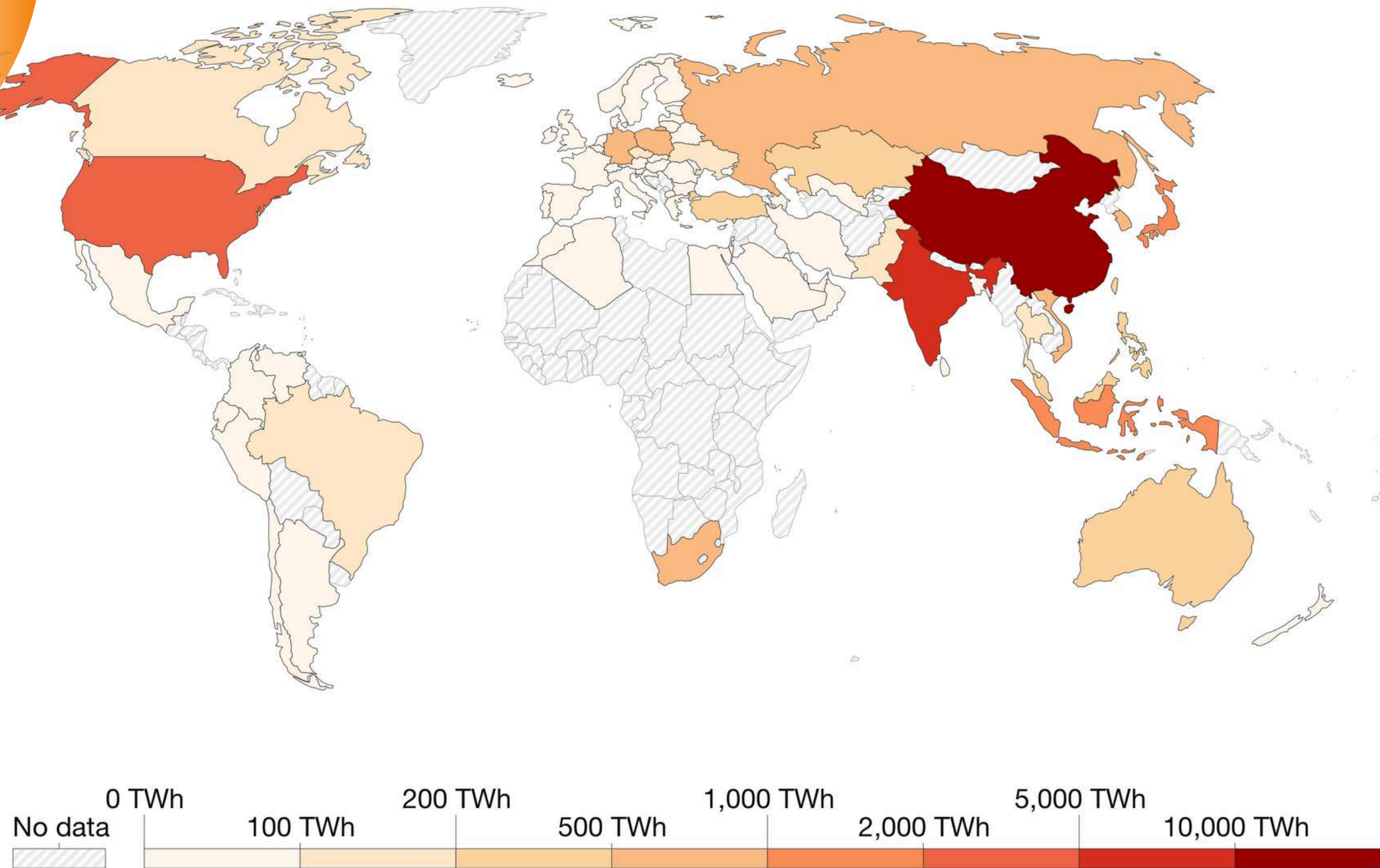




World Oil Production



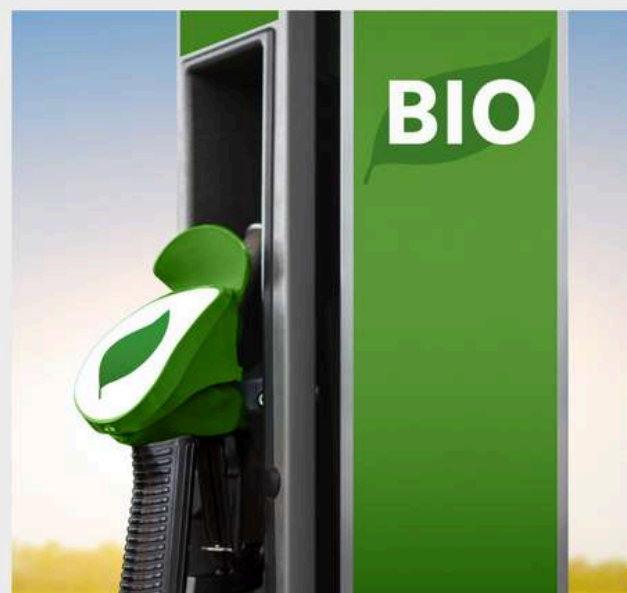
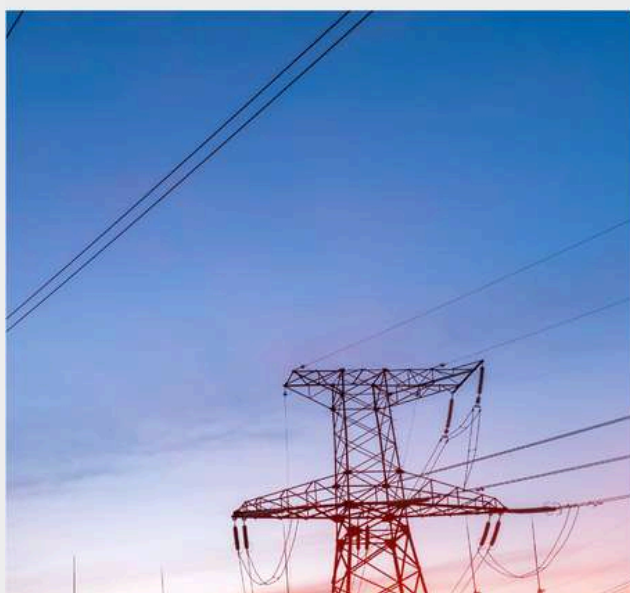
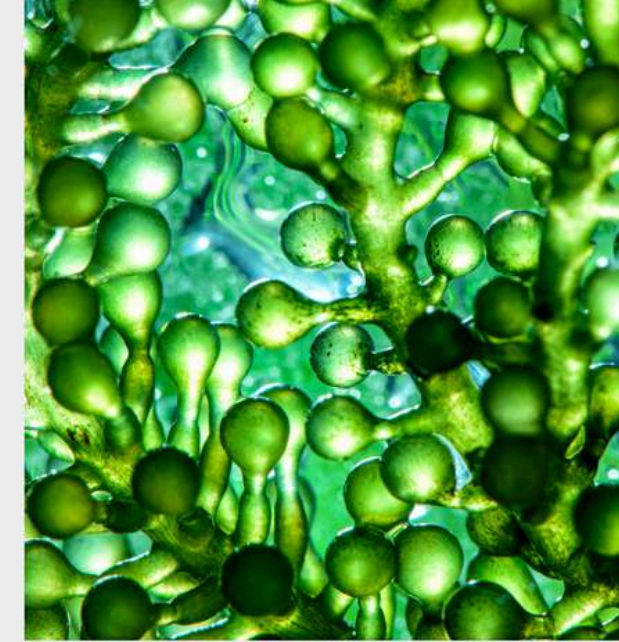
Oil Consumption



Coal Consumption

No data 0% 20% 40% 60% 80% 100%

Fossil Fuel Electricity



Biofuels & Renewables

We have plenty of energy alternatives which can minimise and finally replace non-renewable fossil fuel.

Launch of Global Biofuels Alliance



India to ramp up biofuel production capacity and committed to contribute 25% of global energy demand by 2040.

Global Biofuels Alliance

Challenges



- Feedstock availability
- Project Viability
- Logistics & Supply Chain
- Cost of Installation
- Segregation, classification
- Processing Cost
- Technology & Evolution
- Effluent Treatment
- Impact on Environment
- Government Policy
- Concept Selling, Education



IS IT REALLY GREEN ?



Covalent Vision

To develop green, sustainable, futuristic technologies and establish harmony with existence while implementing biofuels & renewable energy projects to achieve energy self sufficiency for our nation.

A portrait of Dr. Sandeep Narayan Chichbankar, a man with a dark beard and hair, wearing a grey suit, white shirt, and maroon tie. He is standing with his hands clasped in front of him. The background of the portrait features a series of concentric, wavy orange lines that create a sense of motion and depth.

Dr. Sandeep Narayan Chichbankar
Chairman & MD

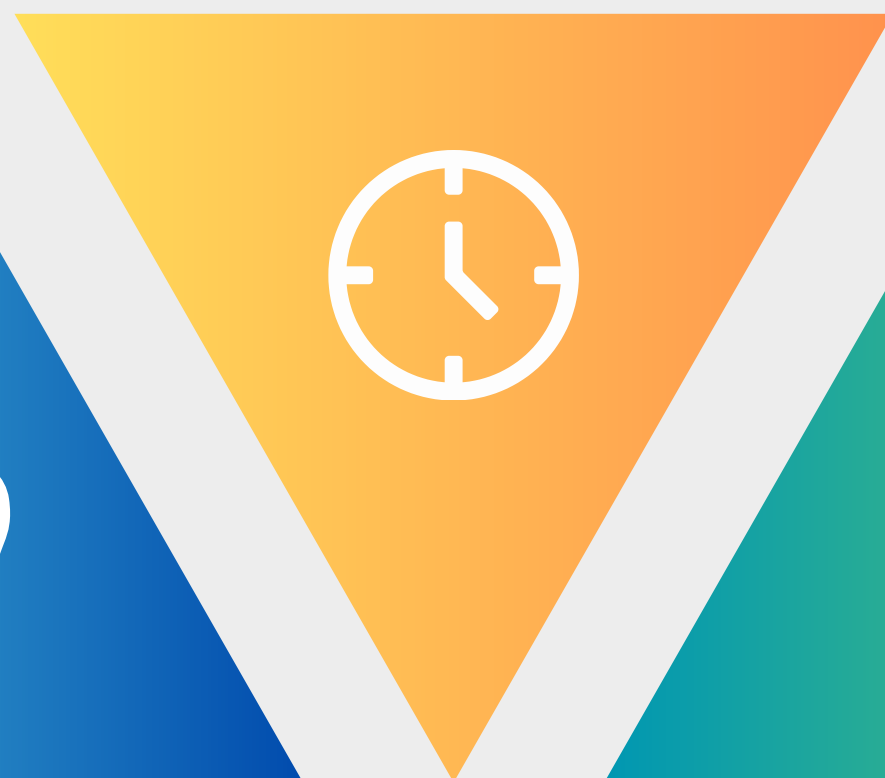
Solution Philosophy

FUTURISTIC

HOLISTIC



**CIRCULAR
ECONOMY**



**SUSTAINABLE
ENVIRONMENTAL**



**EVER
EVOLVING**

About Us

- Established in 2010, Covalent is a group of spirited technocrats driven with a passion for Alternative Energy Sources.
- Expertise in Engineering, Procurement and Construction of Ethanol, Biofuels & Renewable Energy Projects.
- A trustworthy company with highest regards for ethics, professionalism, quality and commitment.
- Serving humanity and the nation with our service.



Pune HO :

25-26, Fly View, Warje Fly Over,
Above Bank of Maharashtra,
Warje, Pune - 411 058 INDIA

Nagpur :

4th Floor, Gupta Tower,
Science College Road, Civil Lines
Nagpur - 440 001 INDIA

Factory 1 :

202, Sector 7, PCNDTA, MIDC Bhosari,
Pune - 411 026 INDIA

Factory 2 :

90/A, Sector 10, PCNDTA, MIDC Bhosari,
Pune - 411 026 INDIA

Covalent Board

- Industry experts with average experience of more than 30 years and execution of 100+ Turnkey Projects.
- Dedicated team of 50+ Engineers and 150+ Skilled Manpower to accomplish any task.



Dr. Sukhbir
Puri



Dr. Sandeep
Narayan



Nitin
Shinde



Subramanyam
Naidu



Rashmi
Chichbankar

Agenda



01

Technology

Sustainable Green
Technology
Innovations

02

Self Sufficiency

Energy Self Sufficiency
For The Nation

03

No Fossils

Reduction in Use of
Fossil Fuels &
Reduction in Oil Import

04

Opportunities

Rural Opportunity
Generation & Farmer's
Prosperity

05

Employment

Generating
Employment Avenues

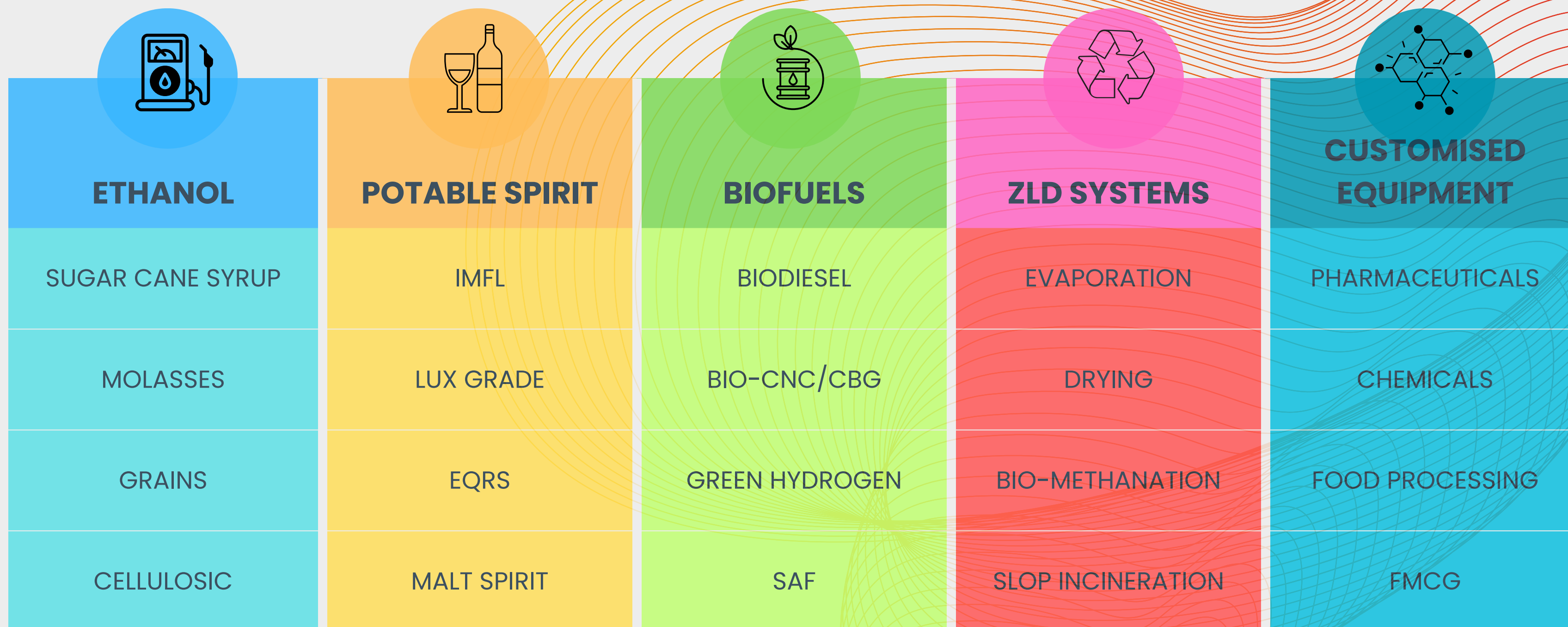
06

Ultimate Aim

"**Aatmanirbhar
Bharat**" in True Sense



Business Verticals



Services



01

TURNKEY

End to End
Scope of Work
Single Point
Guarantee



02

DESIGN ENGINEERING

Latest Design Tools
for Chemical,
Mechanical, Civil,
Structure, E & I



03

PROJECT MANAGEMENT

Timely Execution
Quality
Project Budget



04

RESEARCH

New Feedstocks
Effluent Treatment
Yield & Recoveries
Process Efficiency



05

MANUFACTURING

World Class
Equipment
International Codes
& Standards



Maximum Efficiency

High purity biofuel production with highest yields.



Minimum Utilities Consumption

Energy efficient processes to reduce cost of production



Zero Effluent Discharge

Reduce, Recycle and Reuse for Zero Effluent Discharge

PATENTED TECHNOLOGIES



Amino Acids &
Micronutrients

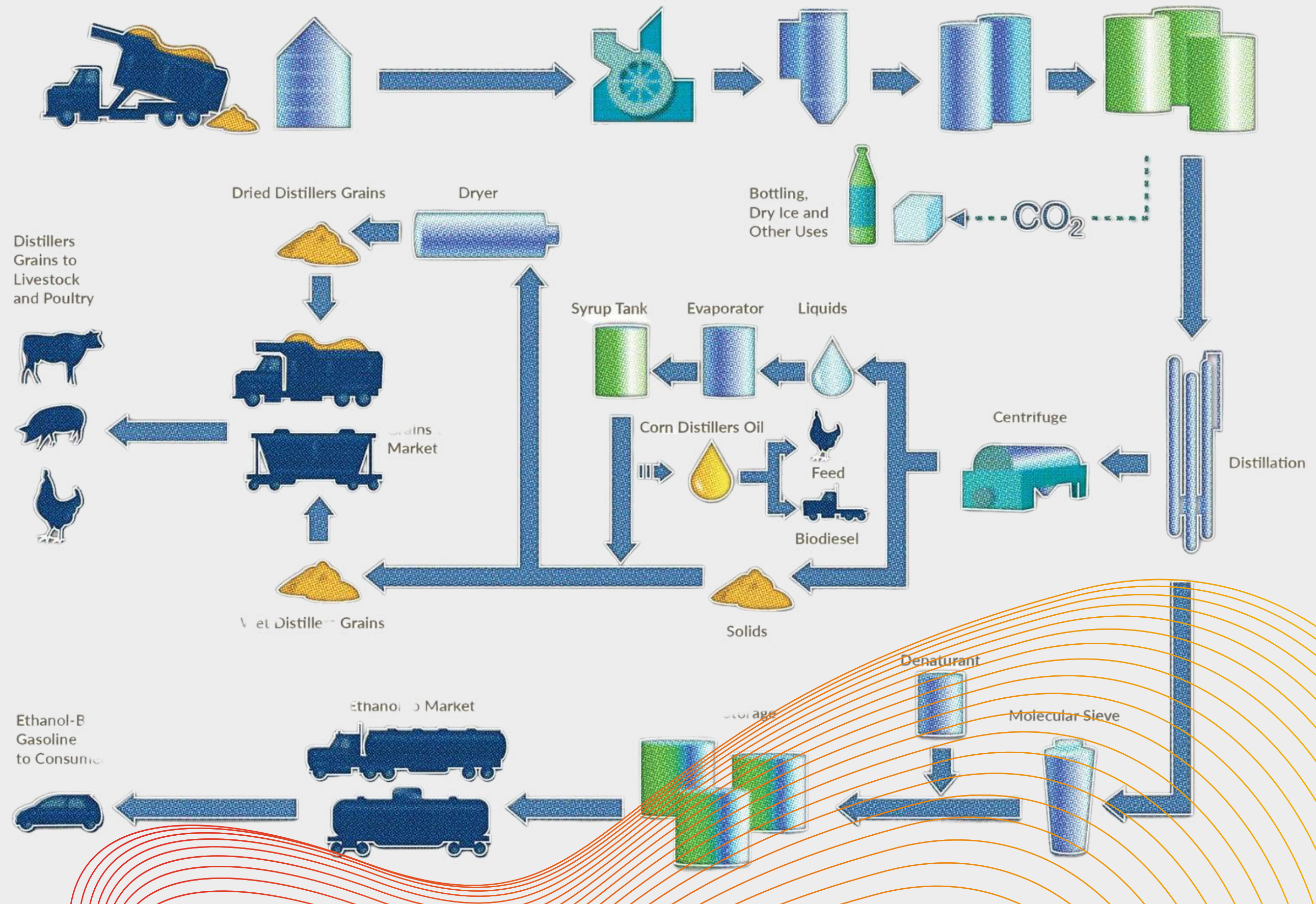


Sugar Polymers
& Healthcare



Distillation for
Biofuel Refining

Ethanol Process





End to End Approach



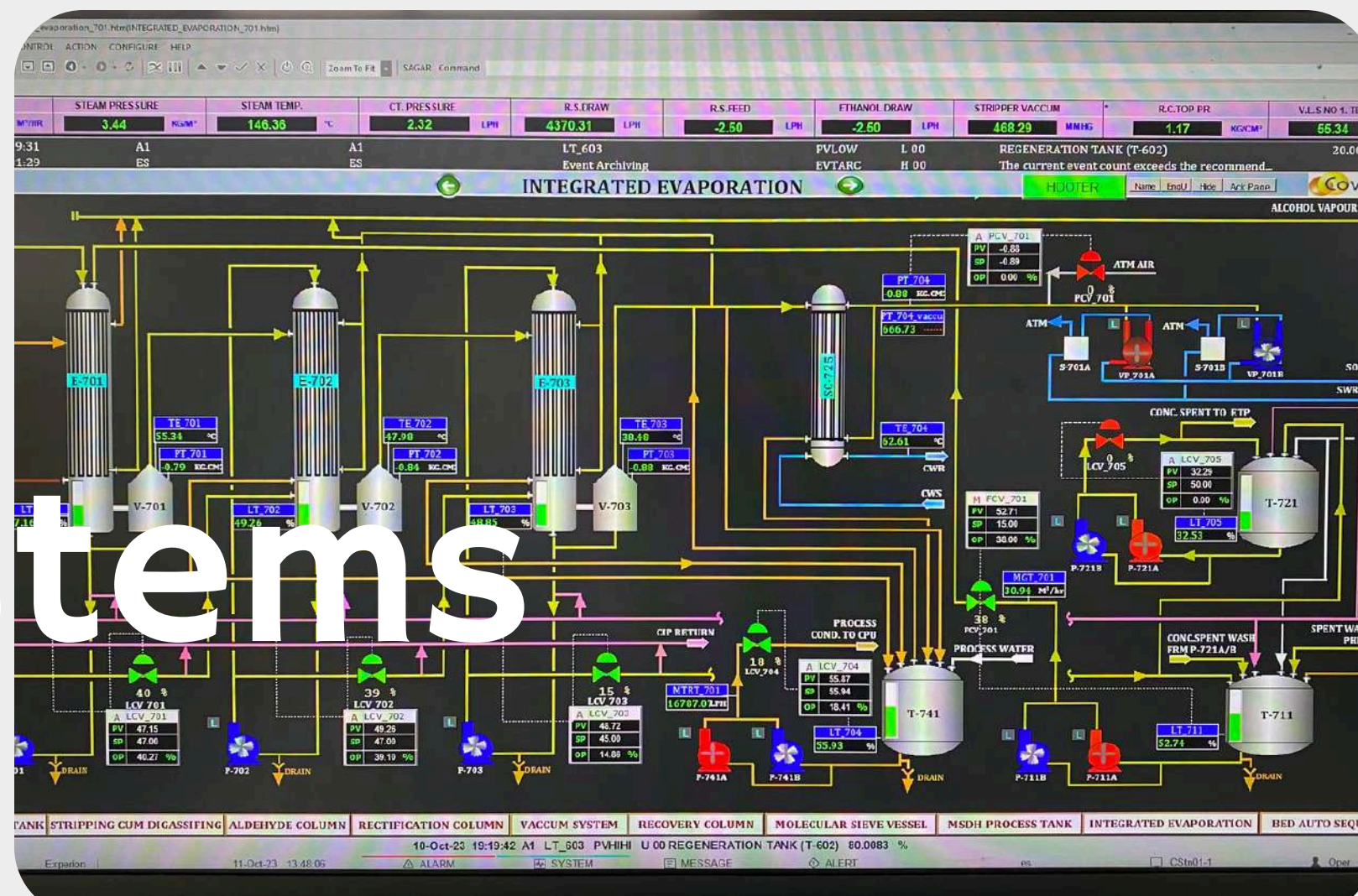
Varied Feedstocks

Hydrolysis & Fermentation

Distillation RS/ENA



MSDH Fuel/Pharma Ethanol



Customised Equipment

Manufacturing

Co-gnize
INNOVATION
CENTRE

Research & Development

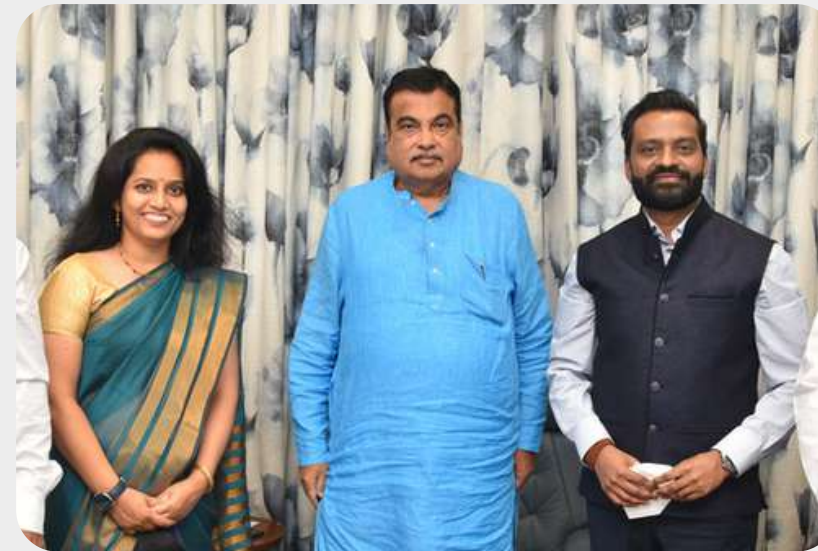
Events



Manas Agro



CEO Review



Green Crude Foundation



IOCL Biofuel R & D



Industry Outlook



CIAN 400 KL Grain



Phibro USA



Indian Sugar Giants



BPCL Biofuel Division



Launch of Flex Fuel Car

Updates



120 KLPD Syrup Ethanol



400 KLPD Grain Ethanol



140 KLPD Grain Ethanol



70 KL Pharma



110 KLPD Molasses Ethanol



Pharma Reactors



2000 m³/day
ZLD System Export



Africa - 60 KLPD Dual
Feed ENA/AA



100 KLPD Dual Feed
Fuel/Pharma Ethanol

Proven Track Record



100+ Happy Customers

34 Molasses Distilleries

16 Grain Distilleries

41 Ethanol MSDH Plants

22 ENA Distillation

43 Evaporation Plants

32 DDGS Dryer

18 Customised Equipment



Worldwide Representation

Thank You !

Get in touch with us for fascinating opportunities ...

Covalent Projects & Engineering Pvt. Ltd.



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Fly View, Warje, Pune INDIA (411 058)

