



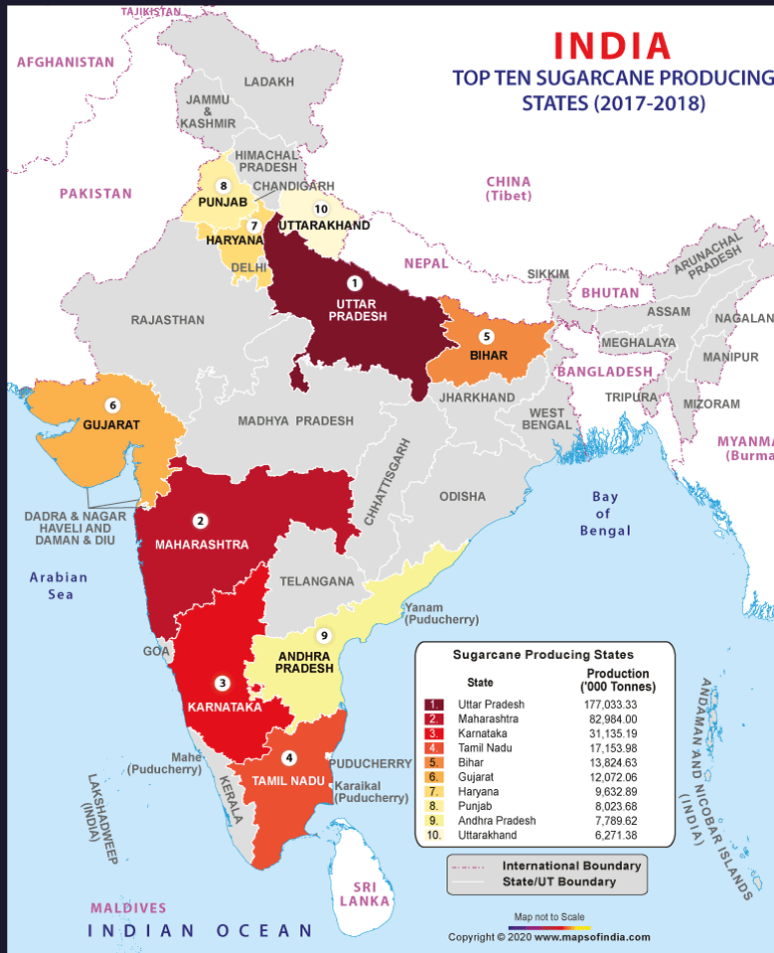
BIOMASS SUPPLY CHAIN MANAGEMENT

MITIGATING CHALLENGES



AGENDA

- CHALLENGES
- **RECOMMENDATIONS**
- Q&A



PM MAKES FIVE PLEDGES

- 1** India will increase its non-fossil energy capacity to 500GW by 2030

- 2** India will meet 50% of its energy requirements from renewable energy by 2030

- 3** India will reduce the total projected carbon emissions by one billion tonnes from now to 2030

- 4** By 2030, India will reduce the carbon intensity of its economy by 45% (from a previous target of 35%)

- 5** By 2070, India will achieve the target of net zero

Budget 2022 Ministry-wise allocation (In rupees)

Defence	[Redacted]
Consumer Affairs, Food & Public Distribution	217.7K
Road Transport & Highways	199.1K
Home Affairs	185.8K
Railways	140.4K
Rural Development	138.2K
Agriculture	132.5K
Chemicals & Fertilisers	107.7K
Communications	105.4K

TOI Source: Ministry of finance

Introduction

- COST OF ENERGY IS RISING
- COAL WILL NEVER BE THE SAME AGAIN
- INDIAN ECONOMY FOCUS ON RURAL SECTOR
- ENERGY TRANSITION MUST TOWARDS NETZERO 2070
- ENERGY MIX IS UNDEFINED

CHALLENGES

ENERGY TRANSITION ROADMAP

MACRO



INTER-MINISTERIAL APEX BODY



COMMAND ZONING



FINANCING SCHEMES



EASE OF DOING BUSINESS



CONTRIBUTIONS FROM STATES



FARMER AS STAKEHOLDER

MICRO

- AWARENESS : STUBBLE BURNING
- **ENTERPRENUERIAL ENABLERS : POLICY, PEOPLE, PRODUCTS**
- LAND & EQUIPMENT : HOLDINGS & PROJECT SCM
- **FINANCE : INTEREST & CREDIT RATINGS**
- R&D AND TECH INNOVATION

“The way to get started is to quit talking and begin doing”

- Walt Disney

SCALES ARE LARGE

GAPS ARE LARGE

CHALLENGES ARE LARGE

JUST OUR

MINDSET HAS TO ENLARGE



RECOMMENDATIONS

PPPP-MODEL WITH EFFECTIVE FWO

MACRO

- APEX CONTROL TILL STATES
- ENERGY TRANSITION ROADMAP FOR NETZERO 2070 WITH ZONING
- MERGE FINANCIAL SCHEMES TO COVER COMPLETE VALUE CHAIN
- STATE-SPONSORED / CENTRE-MONITORED PILOT PROJECTS
- PROFIT SHARING WITH FARMERS / VILLAGES (PPPP-MODEL)
- MONITOR UPSTREAM INVESTMENTS & VALUATIONS

MICRO

- EDUCATION
- SKILL DEVELOPMENT
- FARMER FINANCING BASED ON PAYMENT CYCLES
- PROJECT APPROVAL PROCESS WITH VALIDATED SCM
- TAKE-OR-PAY MODELS FOR SCM
- DIRECT BENEFIT FOR FARMERS

MINOR

- OWN LAND FOR DIRECT AGGREGATION : PROJECT COST
- INTEGRATED LOGISTICS
- BAGGASSE LONG-TERM PRIVATE PRODUCERS / AGRI-WASTE CONTRACTS
- PLANTATION & BYPRODUCT COMMERCIALISATION FOR COST SUBSIDISING
- EXCLUSIVITY FOR SCM PARTNERSHIPS FOR PROJECTS WHILE DIGITAL PORTALS FOR SMALL-SCALE PROJECTS



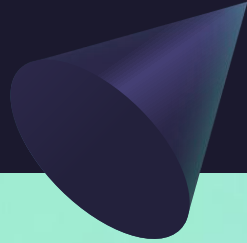
● EACH PROJECT / PLANT MUST HAVE **DIRECT FARMER CONNECT**, WITH **OWNERSHIP** OF THE PROJECT AS WELL AS THE FEEDSTOCK, WITH **CONTROL OVER LOGISTICS** INCLUDING TRANSPORTATION & WAREHOUSING AND WITH EFFECTIVE COST-SUBSIDISING THROUGH **COMMERCIALISATION OF BYPRODUCTS** OF THE PROCESS AND **GLOBAL STANDARD OF DELIVERANCES** INCLUDING ESG

Summary

DEFINED BIO-ENERGY ROADMAP

LOOK FORWARD TO YOUR QUERIES

Thank You



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