KOCHI METRO

TOWARDS SUSTAINABILITY

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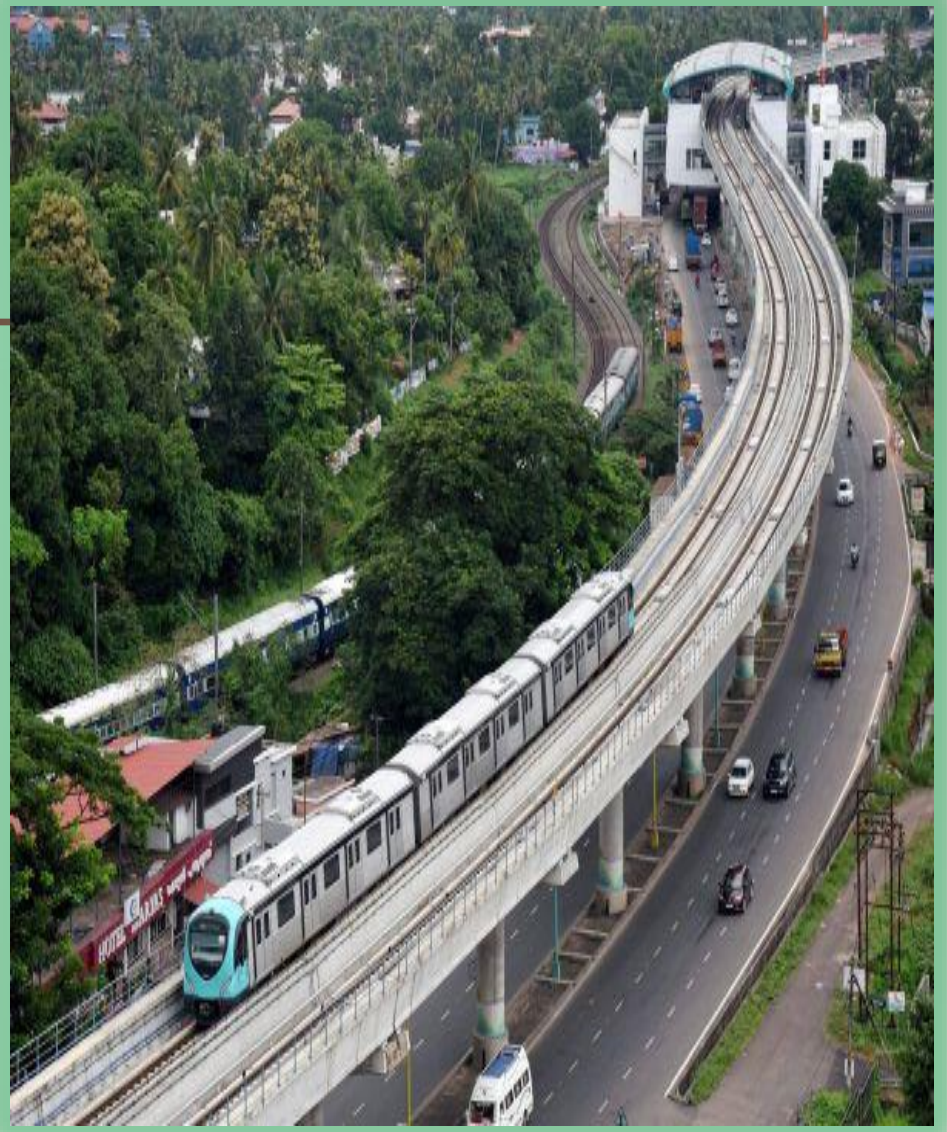
KOCHI- THE COMMERCIAL CITY

- One of the most vibrant tier II cities in India: population 2.1 million.
- Placed among the emerging global cities that will contribute 50% of global GDP by 2025. (*Source: McKinsey*)

- Large investments in IT expected, being the landing point of the South East Asia - Middle East - Western Europe Cable network (SEA)
- Major gas based investments based on Petronet's 2nd LNG terminal in the Country.
- One among the six cities to host the 17th FIFA U-17 World cup

KOCHI METRO **RAIL PROJECT**

- A 25km elevated metro line from north to south axis
- 22 metro stations & one depot
- Three coach train
- Most modern signalling system (CBTC)
- Automatic Train Operation compatible to UTO
- Capital cost of 51817.9 M INR



KOCHI METRO **RAIL LIMITED**

- A Company jointly owned (50:50) by the Govt. of India and Govt. of Kerala.
- Structured as a Special Purpose Vehicle for the implementation of the Kochi Metro Rail Project.
- Present strength of the Company is 500.
- Positioning as the ‘Urban Transport Solutions Provider’ for Kerala.

2016 ENERGY GRANT-
PROPOSAL APPROACH

ENERGY FROM WHERE?

- Construction
- Operation
- Maintenance

SUSTAINABLE WAY???????

2016 ENERGY GRANT- **PROPOSAL APPROACH**

RENEWABLE RESOURCES

- **Solar Roof tops- All buildings**
- **Ground mounted solar projects**

- Short term goal- 30% of reduction in conventional power

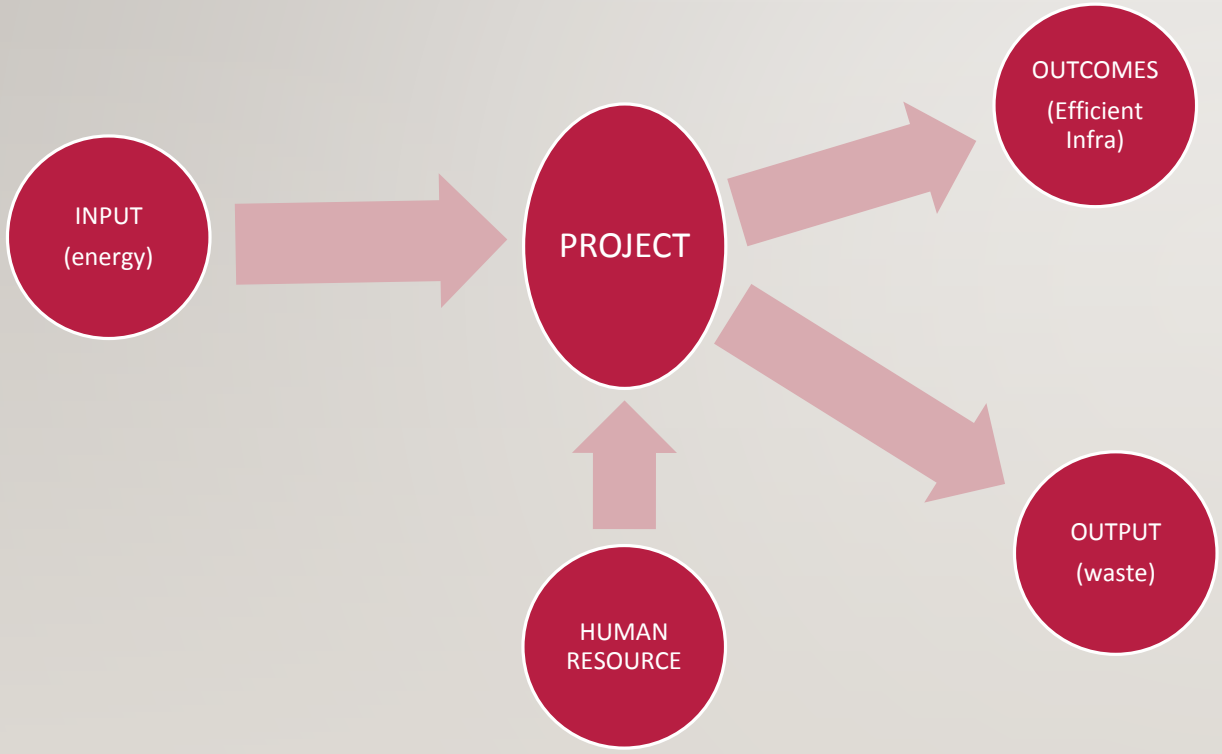
KOCHI AIRPORT RUN BY SOLAR …….

Long term goal-

A METRO RUN BY SOLAR POWER ???

ORGANISATION APPROACH

ITS NOT THE ENERGY ALONE MATTERS!



ORGANISATION APPROACH

ALIGN WITH SDG 1, 5 & 8

- KUDUMBASHREE- ANTI POVERTY PROGRAMME OF THE STATE GRAFTED TO THE URBAN INFRASTRUCTURE PROJECT
- More than 1000 women force
- Face of Metro

Today, the bank officer calls me ‘madam’ !

ORGANISATION APPROACH

ALIGN WITH SDG 5 & 8

- TRANSGENDERS-LGBT Community
- Presently 22 TG's working

Familarization to Metro system

ORGANISATION APPROACH

ALIGN WITH SDG 12

- Waste to Bio compost
- Vertical gardens using bio compost
- Medians of Metro using bio compost
- Revenue from waste

ORGANISATION APPROACH

ALIGN WITH SDG 11

- Water Transport Project
- Livelihood project
- Connecting islands to main land
- 38 Jetties & 78 boats

ACHIEVEMENTS

ACHIEVEMENTS	IMPACT
• Women employment	• Women empowerment
• Transgender employment	• Set path to various organisation
• Vertical garden from waste	• Alternate revenue-waste
• Plastic bottle recycling machines	• Responsible citizen
• Green Building (Platinum rated)	• Less energy less wastage
• Cycle paths & Walkways (LMC)	• More than 1000 cycles in the city

ACHIEVEMENTS

ACHIEVEMENTS	IMPACT
• Water Transport project	• Livelihood project
• Solar	• 6.2 MW project being installed
• E-Rickshaws	• Sustainable mobility
• Multi modal transport integration	• UMTA Bill- Accessibility

KMRL'S METAMORPHISM TO A SUSTAINABLE URBAN TRANSPORT PROVIDER

OBSTACLES AND BARRIERS

TECHNICAL	• Inadequate Project Reports • Focus on outputs than outcomes
MANAGERIAL	• Various stakeholders • Knowledge product
FINANCIAL	Financial commitment/ Limited budgetary allocation Supplementary options Reluctance of Private players
GOVERNMENTAL	Procedures & Policies Political uncertainty
CULTURAL	Public Transport by the Poor NMT usage-climatic conditions

FUTURE PLANS

- Rain water harvesting – Align to SDG 6
- Scale up Clean Energy- Align to SDG 7
- Sustainable waste management- Align to SDG 12

➢Collaboration and partnerships needed for implementation and monitoring and of various SDG's.

➢Lack of technical support and know how.

GROWTH IS NEVER BY MERE CHANCE;
IT IS THE RESULT OF FORCES WORKING TOGETHER.

- *JAMES CASH PENNEY*

THANK YOU