TOYOTA KIRLOSKAR MOTOR PVT. LTD.,

Plot No.1, Bidadi Industrial Area
Ramanagara - 562109

CII National Award for Excellence in Energy Management-2022

Division : Production Engineering Services
Document Owner : Magesh K K , Sr. Manager
Presenter : Suresh A P, Dy. Manager

Plant Aerial View :

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Company Profile :

SN.	Particulars	Details
1	Name	Toyota Kirloskar Motor Pvt. Ltd.
2	Date of Incorporation	6th October 1997
3	Head Office	Bidadi, Ramanagaram Dist.
5	Ownership Profile	Toyota Motor Corporation - 89% & Kirloskar Systems Pvt. Ltd.- 11%
6	Employees	5515 Permanent [April 2022]
7	Area	432 Acres
8	Plant Capacity	3,10,000 cars/year

Major Milestones:











Incorpo-ration

Corolla Prado Launch

Fortuner LC200 Launch

Camry Hybrid Prodn.

Crysta Fortuner FMC Launch

Yaris Launch

Urban Cruiser Launch

1997 2000 2003 2005 2009 2010 2013 2014 2016 2017 2018 2019 2020 2022

Qualis Launch

Innova Launch

Etios Prius Launch

Etios Cross, Corolla FMC

Lexus Launch

Glanza Launch

Urban Cruiser Hyryder Launch

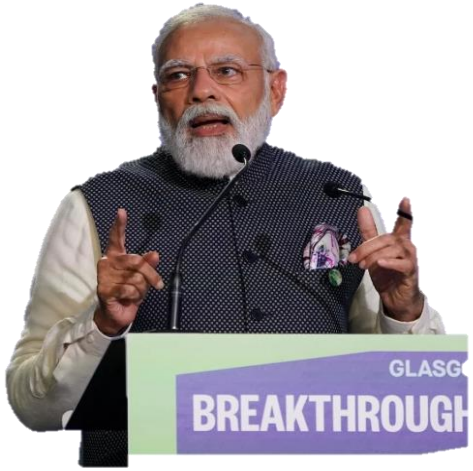







Vision of Carbon Neutral:

India's 2030 Commitment in COP26 :



Mr. Narendra Modi
Prime Minister, India

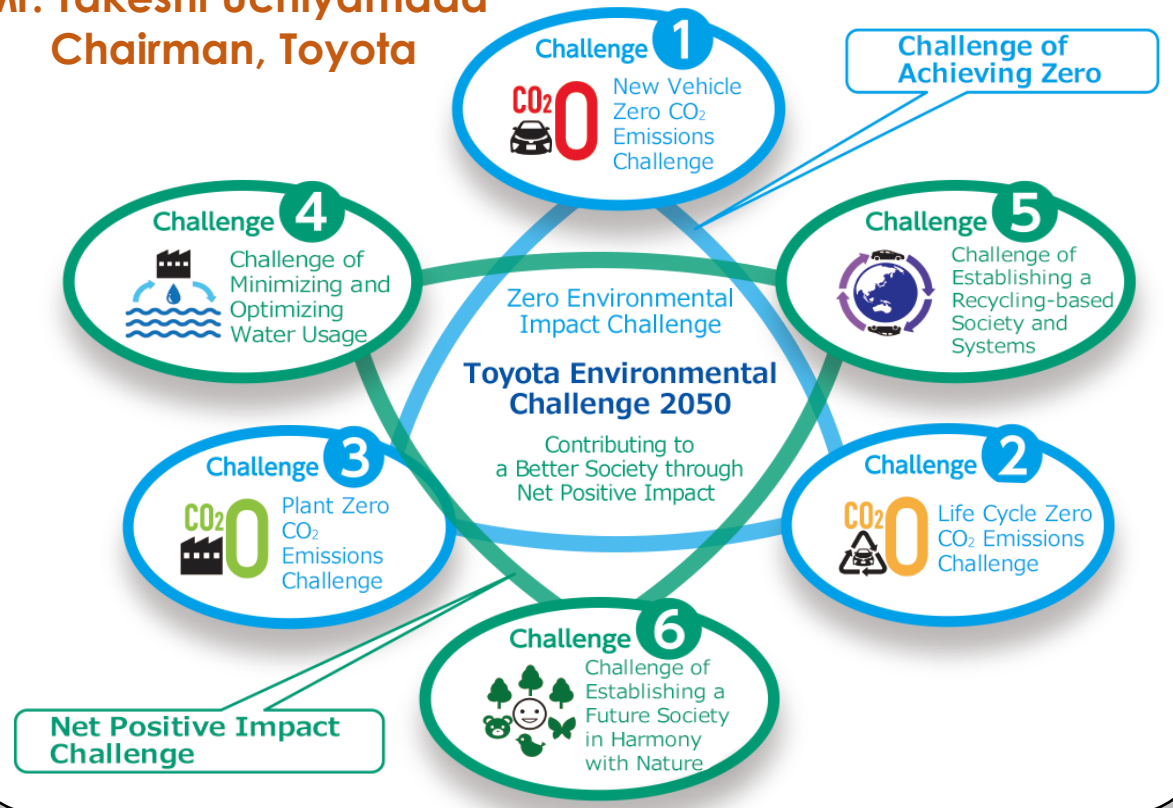
Hon'ble Prime Minister **Narendra Modiji** proposed "**Panchamrita**" a five-fold strategy- for India to play its part in helping the world get closer to 1.5 degrees Celsius at global climate meet in Glasgow.

1. Non-Fossil Energy - 500 Gigawatt (GW) by 2030.
2. Renewable Energy Requirement- 50% by 2030.
3. Carbon Emission Reduction -1 Billion Tons from 2005 Base by 2030.
4. Reduction of Carbon intensity of economy by 45% by 2030.
5. India to Achieve Net Zero by 2070.

Global Toyota's Vision 2050:

Announced **Toyota's Vision 2050** in Toyota Environmental forum on **October 14th 2015.**

Mr. Takeshi Uchiyamada
Chairman, Toyota

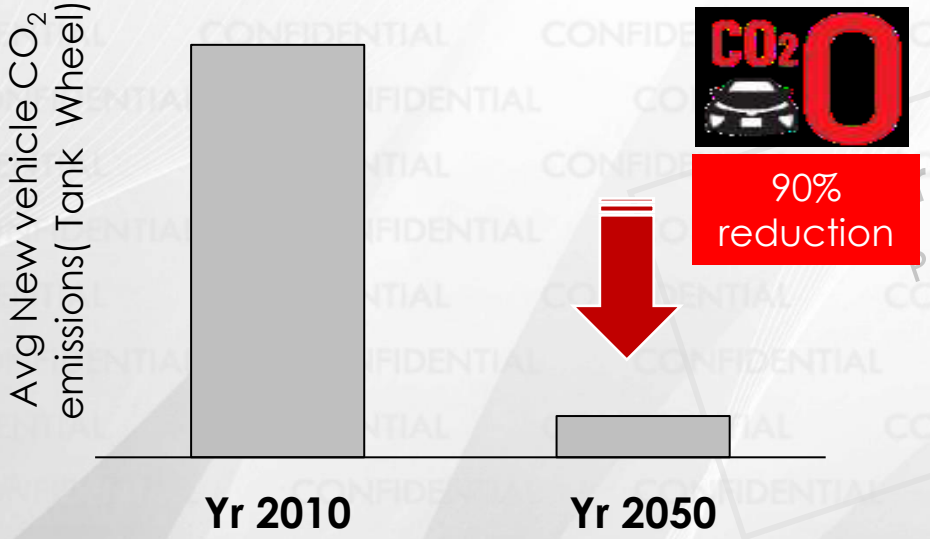


Challenge No-1: [New Vehicles Zero CO_2]

Toyota's strategy for electrification

- Product

New Vehicle Zero CO_2 Emissions Challenge



Toyota Fundamental Stance

- Energy Conservation
- Energy Diversification
- When widely-used, eco-friendly cars can contribute to environmental protection

\+ Pursuing the Joy of Cars

90% reduction in new vehicle CO_2 emissions by 2050

Responding to environmental issues while pursuing the Joy of Cars

Challenge No-2: [Life Cycle Zero CO_2 - Supplier & Dealers]

Supplier:

Training Supplier at TKM

Training & TKM Best Practices sharing

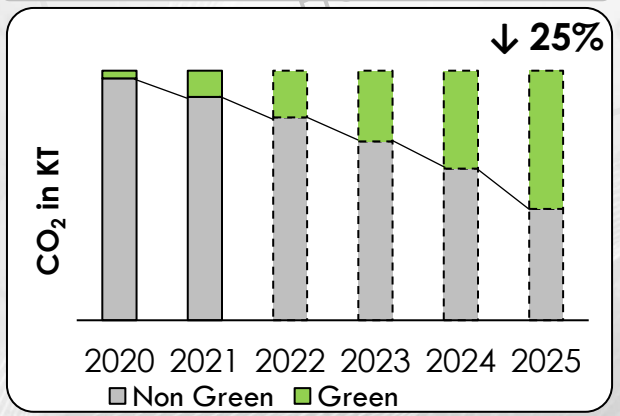
Energy Reduction

Transfer from Energy to No Energy Machines

Promoting Renewable Energy

Utilization of Renewable source of Energy supply

CO_2 Reduction Potential



25% Reduction from FY2019 base

Dealer:

ECO Dealership Guidelines

CO_2 Manual

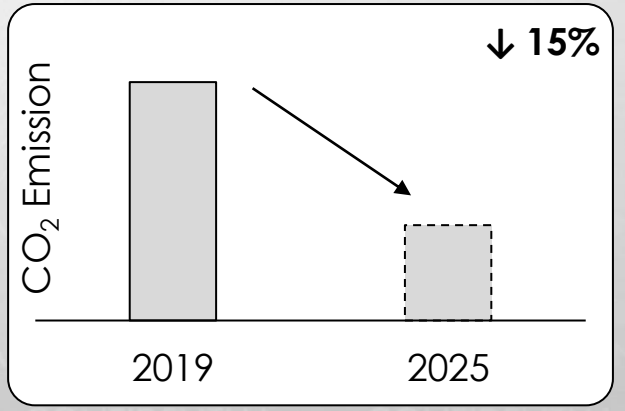
Training Dealers at TKM

All dealer across India, **8200 People trained in 230 dealers**

Promoting Renewable Energy

Utilization of Renewable source of Energy supply

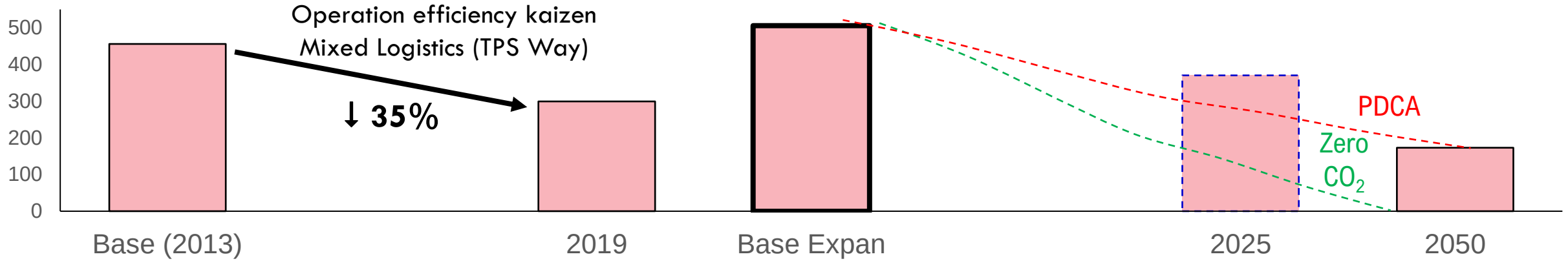
CO_2 Reduction Potential



15% Reduction from FY2019 base

Logistics

CO_2 **reduction YoY** Kaizen, **Supply base** expansion, **Green logistics** (Rail, CNG) enhancement



4 Key Strategies (Ongoing) :

1. **Supplier base shifting Close to South**
   < **D22 - 33 Suppliers shifted** >
2. **Mixed Logistics adoption (TPS way)**
   < **Service parts, Unit Suppliers, CBU** >
3. **Utilize CNG, Rail**
   < **CNG, Rail logistics to parts** >
4. **Technology utilization**
   < **EV,LNG** >

Future Road Map :

Current

1. Supplier Base Shift
2. Mixed Logistics adoption (TPS Way)

2022 ~ 2025

3. Utilize Rail, CNG

~ 2030

4. **Technology utilization (EV,LNG)**

Challenges :

- Supplier alignment
- Technology availability
- Infra Visibility
- Operation suitability
- Govt. initiatives / Policies

Green Logistics

Bring Suppliers to nearest location – Onsite Supplier Concept

Before

After

Onsite suppliers within TKM premises

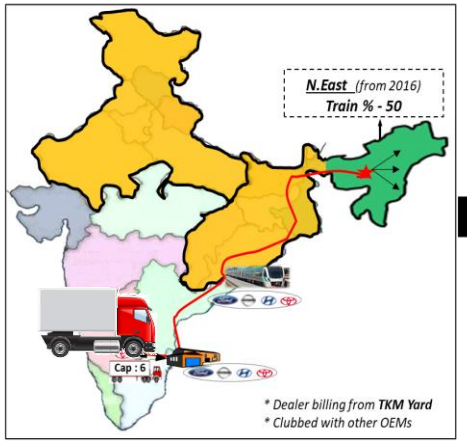
Oyaku dolly for Just In Time supply of par

CO_2 Reduction: 3,300 Ton/Yr

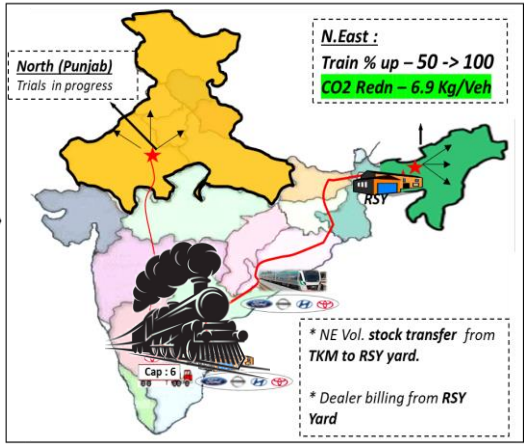
Alternative Logistics

<Rail Logistics>

***Previous Condition** (Only Domestic units) :*



***Revised Condition** (For North East Only) :*



CNG Introduction for parts

Delhi : 2/7 – Implemented
5/7 – by 2023

BLR Region – HCV - 7/21.
--LDV – 14/14 by 2023*

CNG introduction 9 routes – Truck type HCV :

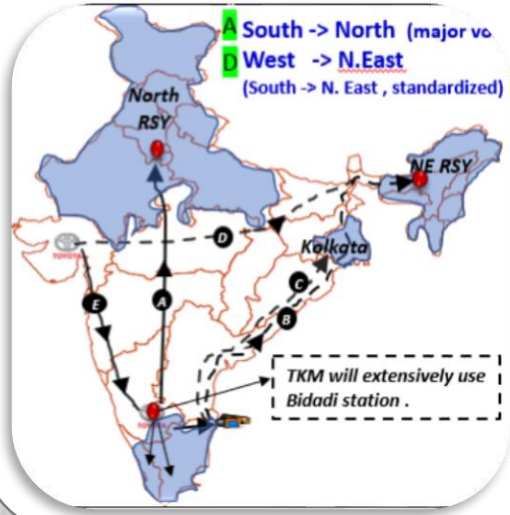
Current Condition : Limited Truck type

Future : Scope available for Expansion.

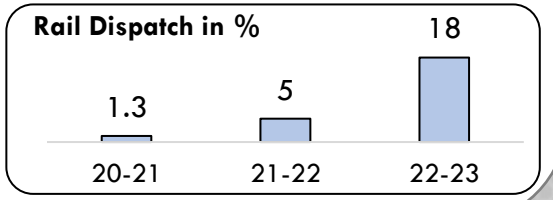
*** CNG stations expansion**

CO_2 Reduction: 165 Ton/Yr

Rail Logistics Enhancement for CBU



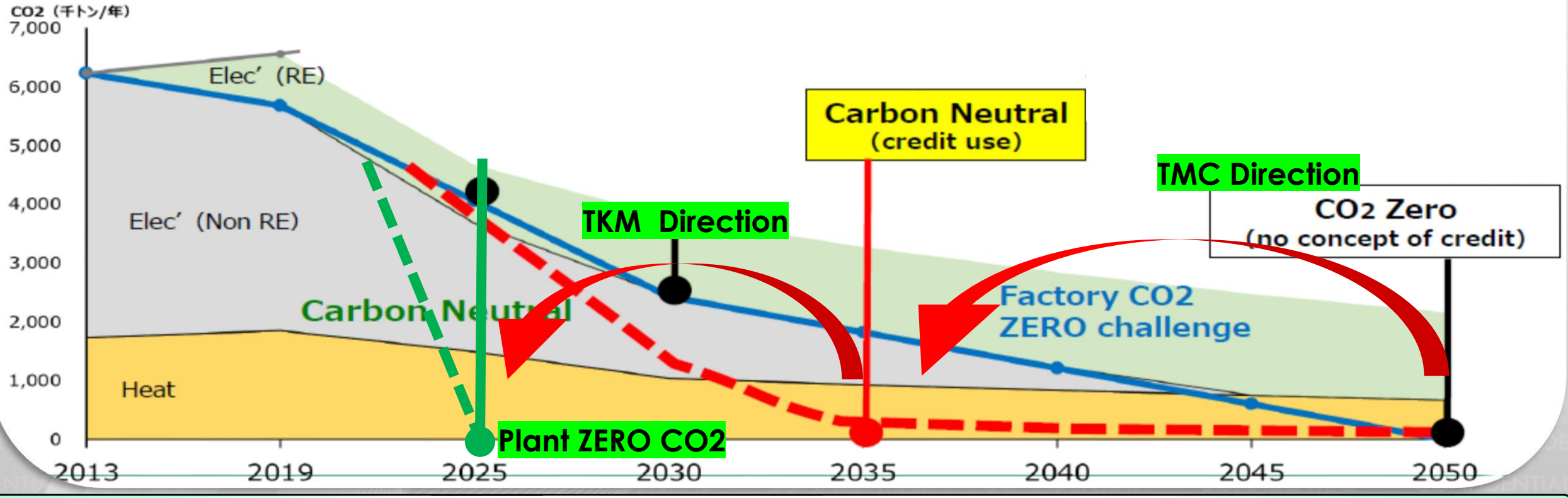
	Loading Stn	Train	Category
A	Chennai	AFTO	Mix with Hyundai
B	Chennai	NMG	Mix with Hyundai
C	Chennai	AFTO	Mix with Hyundai
D	Bidadi	NMG	Exclusive
E	Gujarat	NMG	Mix with Tata



Challenge No-3: [Plant Zero CO_2]

Advancement of Challenge 3 :

Toyota India has opportunity to become first Carbon Neutral Plant among 56 Global plants in 36 countries.



TKM Preponed to Achieve Plant ZERO CO_2 by 2025 *2050----->2035------>**2025***

Energy Management :

Management Commitment:

At TKM, we understand that social and environmental sustainability is equally important as the economic sustainability.

The future generation is looking towards the organizations to address the critical environmental issues that the planet is facing today.

In all our business decisions we shall consider environment aspect as a top priority.

Toyota 2050 Challenge ⟺ **12 of the 17 SDG's linked 2050 Challenge**

Environment Policy:

TOYOTA

ENVIRONMENT POLICY

As a responsible organization, we at Toyota Kirloskar Motor Pvt. Ltd. firmly believe in the philosophy of "Respect for the planet".

Also understanding the environmental threats, posing the industry and mankind, the "Toyota Environmental Challenges 2050" forms the base of the mid to long term commitment towards Environmental Protection.

Hence, we reaffirm our commitment, to contribute to the society by ensuring Environment protection, throughout life cycle of our Products, Operations and Services.

To realize our commitment, we shall aim to:

- Quantify & Reduce Green House Gas emission across the Value chain & Life Cycle, by Promoting cleaner technologies and processes.
- Conserving water resources with the objective of achieving water neutrality.
- Optimizing material usage, minimizing waste and enhancing/improving recyclability.
- Looking beyond environmental compliance obligations towards realizing the real intent of preserving the environment.
- Promoting biodiversity conservation & supporting community environment initiatives.

TKM commits to engage with all stakeholders (Team Members, Suppliers, Dealers, Customer, Contractor, Community...), to create eco consciousness, and to motivate and inspire them to achieve Environmental sustainability. We shall strive to achieve these objectives to realize our dream of "Living in Harmony with Nature".

Akito Tachibana
Managing Director

Supersedes All Previous Environmental Policies
This policy is effective from 2nd of May 2017

Toyota Environmental Challenges 2050 aligned to Sustainable Development Goals (SDG)

Energy Data:

Overall Energy Summary:

Electricity 86%
- Machinery – 58%
- Ventilation – 25%
- Compressor – 14%
- Lighting – 3%

TKM

Fuel 14%
- Ovens – 87%
- Boiler – 5%
- Canteen – 8%

Diesel 0.1%
- Diesel Generator *[For Back up power]*

Approach:

Energy Reduction

Consumption:

① Low CO_2 technology

Drive through Latest Technologies & Upgrade Existing Condition **with Investment & Resources.**

② Daily Kaizen

Existing Resources Energy Reduction activities on Daily basis **involving Team Members**

Supply:

③ Renewable Energy

Conversion of Plant Energy to **Renewable energy** (Zero CO_2-Energy) to achieve **RE-100**

Energy Scenario:

Electric Energy

In-side Solar
8.2 MW

24%

Out-side Solar
18 MW

68%

Green Energy Purchase
[Bescom-Green+ Wind]

7.7%

Bescom

0.3%

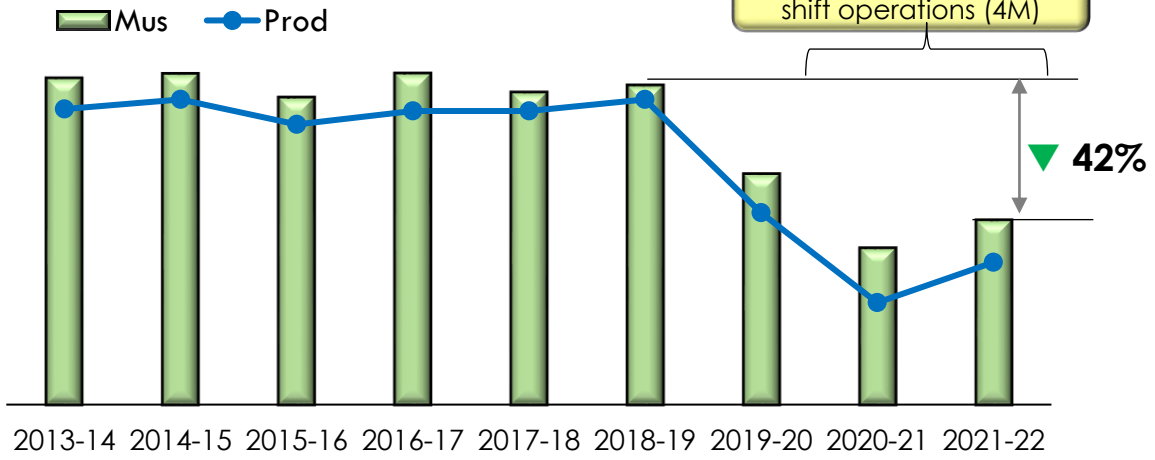
DG
[Back-up Power]

0.1%

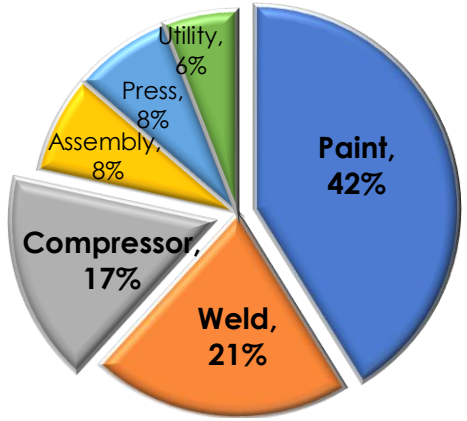
TKM - 220KV Sub-station

Source: Energy Reports [FY2021-22]

Power Consumption Trend



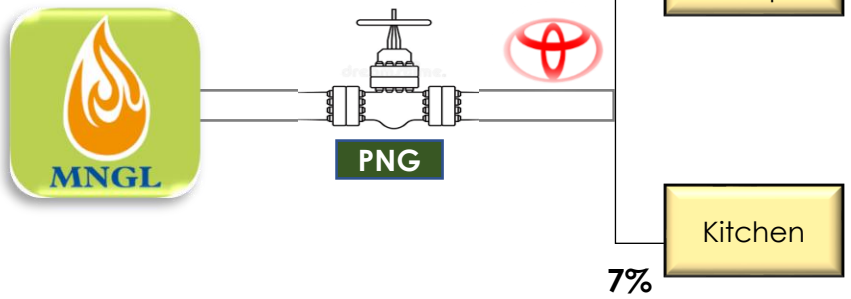
Shop wise consumption



Production Volume decreased by **54%** from FY2018-19 to FY2021-22, Electricity Consumption reduced by **42%**

Energy Scenario:

Fuel



Oven

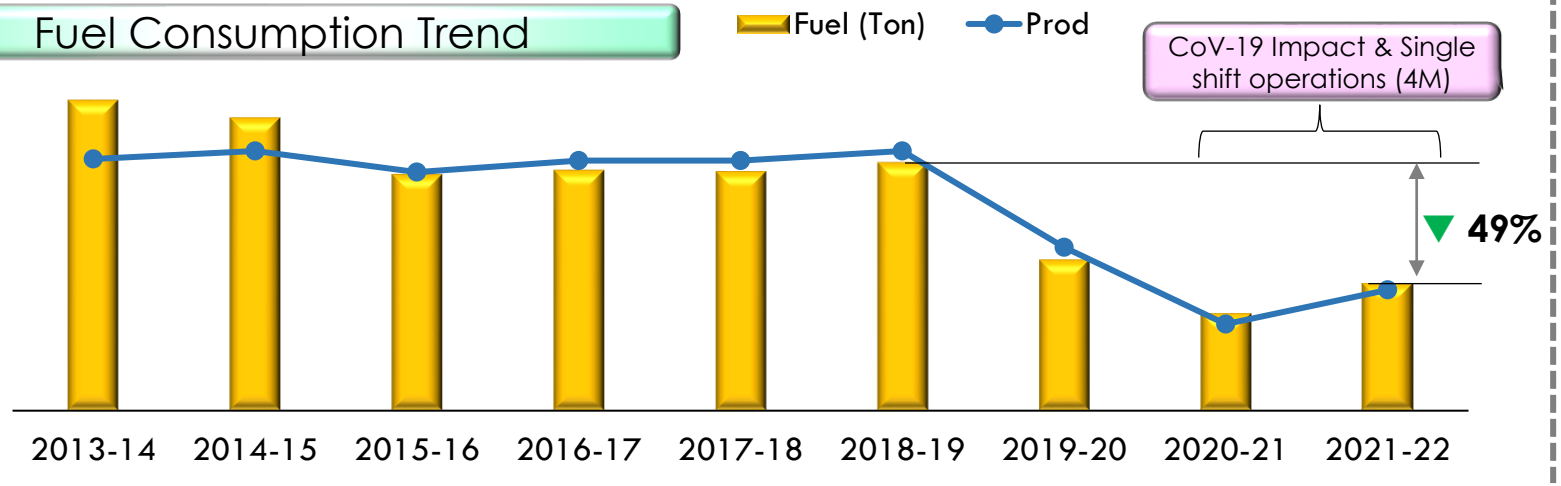
Boiler

Steam Boiler

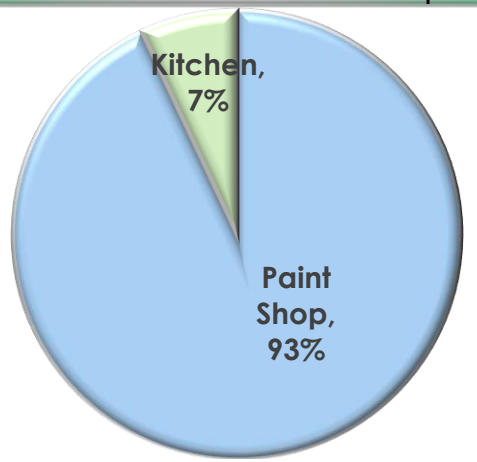
Diesel Generator

Emergency Power to shop

Fuel Consumption Trend



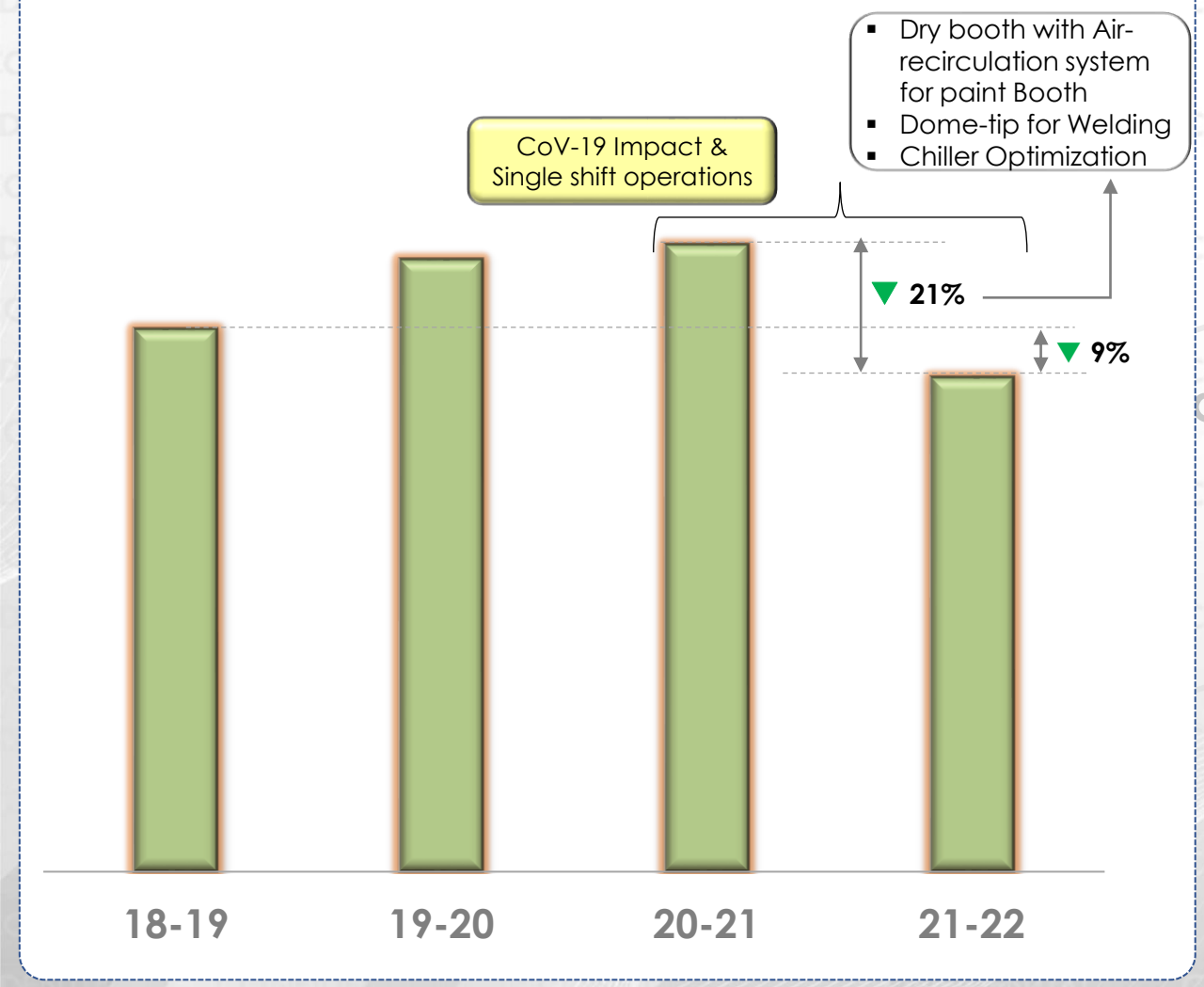
Shop wise Power consumption



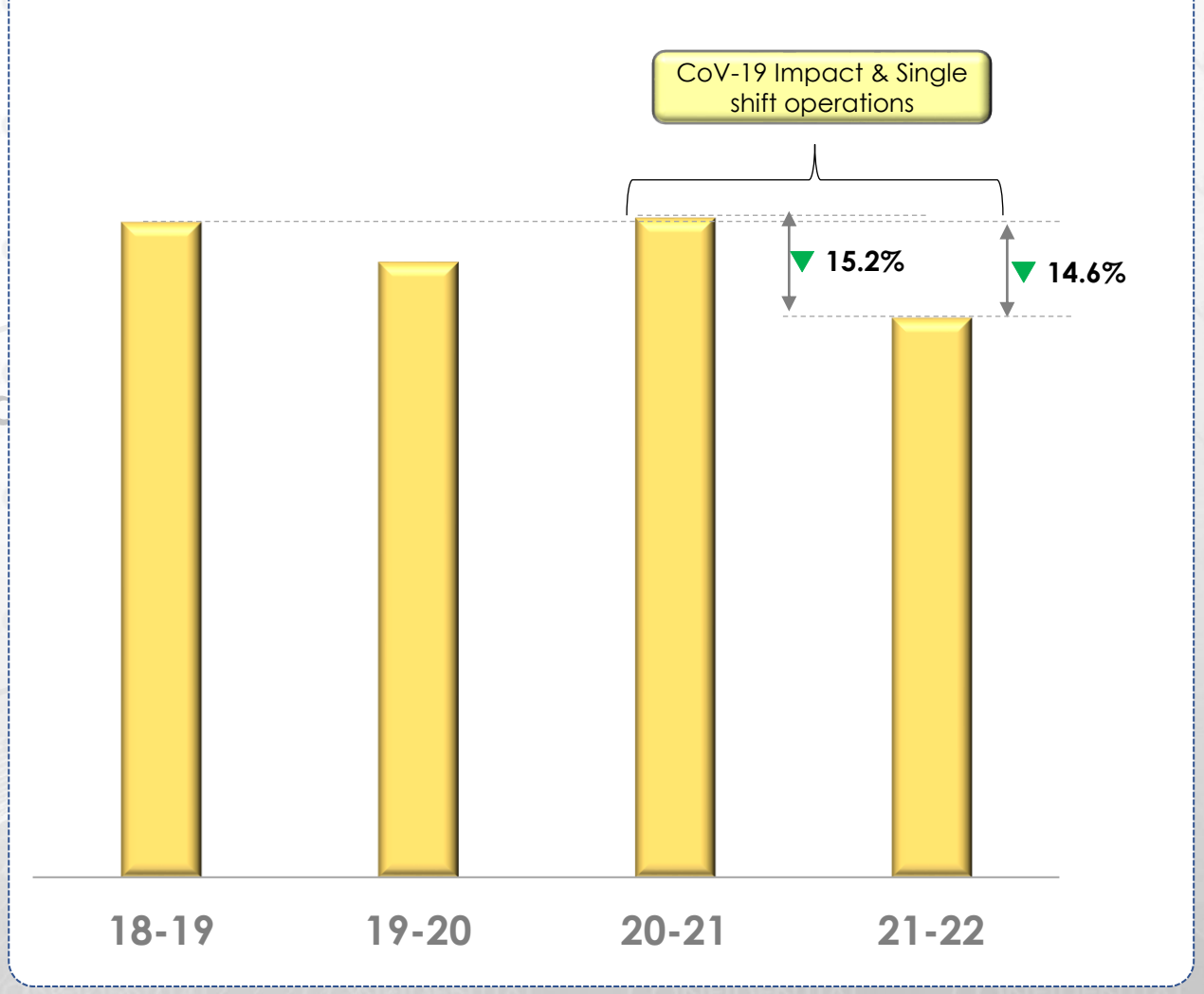
Production Volume decreased by **54%** from FY2018-19 to FY2021-22, Fuel Consumption reduced by **49%**

Specific Energy Consumption :

Specific Electrical Energy Consumption



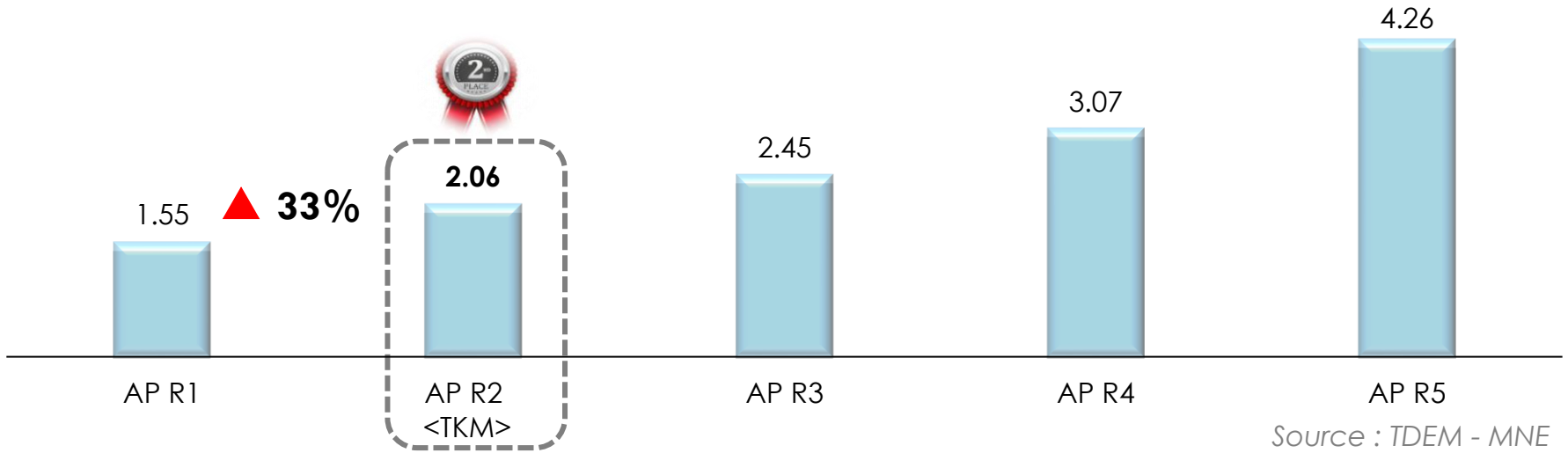
Specific Fuel Consumption



SEC Reduced by **9%** in Electricity & **14.6%** in Fuel consumption in Last 3 years

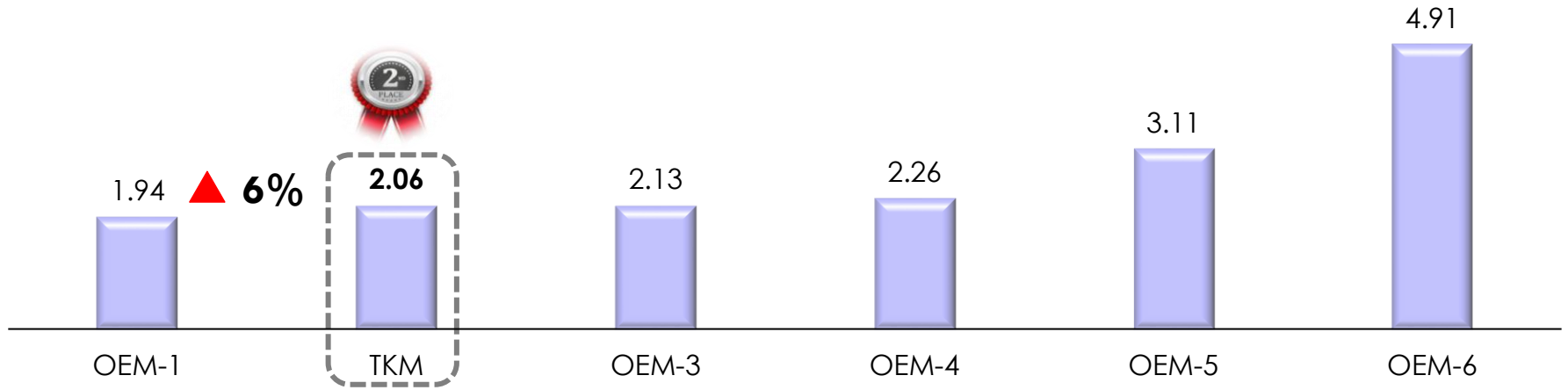
Benchmarking :

Global (Toyota affiliates) Benchmark (GJ/Veh)



Source : TDEM - MNE

National (OEM) Benchmark (GJ/Veh)



Source : CII

TKM at **No-02** position among Asia Pacific Toyota Affiliates & National OEMs

FY2019-20 Major Energy Saving Summary :

Daily Kaizen :

SL No	Kaizen Details	Energy	Annual Saving	Cost Saving (INR in mil.)
Enhance Operational Efficiency:				
1	VFD's installation for Paint Pumps	Electricity	319 Mwh	₹ 1.20
2	Primer booth & base coat Booth Dew point Sensor calibration	Electricity	28 Mwh	₹ 0.60
Energy Management Enhancement:				
4	Segregation of Shop wise Compressed Air-lines	Electricity	59 Mwh	₹ 0.40
5	Sequential stop / start of Equipment	Electricity	90 Mwh	₹ 0.09
6	Ovens Sequential OFF / ON & Auto stop Method change	Fuel	16.2 Ton	₹ 1.18
7	Auto damper providing for fresh Air intake & Inverter for ventilation fans	Fuel	22.6 Ton	₹ 1.6
7	High mast last Operation time revision	Electricity	87 Mwh	₹ 0.42
8	Roof Exhaust fans connected to CTC auto on & off as per production timings.	Electricity	37 Mwh	₹ 0.27
9	VFD's installation for Primer Booth Sludge pool circulation pump	Electricity	35 Mwh	₹ 0.25
10	Primer booth AHU conversion from Point to Window control & Booth burner off while no body in Booth	Fuel	69 Ton	₹ 5.1

FY2020-21 Major Energy Saving Summary :

Low CO_2 Technology :

SL No	Kaizen Details	Energy	Annual Saving	Cost Savings (INR in mil.)
Technology Upgradation :				
1	Dry booth Implementation – *Water less paint booth.*	Electricity	483 Mwh	₹ 3.40
2	Booth Downsizing		3.8 Ton	

Daily Kaizen :

Energy Management Enhancement:				
3	UF-2 Pump for agitation pump VFD installation	Electricity	211 Mwh	₹ 1.50
4	Frame line Exhaust Optimization	Electricity	228 Mwh	₹ 1.62
5	Chiller consumption optimization [Booth Window Control, Temp. reduction…]	Electricity	651 Mwh	₹ 4.63
6	All ovens Heat loss minimization by Balancing & Leakage arrest, Start/stop delay	Fuel	6.3 Ton	₹ 0.64
7	Energy reduction through Motion Sensor implementation for Lighting	Electricity	91 Mwh	₹ 0.65
8	Weld shop Energy reduction activities -Robot spots migration to single robot.	Electricity	228 Mwh	₹ 1.63
9	Power reduction in servo machine during nonproduction hours	Electricity	121 Mwh	₹ 0.86
10	Degrease bath temperature reduction by 2^0C & High efficiency HEX installation to phosphate	Fuel	6.55 Ton	₹ 0.48
11	Sequential start of ED / TC & primer oven	Fuel	17.4 Ton	₹ 1.42

FY2021-22 Major Energy Saving Summary :

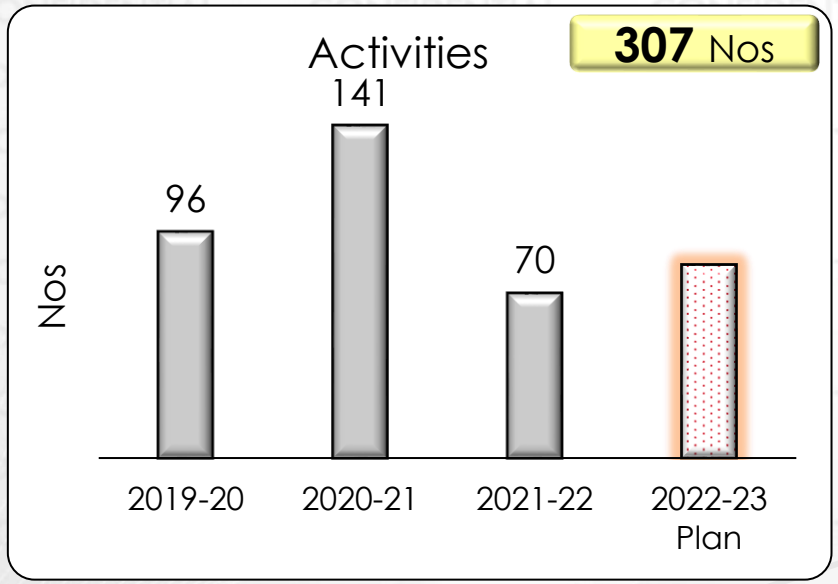
Low CO_2 Technology :

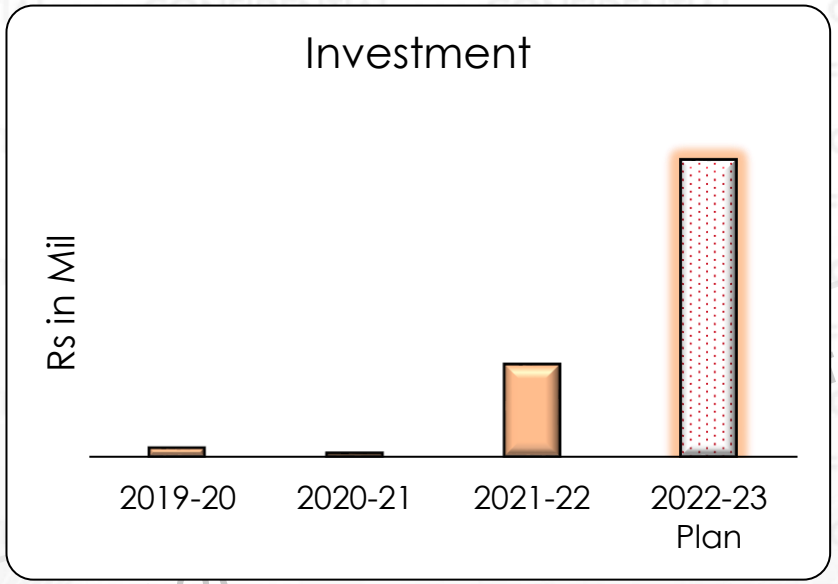
SL No	Kaizen Details	Energy	Annual Saving	Cost Savings (INR in mil.)
Technology Upgradation :				
1	Bumper-A line Dry booth implementation	Electricity	432 Mwh	₹ 3.10
2	Booth Energy reduction through Primer Booth Air-recirculation system	Electricity	546 Mwh	₹ 3.90
3	Fuel source change from LPG to PNG (Pipeline Natural Gas)	Fuel	CO_2 Reduction	₹ 18.5

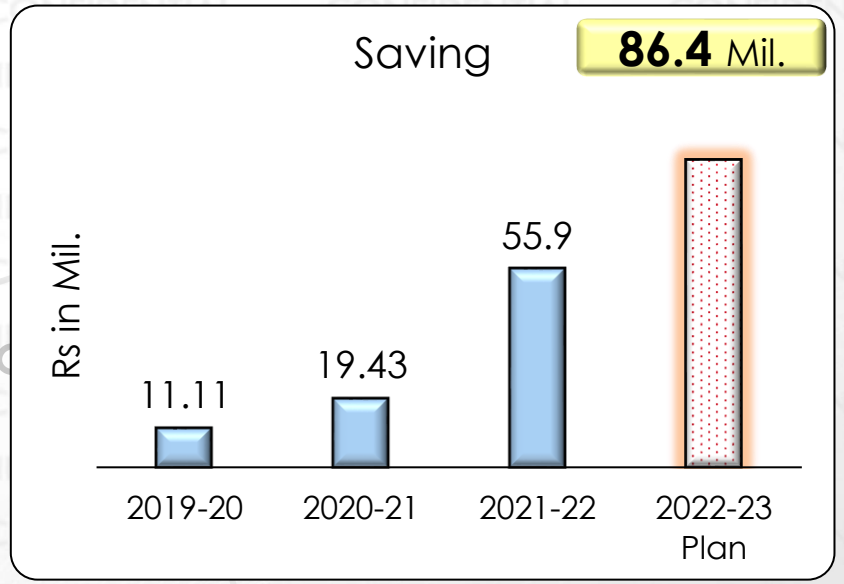
Daily Kaizen :

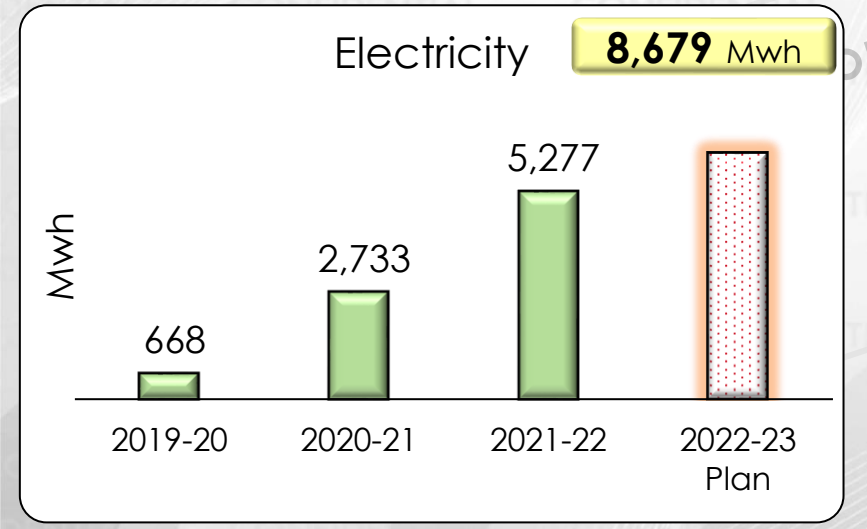
Enhance Operational Efficiency :				
4	Invertors for Chiller Primary, Cooling tower & Condenser pump	Electricity	270 Mwh	₹ 1.93
5	Compressor Pipeline modification, pressure optimize & Baby comp. - holidays	Electricity	626 Mwh	₹ 4.40
6	High Efficiency motor for Weld Cooling Tower (WCT)	Electricity	267 Mwh	₹ 2.00
7	DOME-TIP Implementation for Welding	Electricity	525 Mwh	₹ 3.70
8	Chiller consumption optimization [Pump Reduction, Temp. feed back…]	Electricity	360 Mwh	₹ 0.9
9	LEDification for High mast lamp, Office building, Ware-house & Street lights	Electricity	770 Mwh	₹ 5.5
10	VFD Installation for Pump & Motors in Paint shop & Latest Air-Blower in WWTP	Electricty	534 Mwh	₹ 3.8
11	All oven Start up based on Enthalpy & hot water boiler conversion to Electricity	Fuel	70.3 ton	₹ 5.3

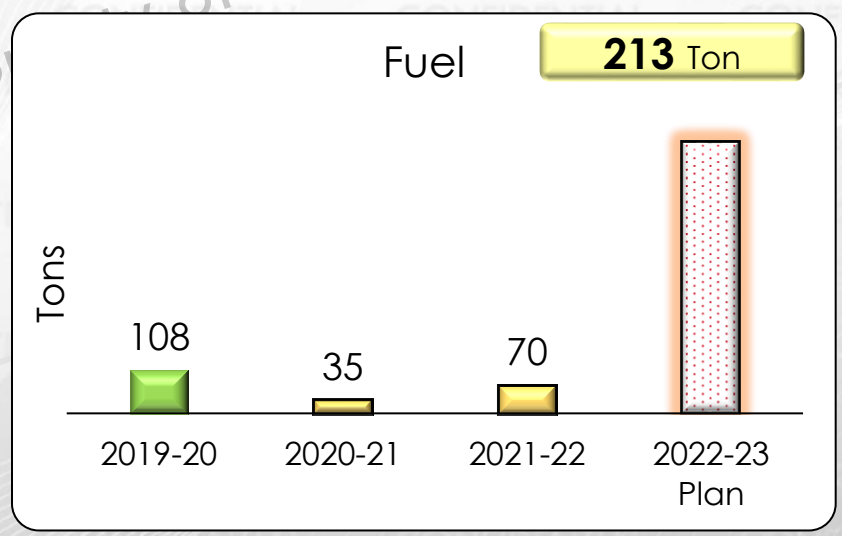
Consumption Reduction summary *[FY2019~21]*:

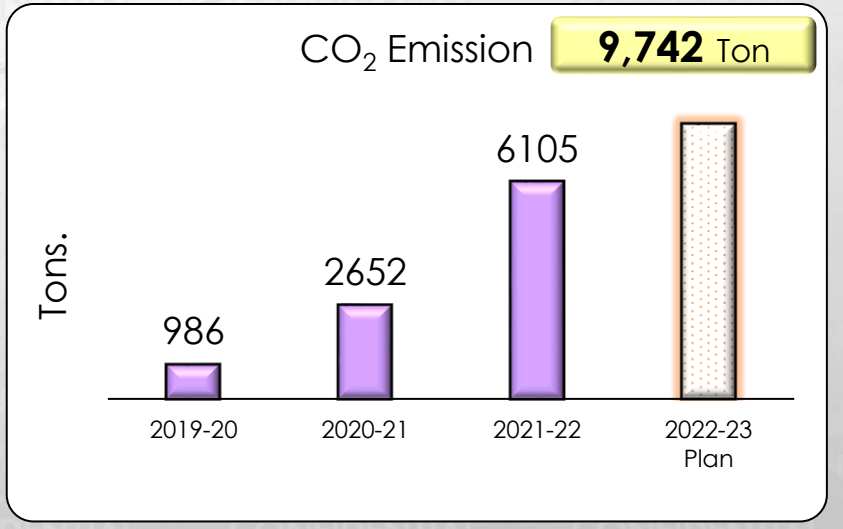








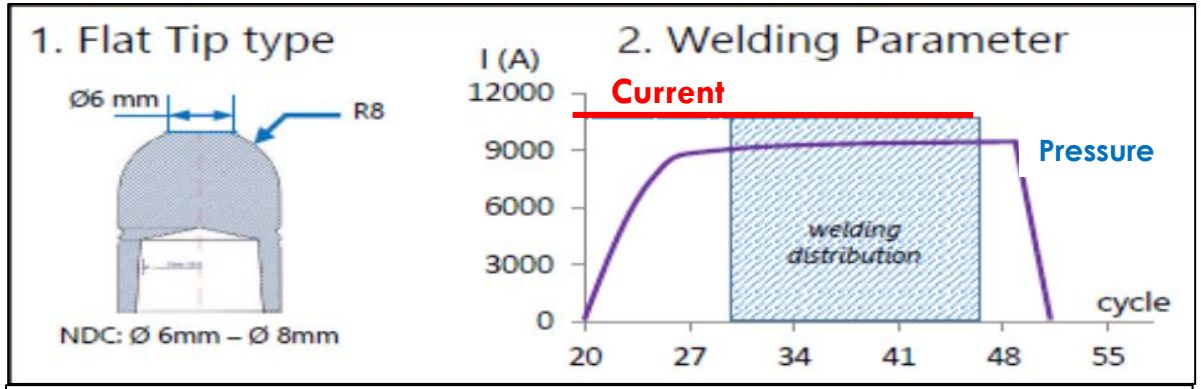




FY2019~21 Focused on Low Hanging Fruits with minimum investment **[ROI : < 2Yrs]**

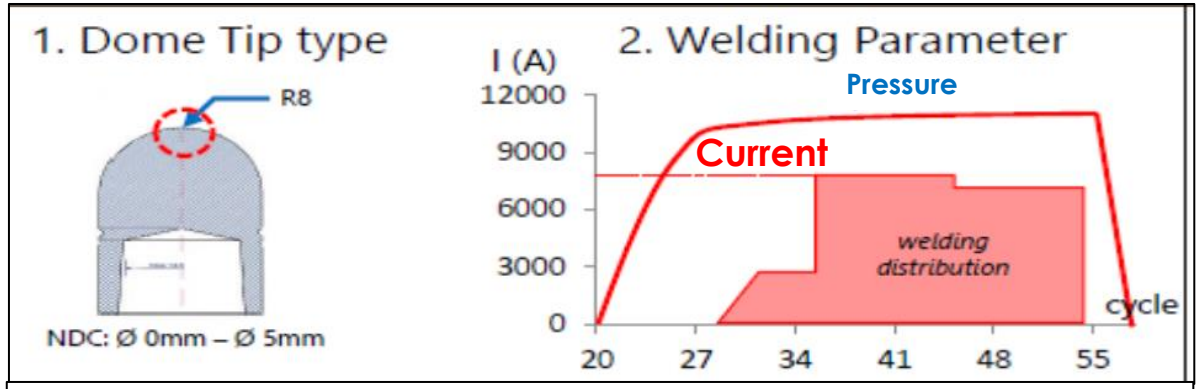
Innovative Projects-1: *[Dome-tip Implementation in Weld shop]*

A : Flat Tip



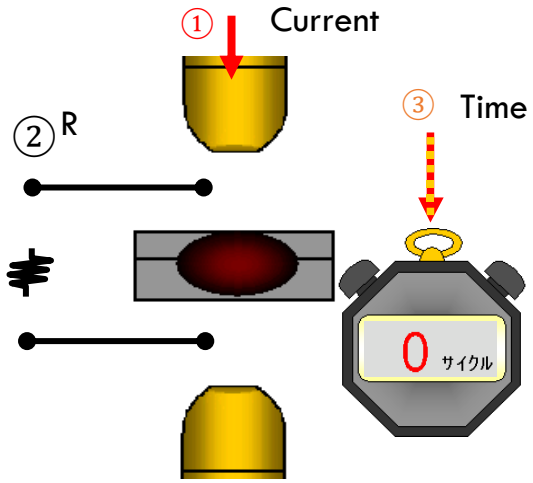
More contact Surface& High Current

B : Dome Tip



Point contact Surface & Low Current

Spot Welding



Comparison

Parameters	Flat Tip (Surface contact)	Dome tip (Point Contact)
Contact Surface (A)	Ampere ↑	A↓
Effect to Resist (R)	Resistance↓	R↑
Effect to Energy (Q)	Joule↓	J↑

Benefit

Current Drop (I)	Energy (J)
0 %	133
5 %	120
10 %	108
15 %	96
20 %	85
25 %	75

Electric current Reduction up to (15%)

Tangible Benefit : Energy and CO_2 Reduction

Intangible Benefit: Product Quality up

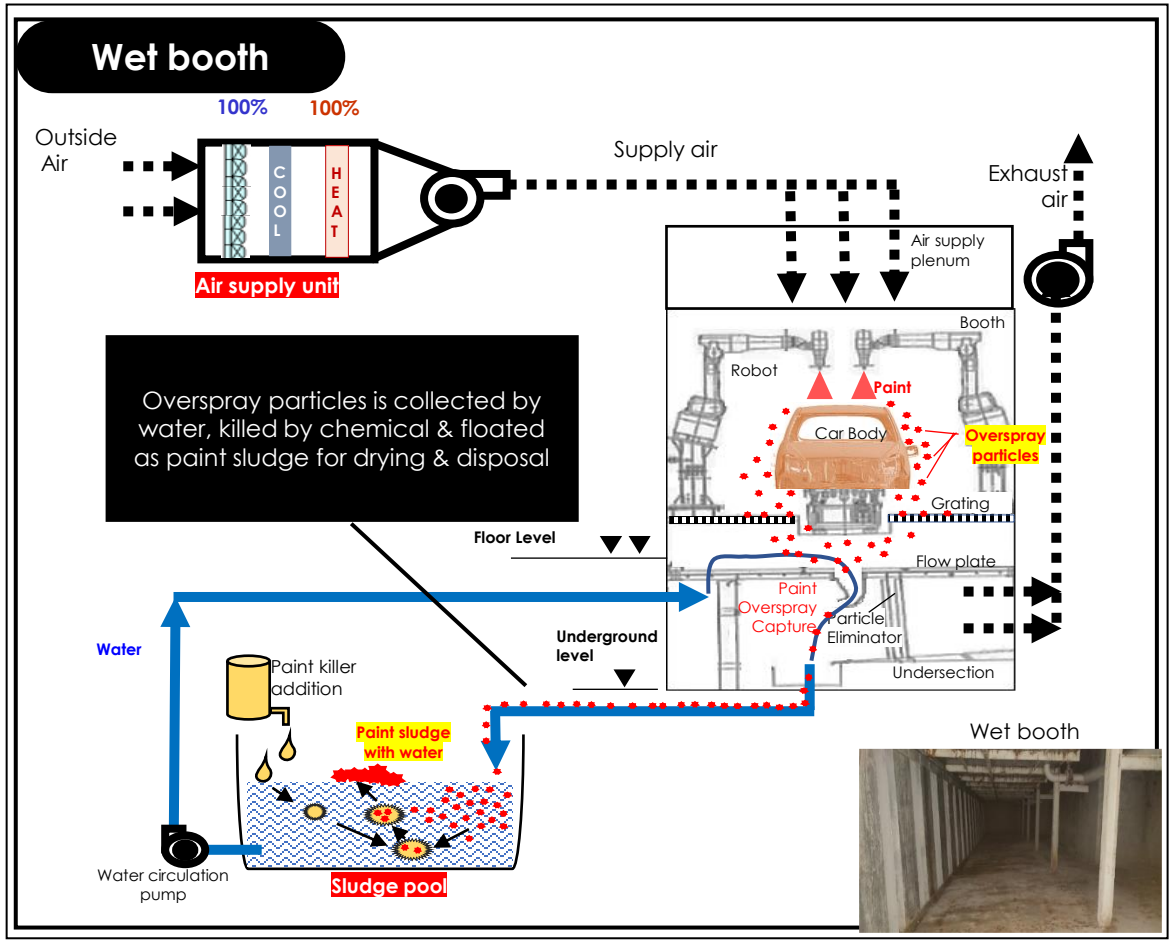
Reduction:

Electricity :	*CO_2:*	*Savings:*	*ROI:*
525 Mwh	**491** ton	**₹ 3.7** mil.	**0.3** Years

Innovative Projects-2: [Dry booth with Air-recirculation system in Paint Shop]

Before

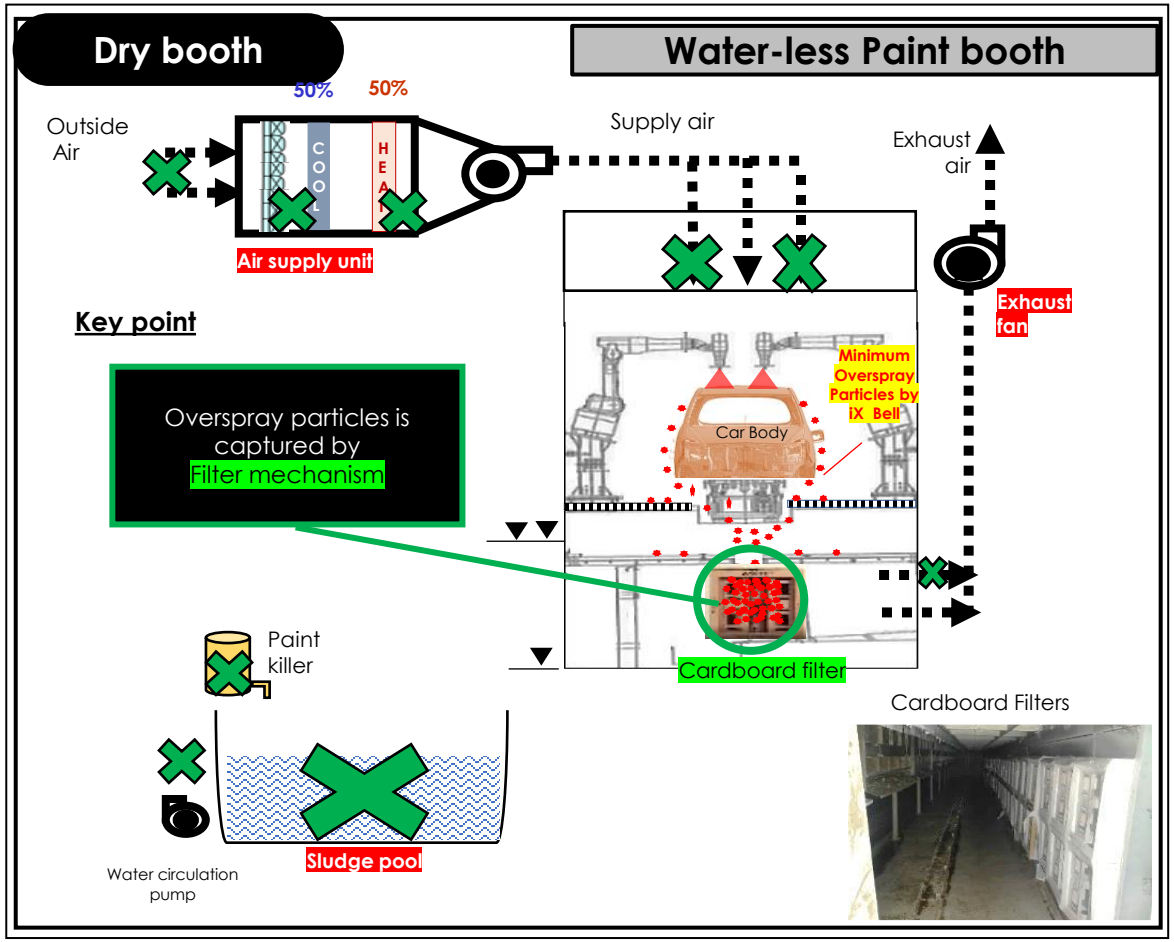
Wet booth



After

Dry booth

Water-less Paint booth

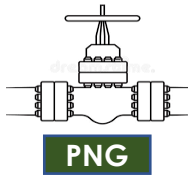


Reduction:	Electricity :	Fuel:	CO_2:	Savings:	ROI:
	1,461 Mwh	38 ton	1,898 ton	₹ 10.4 mil.	1.7 Years

Innovative Projects-3: [Steam Boiler Elimination thro Heat pump with Solar reflector]

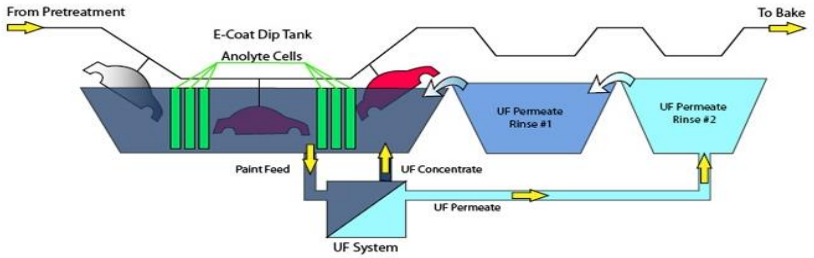
Before

Pipe-Line Gas



Steam Boiler

Paint Process



Steam **generation using Pipeline Natural Gas** to produce heat for Paint shop process

After

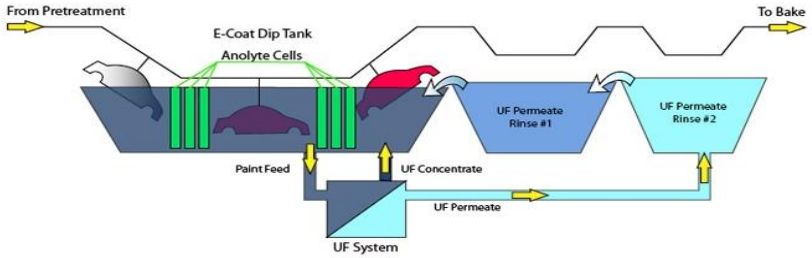
Solar Parabolic Reflector with Integration of Heat Pump

Parabolic Reflector

Heat Pump

Hot water Storage Tank

Paint Process



Steam elimination & utilization of **Solar Energy & Heat pump** for heat generation to Paint shop process

Ongoing….

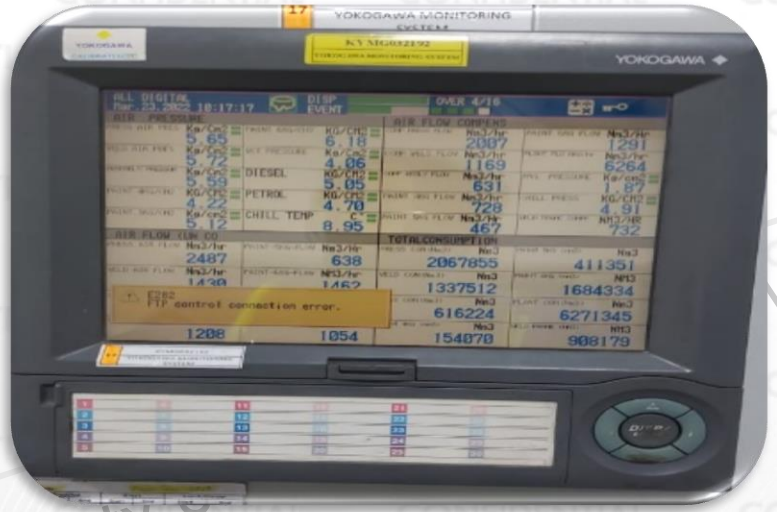
Reduction:

Fuel :	CO_2:	Savings:	ROI:
571 Ton	**1,180** ton	**₹ 17.2** mil.	**4.8** Years

Energy Monitoring:

Scada System – Electricity / PNG

Compressor Logger



BMS – Chiller

Manual Entry

Energy Obheya
[Energy Management]

Ongoing….

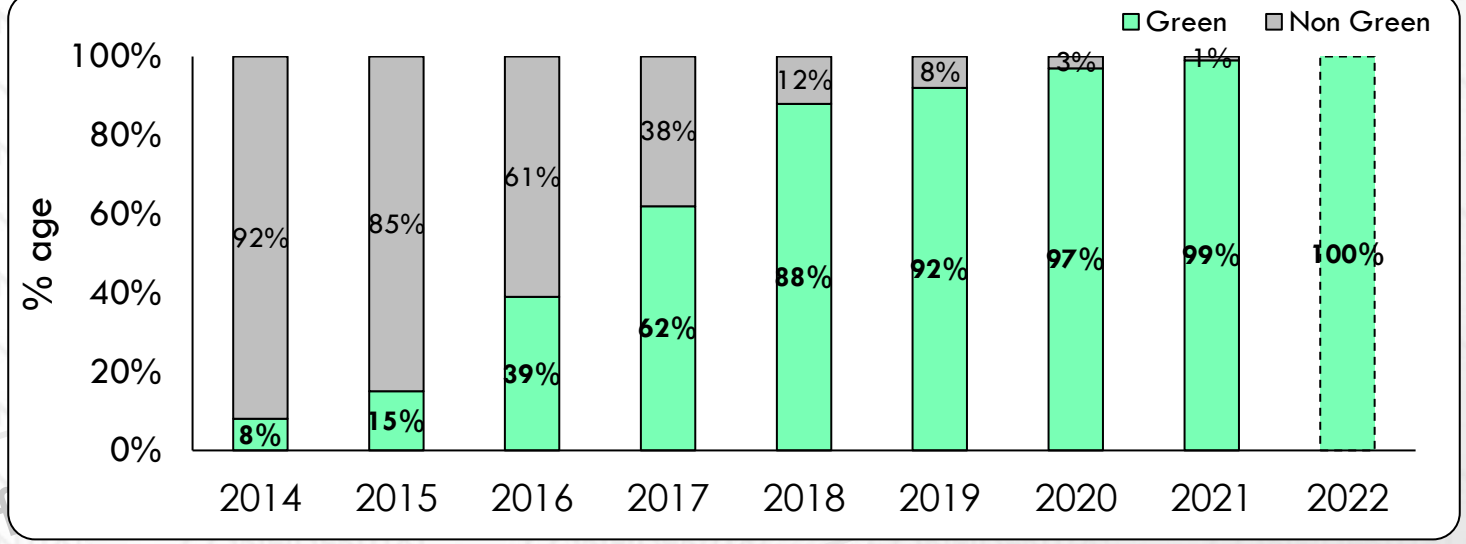
Real time monitoring with all energy elements through IoT- EMS

Supply : <Renewable Energy - Electricity>

Strategy :

1. **Maximize inhouse solar generation** utilizing ground & Roof top.
2. Roof top completely utilized so **move off-site for additional demand.**
3. **RE from open market** due to high demand & flexibility

Green Energy Consumption trend:

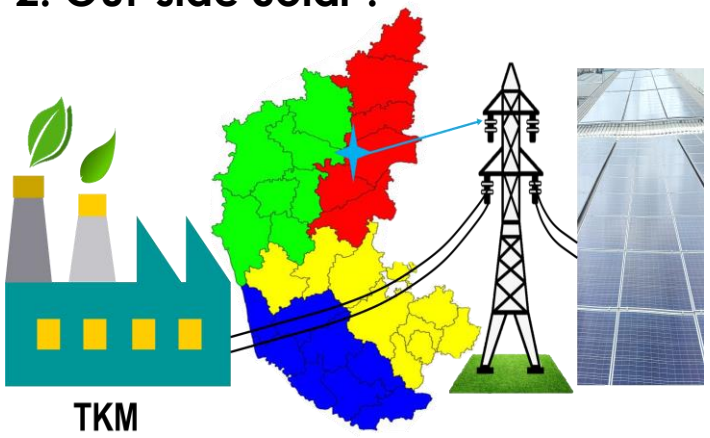


1. In-side solar :

Phase 1 : 3.2 MW
TKM Roof Top & Ground Mounted

Phase 2 : 5 MW
TKM Roof Top

2. Out-side Solar :

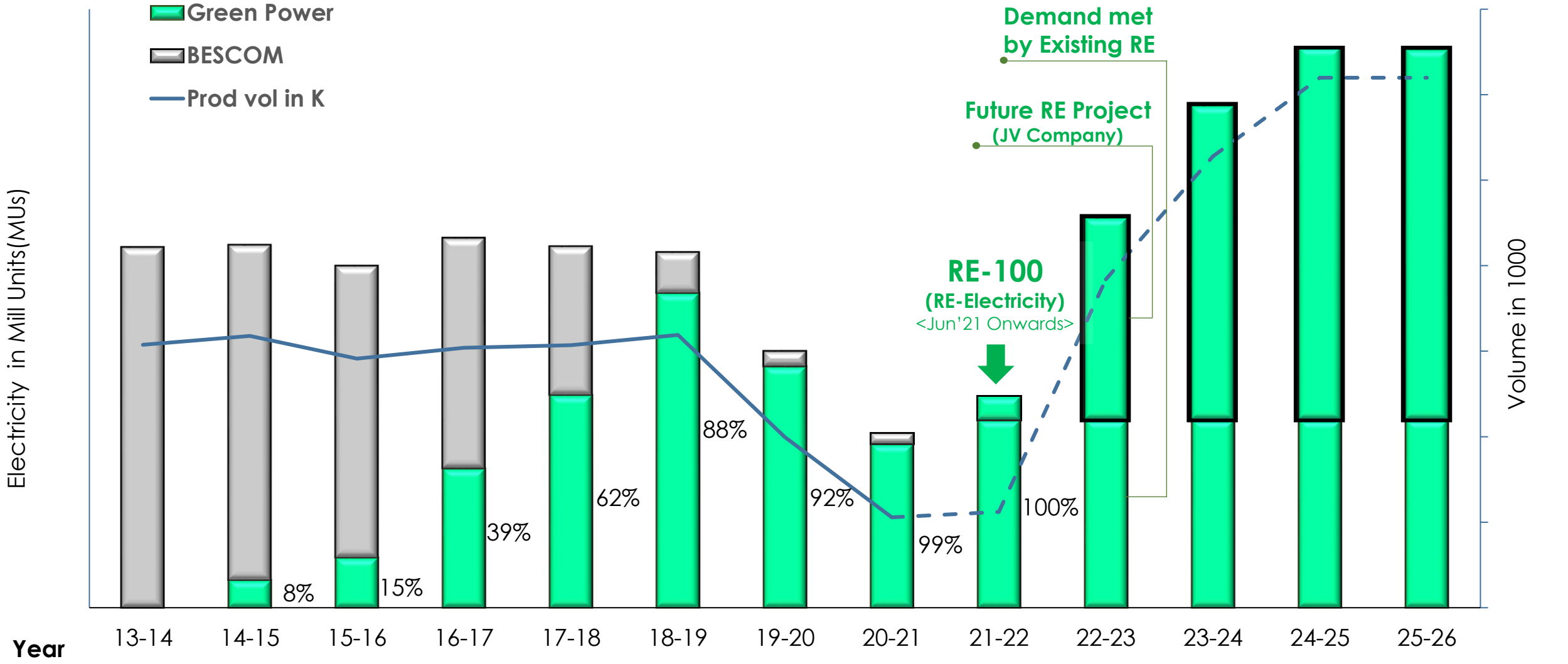


Phase3 : 18 MW
Offsite Solar

3. Joint Venture: <2023 onwards…>

Phase 4 : Future Demand – 40 MW
Offsite (Group Captive - JV) Solar / Wind

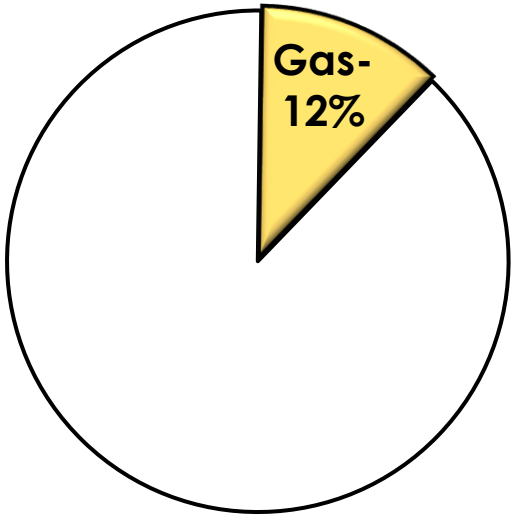
RE Electricity Demand Forecast with Business Expansion



Sustain RE 100 → through JV company

Supply : <Renewable Energy - Fuel>

Current Gas Usage:

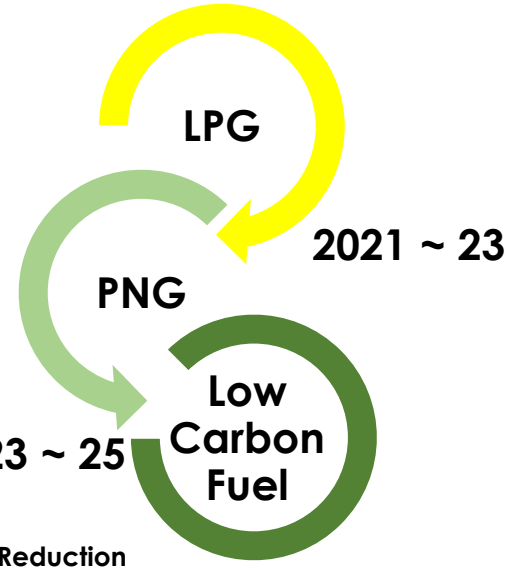


Strategy:

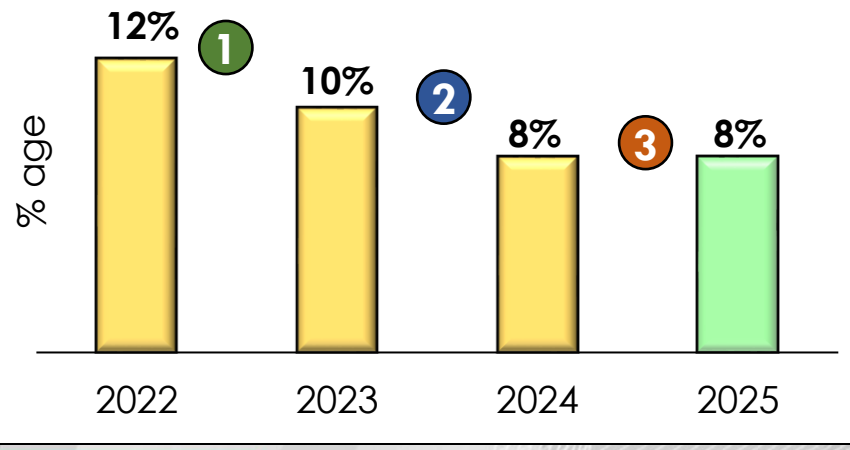
1. **Low Carbon alternate fuel**
< LPG---> PNG > stepwise changeover.

2. **Explore Zero carbon fuel**

Step wise Approach:



Year wise Reduction:



Key Activities:

1. *LPG to PNG* ***source change***
   Phase1 – Complete,
   Phase2 – Under progress

2. *Steam boiler elimination using Heat pump with Solar reflector.*

3. ***Alternate solution [8%]*** *< Under study >*

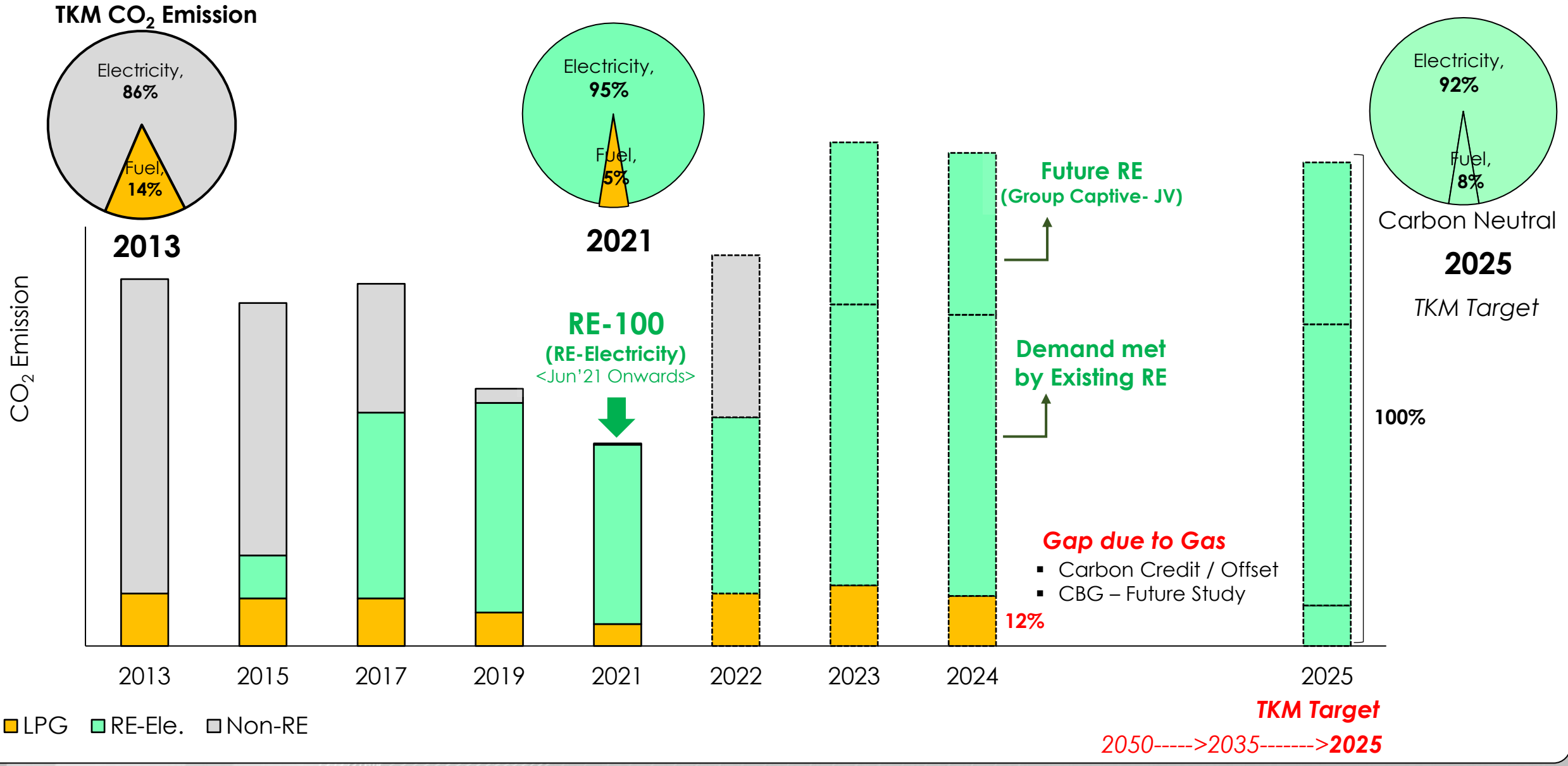
Challenges:

- ***No Proven Zero carbon fuel*** *for LPG replacement.*

Way Forward :

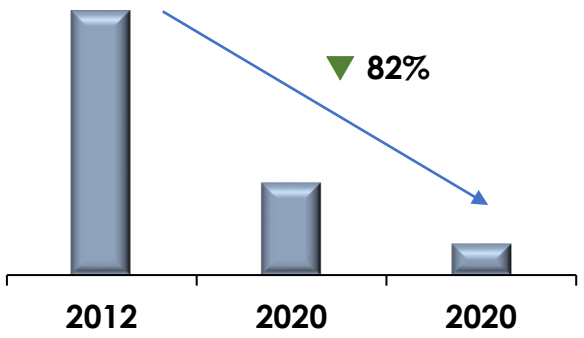
Compressed Bio-Gas (CBG) - study

2025 CO_2 Emission Scenario:



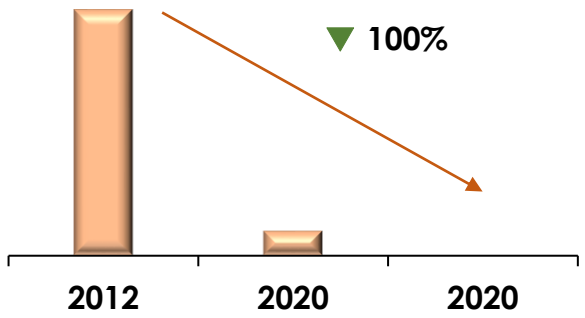
GHG Inventorisation :

Scope 1 - Emissions



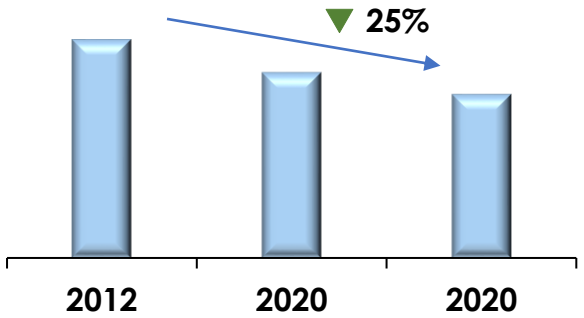
Fy'20~21 Emissions- 473 KTons

Scope 2 - Emissions



Fy'20~21 Emissions- 271 KTons

Scope 3 - Emissions



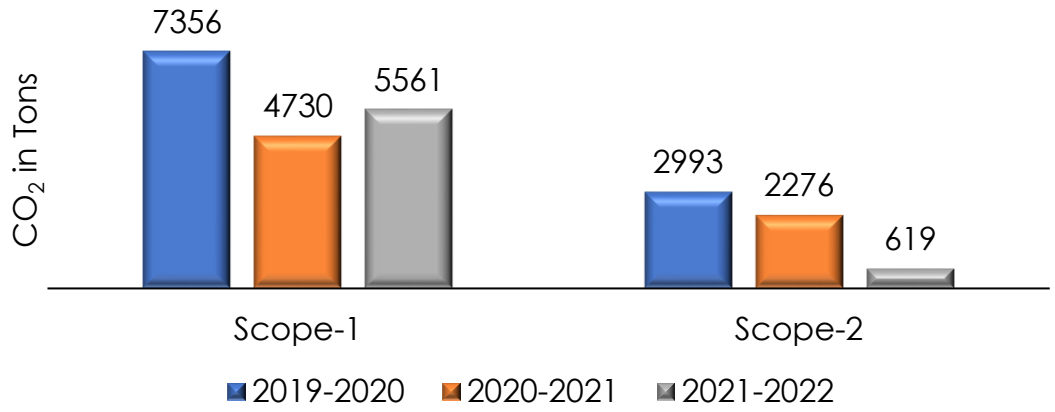
Fy'20~21 Emissions- 494 KTons

Way forward

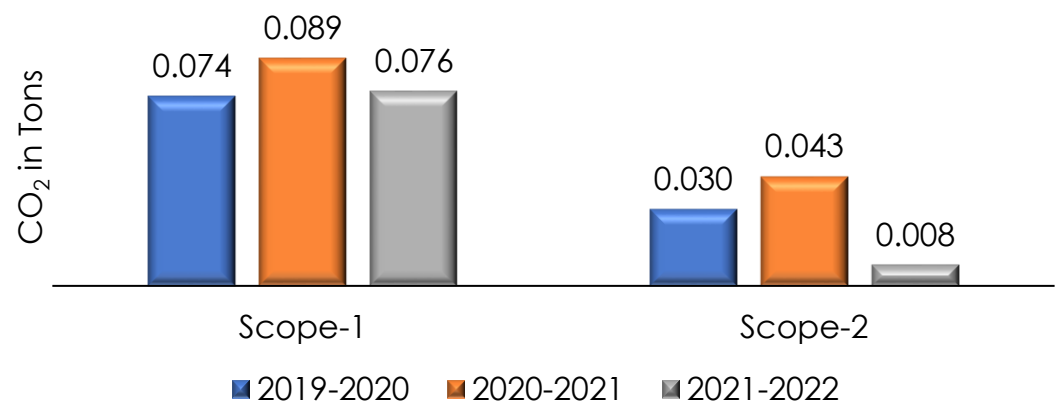
Focus on Scope 3 emissions reduction

Supplier, Logistics, Dealers & Materials

Absolute carbon emissions (scope 1 & 2)



Specific carbon emissions (scope 1 & 2)

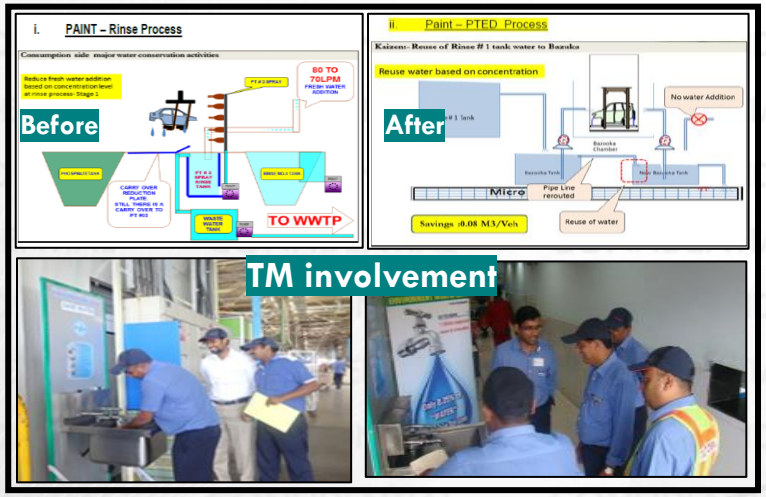


TKM Bidadi plant achieved **100% [Renewable energy-Electricity] in June 2021** contributing to significant decrease in Scope-2 emissions.

Challenge No-4: [Minimizing and Optimizing Water Usage]

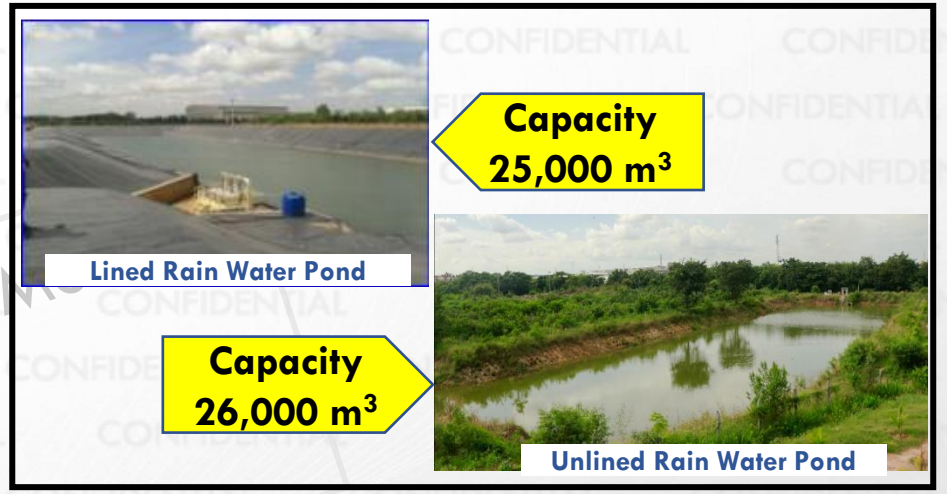
Approach : 3R [Reduce, Recycle & Reuse]

a. Reduce – Specific Consumption

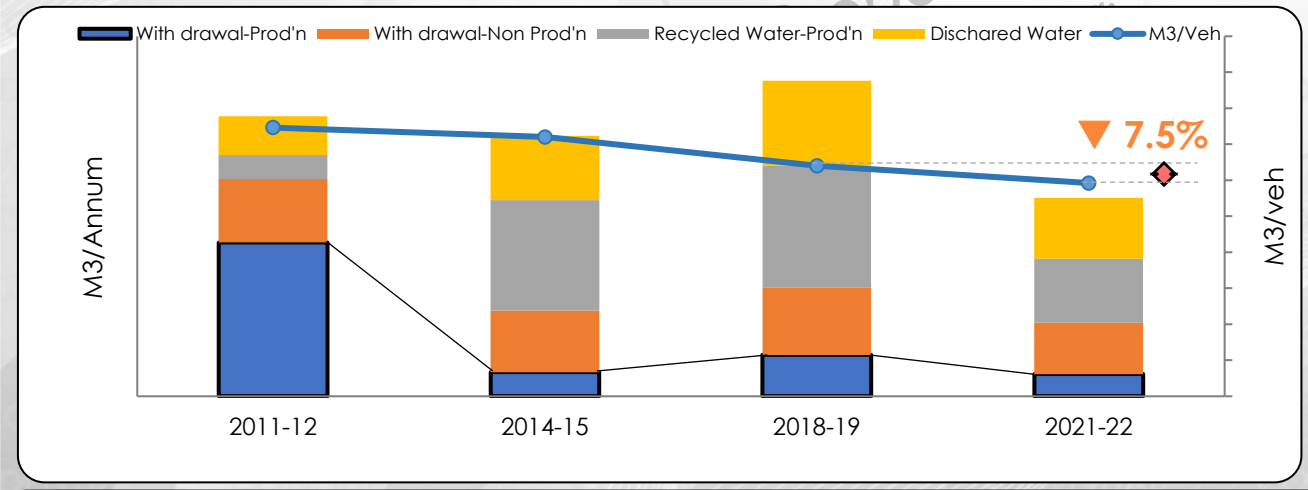


b. Recycle

c. Reuse – Rainwater Harvesting

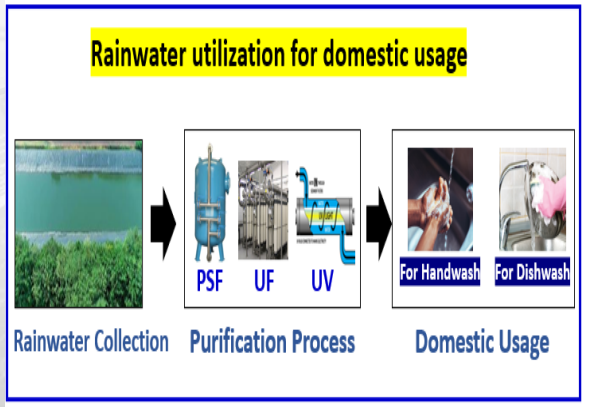


Water Reduction so far.....



Approach towards Water Positive :

a. Rainwater – For Domestic use



b. Groundwater - Recharge

TKM No. 01
(Toyota Affiliates - Asia Pacific Region)

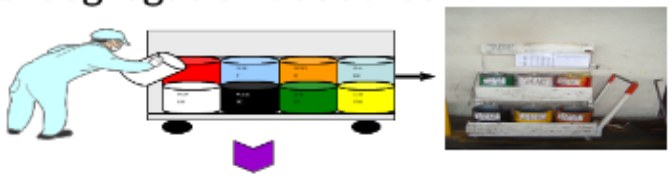
47% Freshwater consumption reduction & **7.5%** [m³/Vehicle] in manufacturing in last 3 years

Challenge No-5: [Establishing a Recycling based Society]

a. TKM Waste Management System ➡Value management System

1. Waste generation @ Production

2. Segregation at source

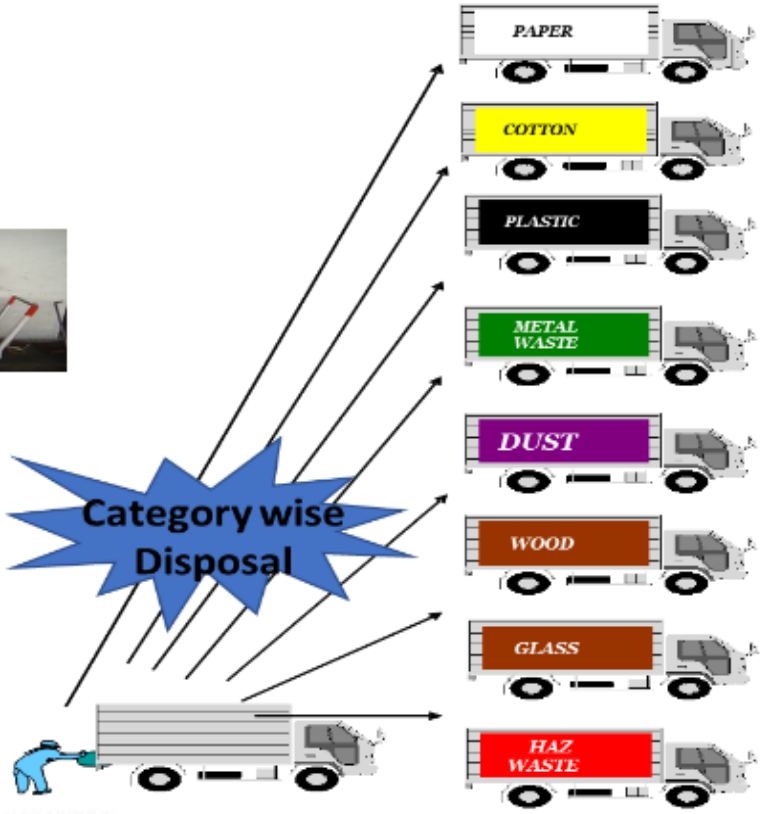


3. Final Storage

Value Yard

TKM Value Yard

Waste Type



Value category – 31 to 59 from FY 2014 to FY 2020

Recyclability of waste - 73 % (yr12) ➡ 96% (yr20)

b. Expanding to Value Chain

Waste Management @ Suppliers & Dealers

c. Waste Management ➡ Circular Economy

Plastic Recycling	Metal Recycling	Battery Recycling
Plastic waste to granules making and supply back to manufacturing	System to Collect from Suppliers & Dealers (Aluminum, Glass, et)	Re-built, Re-Use & Re-Cycle

Example

Bumper waste | Granules | Supply to Vehicle Parts manufacturing

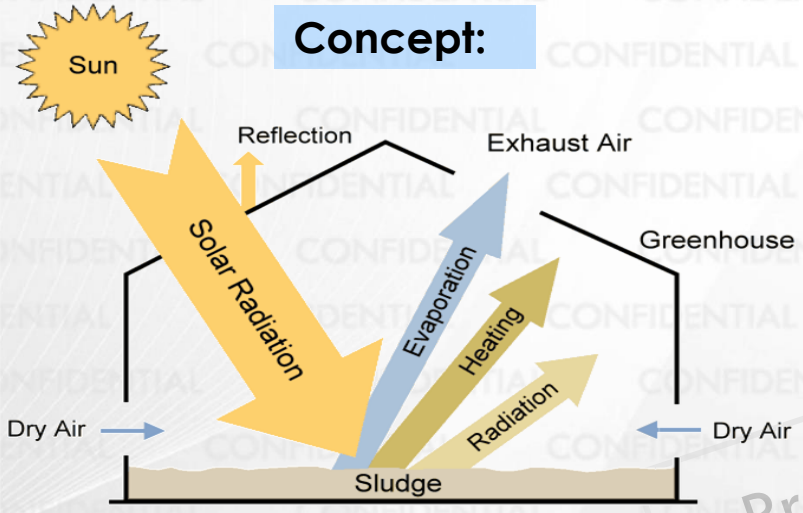
96% of Waste is recycled & Promoting across value chain towards Circular Economy

Establishing Recycle based society – [Zero Landfill]

1. Chemical, Phosphate & Paint Sludge :

Drying at source

Concept:



Benefits:

- Reduction in Hazardous waste : >50%
- Reduction in Logistics CO2 : 40%

Incineration to Co-processing

> All incinerable wastes dispose through co-processing to **reduce process emissions** and **achieve Zero waste to Landfill**

Incineration

Co-Processing

1,50,627 tons CO_2 Emissions reduced

Benefits:

- Reduction in Hazardous waste : >12%
- Reduction in Process CO2 : 80%

TKM with ACC cements carried out first trials of Co-processing Involving MOEFCC,CPCB,KSPCB (Yr 2008)

2. BIO Sludge :

Bio-sludge to Compost using Bio-Enzymes

Bio-Sludge

Drying facility

Final Compost

Manure Approx. 200 tons per annum of utilized for plantation

Minimize Environment impact by eliminating 2850 tons of Hazardous waste to Landfill

Challenge No-6: [Future Society in Harmony with Nature]

Eco Activities :

TKM initiated large-scale Afforestation activity under guidance of Dr Miyawaki in 2009.

More than 320,000 saplings planted with more than 600 native species

Thinking –way :

To restore & reconstruct forests based on the concept of **"Potential Natural Vegetation"**

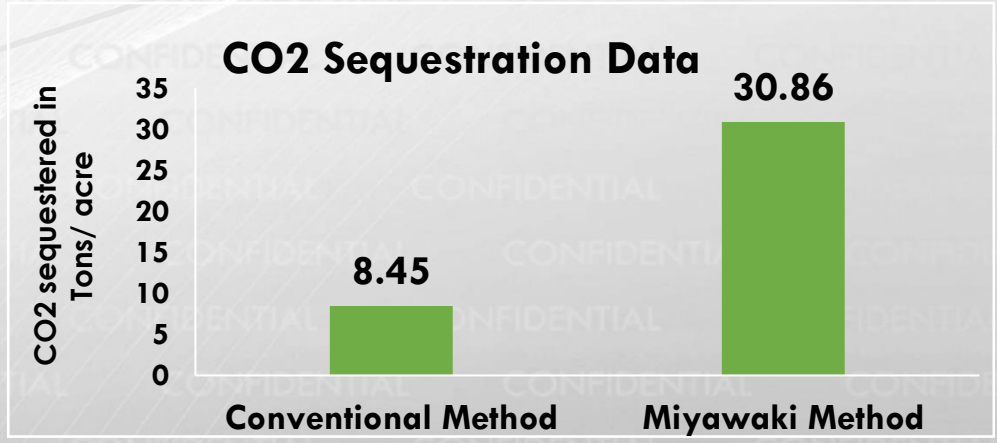
INVENTORY CO_2 OF IN GREEN-BELT AREA

Project Partner

BANGALORE UNIVERSITY

Approx. 4700 tons of CO_2 Emission sequestered (Cum. FY 2009 to FY 2019)

Outcomes:



Till date more than 20,000 students (Govt & Private Schools) have been trained at Ecozone

Challenge No-6: [Future Society in Harmony with Nature]

TOYOTA ECOZONE LEARNING WITH NATURE

An Experiential Learning Center

Purpose: To bring in "Behavioral change" towards Environment in Society and "Habitat Restoration"

GLIMPSES OF ECOZONE

17 Theme Parks

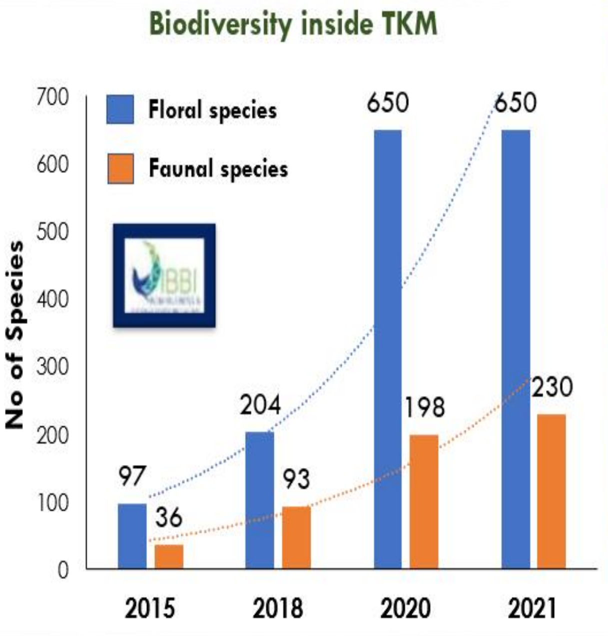
Toyota Plaza

Evolution timeline walk

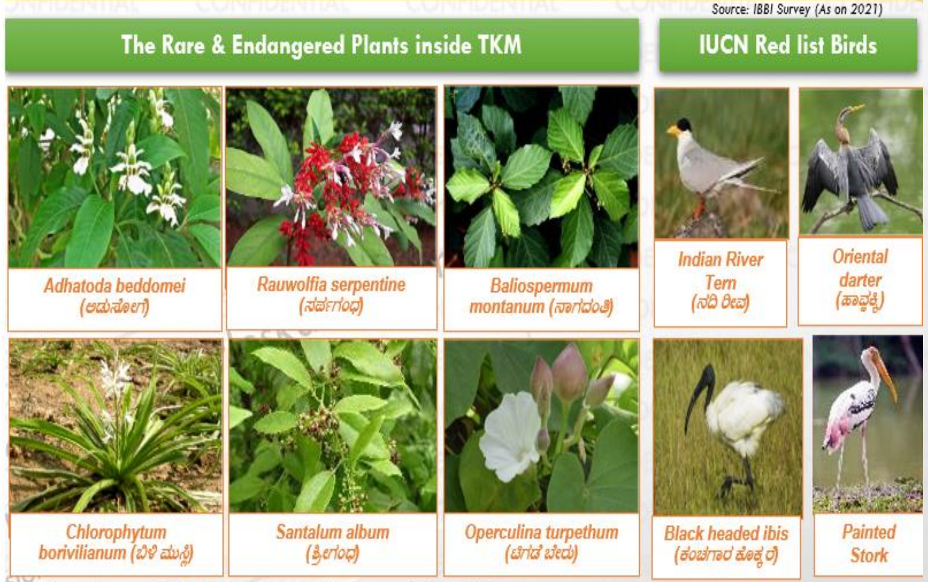
Education Building

Solar Energy Park

Biodiversity @ TKM:



Source: IBBI Survey (As on 2021)



TKM has collection of **38 varieties** of rare and endangered plants which are categorized in IUCN (International Union for Conservation of Nature) Red-data book.

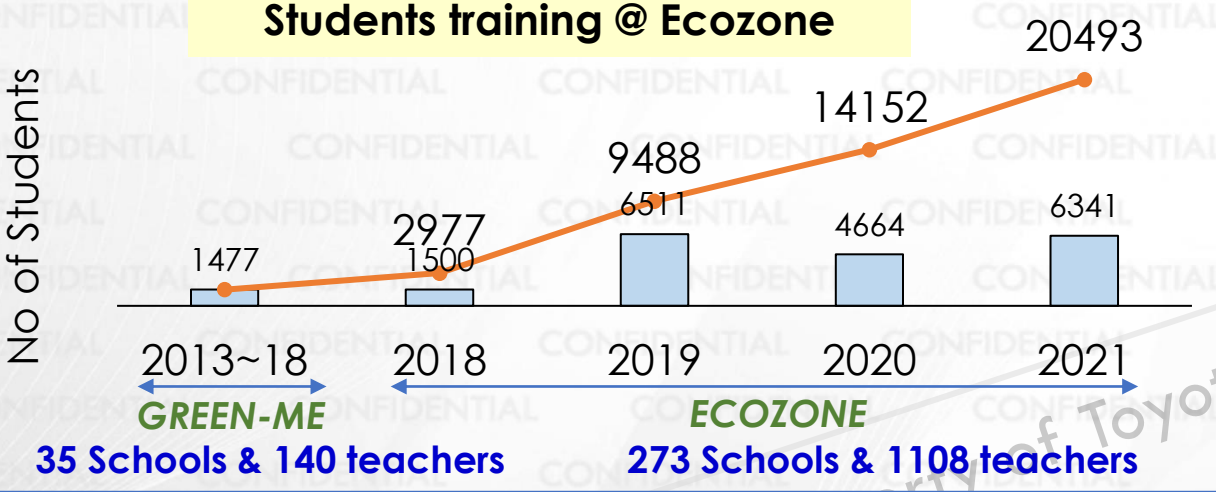
TKM has **4 IUCN Red-list** of threatened species

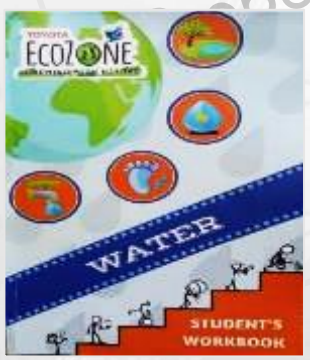
Located in an area of **25 acres** with **17 Theme Parks** & **22 Education Models**

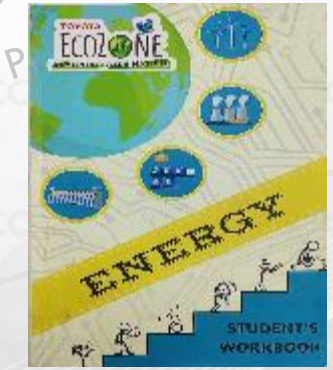
Challenge No-6: [Future Society in Harmony with Nature]

Promotion among Stake holders:

Students training @ Ecozone

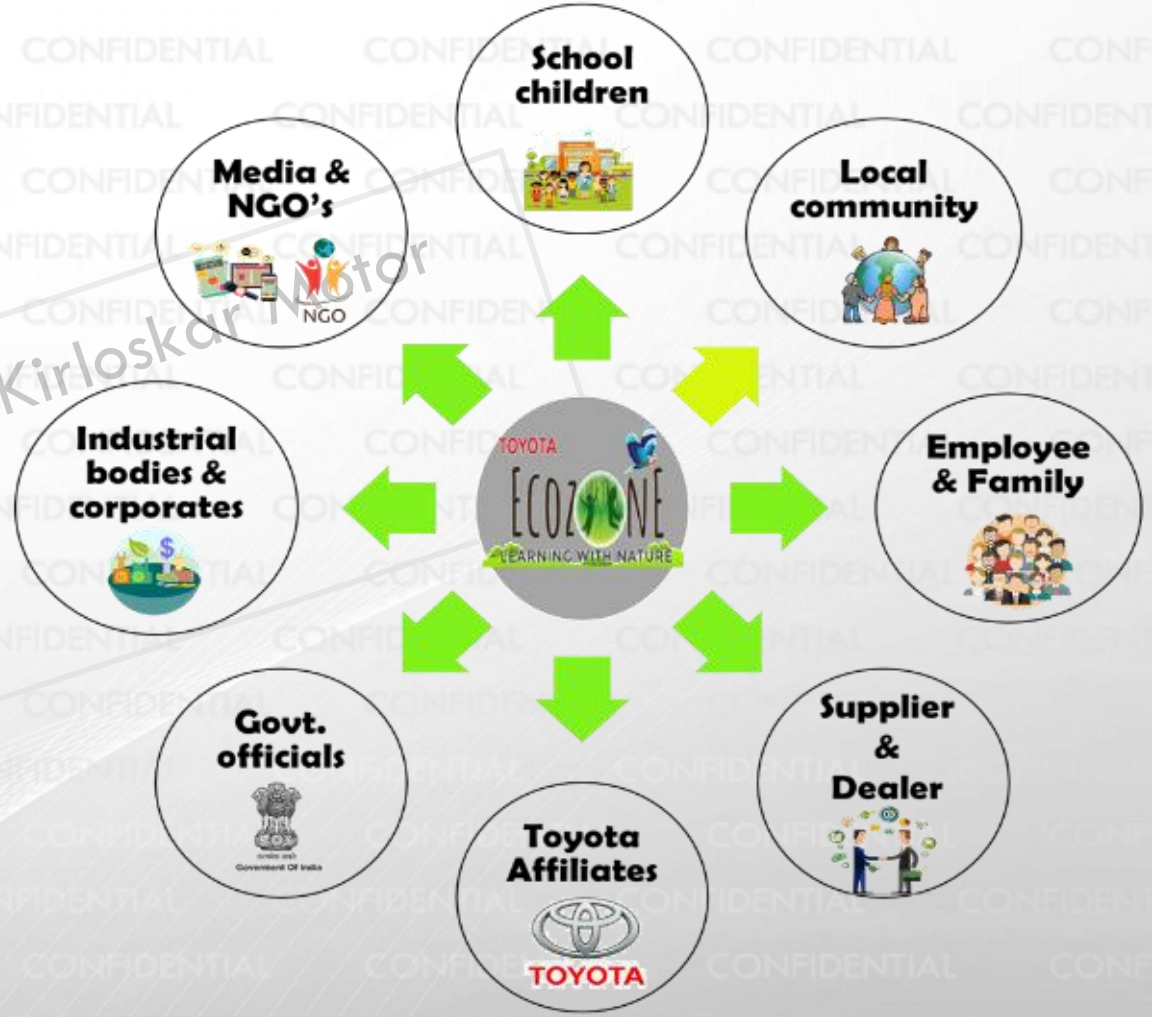






9 training modules developed (6 Offline & 3 Online)

Expanding Ecozone training to all stakeholders



Engaged with **young minds** (Government & Private schools) at Ecozone

Employee & Family Members Involvement:

TKM utilizes various platforms to build awareness and promote eco consciousness among its stakeholders

Team Members:

Eco Mind:


Eco Kaizen:


Eco Showcase:


Family Members:




Engaged with **young minds** (Government & Private schools) at Ecozone

Awards & Recognitions:

2012 to 2015
CII Sustainability Awards

2018 CII Environment Domain Excellence Awards

2018-19
CII CAP 2.0

Mr. Naomi IShii, MD-TKM receiving award from Chairman

Mr. A Tachibana, MD-TKM receiving award from Mr. Hiroyuki Fukui (Chief Executive Officer of AMENA)

Best Environment Management Award – Asia Pacific Region (2015 ~ 2017)

Toyota Global Eco Kaizen Award

CII (SR) Award -2021

Golden Peacock award for Energy Efficiency

Frost & Sullivan & TERI Award - 2021

Recognition from Ministry of MNRE– FEB 2022

2021 - Logistics Kaizen

"Best Hazardous Waste Management Company"

"Water Management Company of the year"

Winner of Golden Peacock Award for Energy Efficiency 2019 & 2021

Frost & Sullivan & Teri Awards – Sustainability 4.0

Hon'ble Minister Shri RK Singh & Shri Kuba felicitated TKM Energy Compact – Feb'2022

Please do visit Ecozone

Website : https://www.toyotabharat.com/toyota-in-india/environment

E-mail : *toyotaecozone@toyota-kirloskar.co.in*

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THANK YOU

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