

Mahindra MSTC Recycling Private Limited

A joint venture between MSTC and Mahindra Accelo

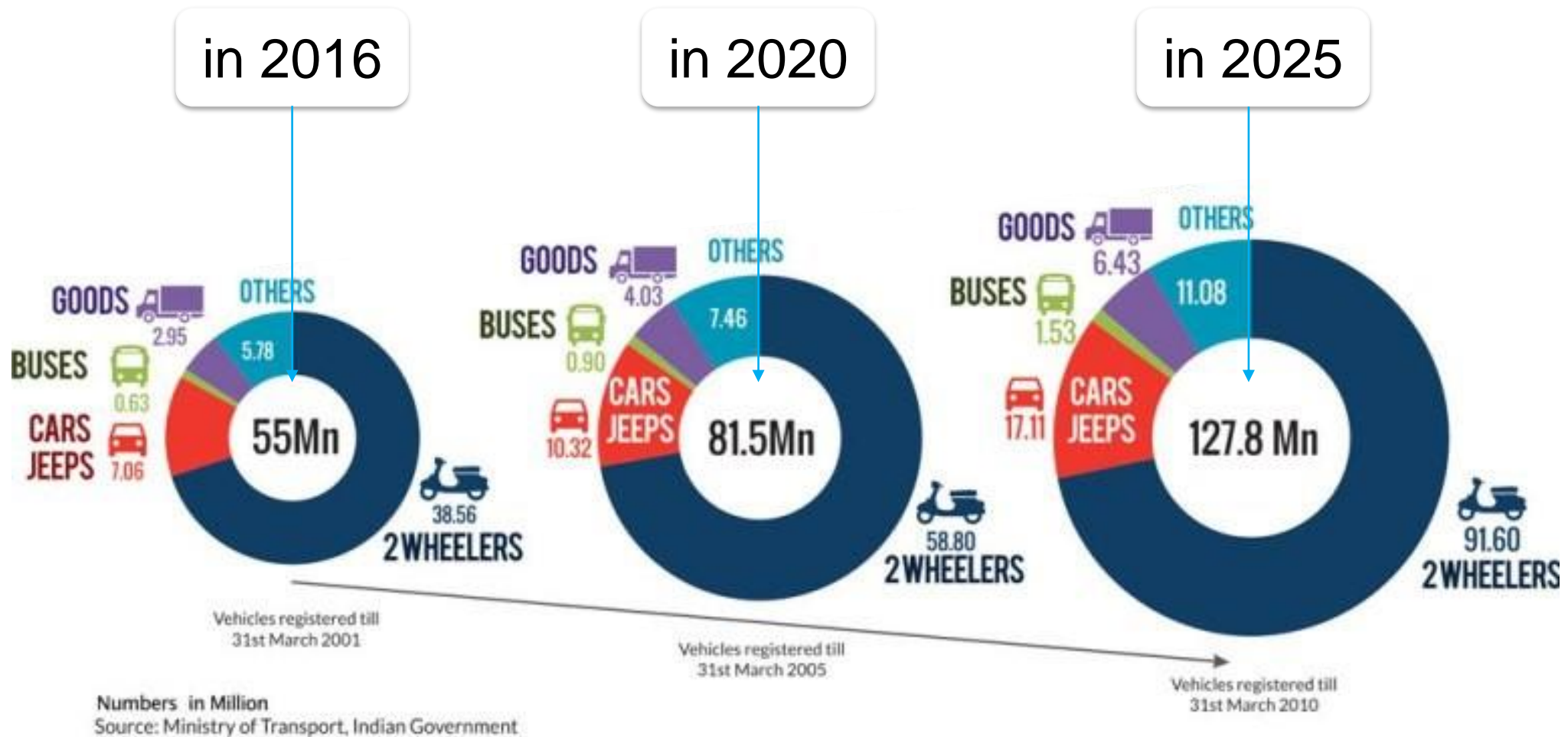


CERO

Moving towards a ZERO -
pollution nation
With **India's 1st Automotive & Steel
recycling facility**



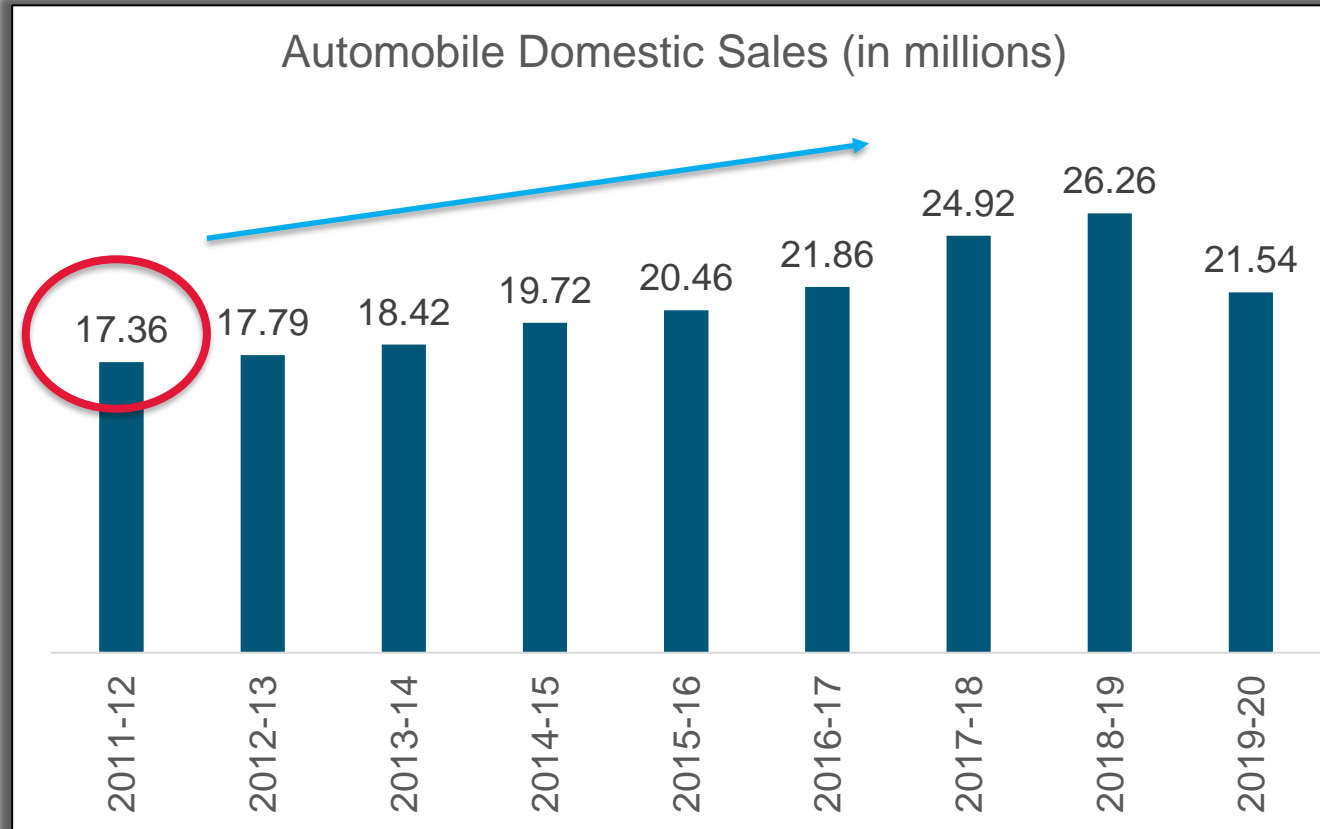
Automotive recycling : Market size



Auto recycling industry size



These will be qualified as ELVs in the year 2025 and increasing in subsequent years



THE END OF LIFE VEHICLES ON OUR ROADS

Some important Numbers

Over the next five years, 40 million vehicles are likely to reach their end of life in India

40
Million

9
Million

9 million vehicles are likely to be added to this base every year going forward

Internationally, 85-95% of the vehicle is recovered and vehicle designs are also well suited for easy dismantling and disposal

85%

Pollution caused by old vehicles compared to new ones

Emission of 1 Old Car = Emission of 10 New Cars



Emission of 1 Old Truck = Emission of 8 New Trucks



COUNTRY	RANK	EPI SCORE
FILTER BY REGION: ALL REGIONS		
Djibouti	164	28.1
Lesotho	165	28
Gambia	166	27.9
Mauritania	167	27.7
Ghana	168	27.6
India	168	27.6
Burundi	170	27
Haiti	170	27
Chad	172	26.7

India ranks **168th** in 'Environment Performance Index' by EPI Envirocentre 2020

Source : Envirocentre -> Environmental Performance Index



In addition to this,

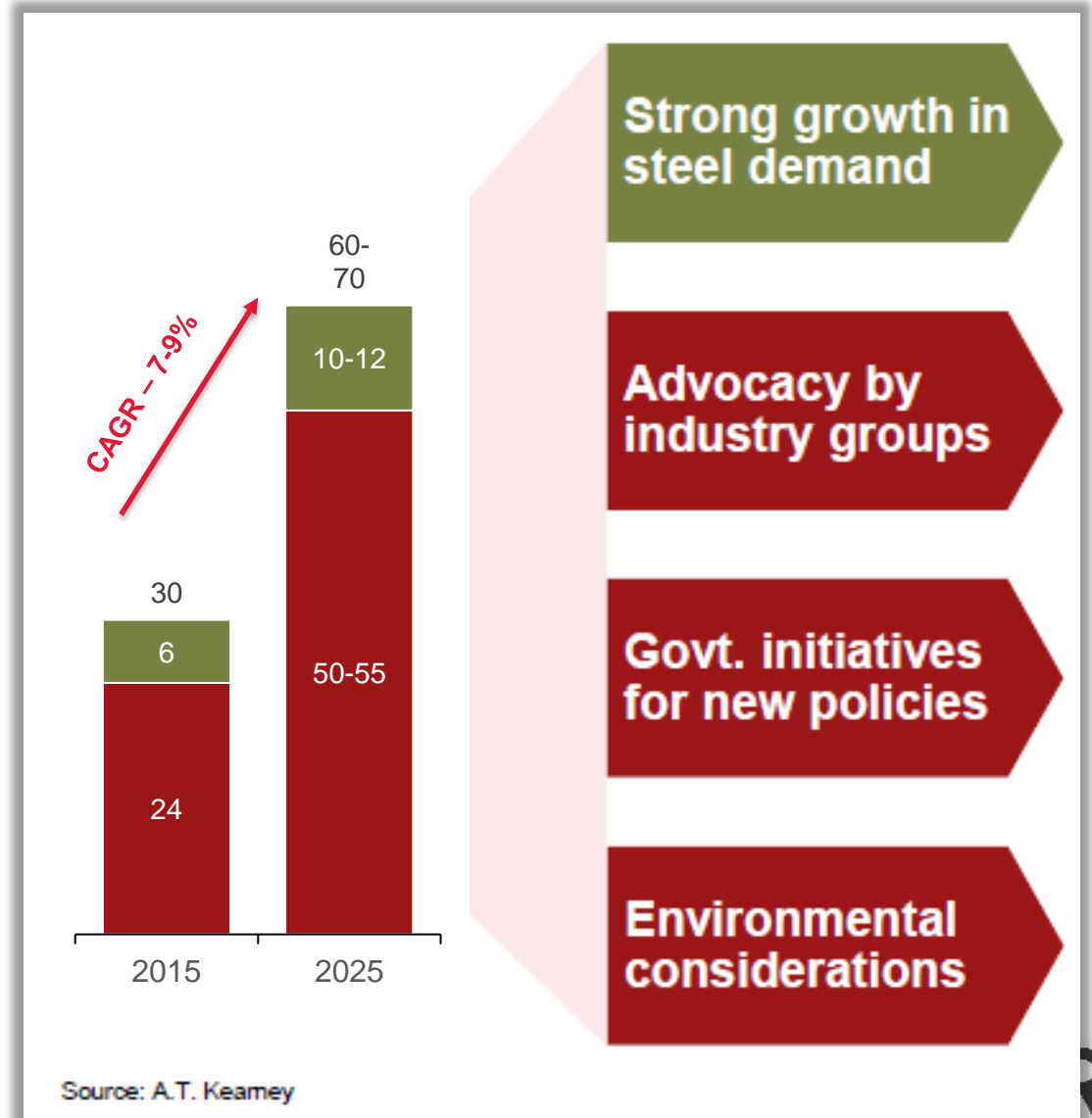
~50,000 vehicle are added to Indian roads everyday.....

Ferrous scrap consumption in India

**Ferrous scrap consumption in India
And Growth drivers (mn tonnes)**



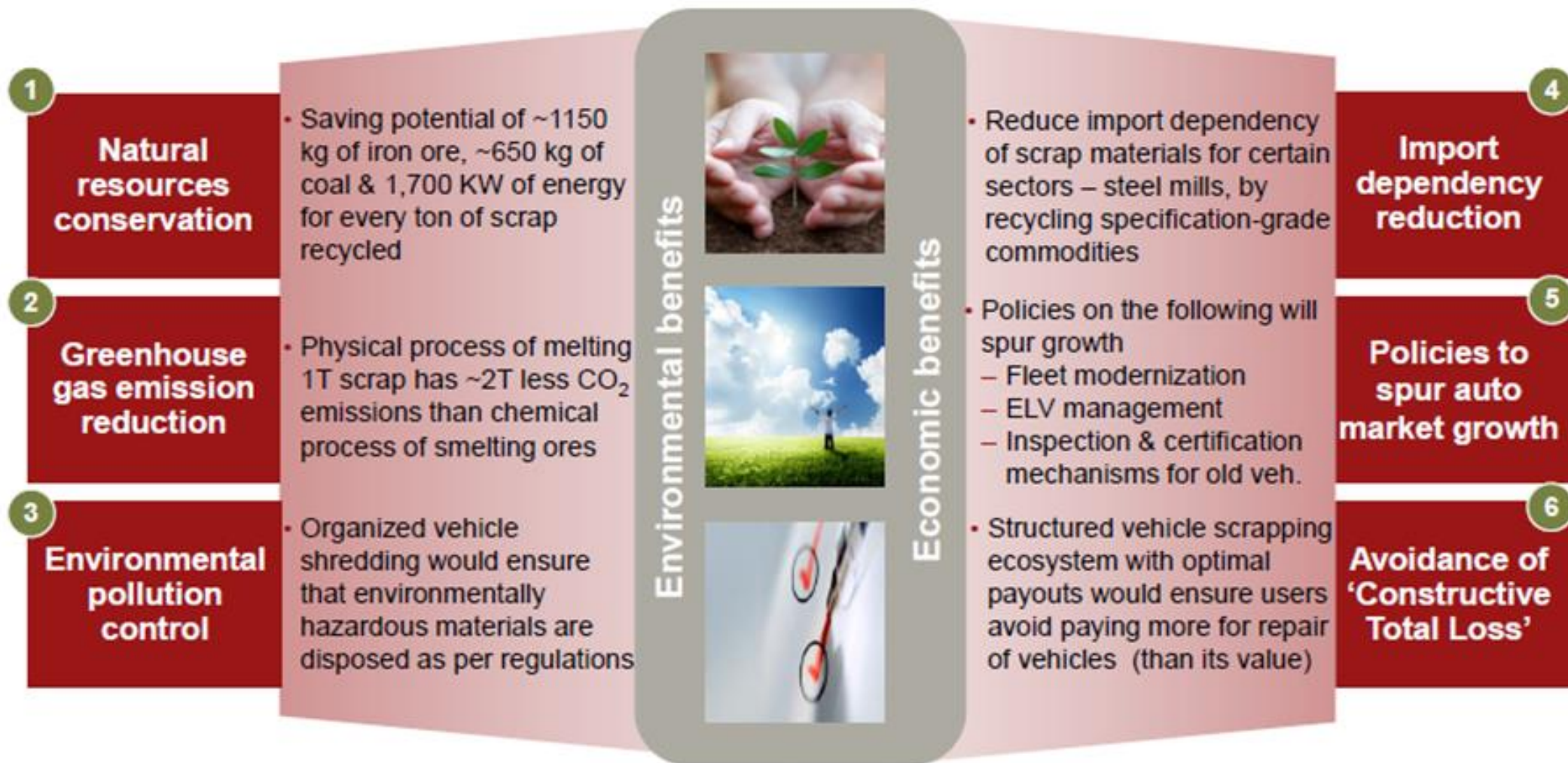
**India imports close to 6-7 million tonnes of
scrap steel every year due to gap in domestic
demand and supply!
(Equivalent to ~\$2 bn in forex)**



Benefits of recycling



Benefits of recycling





Benefits of Recycling



CO₂ emissions are reduced by 58% through the use of ferrous scrap

India is the 2nd largest importer of Steel Scrap, importing 6 million tons of scrap per annum

1600 kg Iron Ore

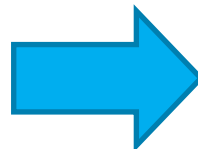
625 kg Coal

53 kg Limestone

642 kWh Energy

287 Liters Oil

2.3 m³ of landfill space



Efficient recycling saves energy, reduces emissions, conserves resources, preserves foreign exchange and creates employment

Consumes:

74% less energy

90% less virgin materials

40% less water;

Produces:

76% fewer water pollutants

86% fewer air pollutants

97% less mining waste



Current scenario in unorganized sector



Current Process in India – Unorganized market

Collection process



ERO



Current Process in India – Unorganized market

Dismantling process



CERO



Current Process in India – Unorganized market



**Recycling
process**

CERO



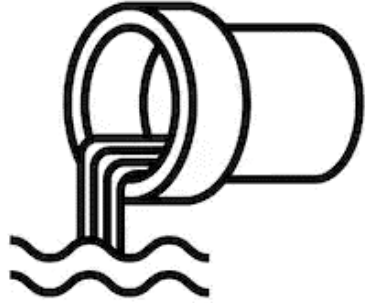
Current Process in India – Unorganized market



Non-reusable
parts and oils
and dumped



Such processes lead to :



Unsafe disposal of hazardous waste



Environmental pollution



No transparency in process & transactions



Poor working conditions

INTRODUCING CERO

INDIA'S FIRST ORGANIZED VEHICLE RECYCLER



A Mahindra Accelo and MSTC Venture

ABOUT US

WHY CERO?



FAQs

BLOG

SALES

CONTACT US

1800-267-6000



A collaboration between Mahindra Accelo and MSTC (A Government of India Enterprise)

TOWARDS A ZERO POLLUTION NATION

Zero waste, Zero pollution, Zero hassles

We're Online!
How may I help you today?





JV
50/50



*Mahindra MSTC Recycling
Private Limited.*



JV signed on August 8, 2016
In presence of

Chaudhary Birender Singh, Minister of Steel & Mines
&
Dr. Aruna Sharma, Secretary Steel

To Set up India's first Auto shredding plant with MSTC Ltd. as a partner

CERO

An Introduction to CERO



- A Joint Venture between Mahindra Accelo (Subsidiary of Mahindra & Mahindra) and MSTC Ltd. (a Govt enterprise) under the brand name “CERO”
- **CERO** is India’s first organized automobile recycling initiative.
- It uses eco-friendly ways of recycling vehicles, aiming to create almost zero waste in the process.
- **CERO** wishes to create a culture of zero tolerance to unscientific processes and pollution of recycling automobiles.
- With the steel that is generated, it aims at reducing India’s dependence on steel scrap imports (Currently it is at 6 mn tonnes / year)



Our objectives

- Zero tolerance towards pollution
- Zero tolerance towards unsafe and unethical practices
- Zero tolerance towards untreated discharge

CERO – First Government authorized vehicle recycler



TRANSPORT DEPARTMENT, GOVT. OF NCT OF DELHI
5/9 UNDER HILL ROAD, DELHI-110 054.

DC/OPS/TPT/2018/1387/ 5844-49 Dated: December 21, 2018

LICENCE OF AUTHORISED SCRAPPER OF MOTOR VEHICLES IN DELHI
(Under Guidelines for Scrapping of Motor Vehicles in Delhi-2018)

On acceptance of the prescribed Terms & Conditions of 'Guidelines for Scrapping of Motor Vehicles in Delhi-2018', M/s Mahindra MSTC Recycling Pvt. Ltd. (CERO) is hereby granted a licence as per details mentioned below as 'Authorised Scrapper' for scrapping of Motor Vehicles in Delhi :-

1.	Licence number	0001/2018
2.	Name & Address of Office in NCT of Delhi	Mahindra MSTC Recycling Pvt. Ltd., 6 th Floor, Mahindra Towers, 2A, Bhikaji Cama Place, New Delhi-66.
3.	Address of Scrapping Yard in NCR	B-10, Ecotech-2 Extension, Greater Noida, U.P.-201306
4.	Details of Bank Guarantee	Bank Guarantee No. 240GT06T01183530010 dated 19.12.2018, valid upto 19.12.2023, for Rs. Ten Lakhs, in favour of Commissioner (Transport) issued by HDFC Bank, Harsha Bhavan, Connaught Place, New Delhi-01.
5.	Pollution Control Certificate	7213/U/PCB/Greater Noida/ (U/PPCBRO)/ CTO/ water/GREATER NOIDA/2017 dated 20.01.2018 issued by U.P. Pollution Control Board valid upto 31.12.2020.
6.	Date of issue	December 21, 2018
7.	Validity	31-12-2023, subject to validity of Pollution Control Certificate. Renewable for another five years on satisfactory performance.

The licence is subject to fulfilment of all conditions of "Guidelines" referred above and will be cancelled if found not eligible at any stage or if found not scrapping the vehicles in accordance with provisions of Acts, Rules and Guidelines prescribed there under.

DC/OPS/TPT/2018/1387/ 5844-49

(ASHA CHAUDHARY MALHOTRA)
DY. COMMISSIONER (OPERATIONS)
Dated: December 21, 2018

Copy for forwarded for information & necessary action to:-

1. Secretary to Hon'ble Minister (Transport), Delhi Secretariat, I.P. Estate, New Delhi.
2. OSD to Commissioner (Transport)/ Spl Commissioners (Transport)
3. Sr. System Analyst to take up the matter with NIC to finalise online process/ live feed of scrapping to Operational Control Centre (OCC) immediately.
4. All Dy. Commissioners / DCA / All MLDs / MLO (Mayor Vihar), Inspecting Officer
5. System Analyst for uploading on the website of the department.
6. Guard File.

(ASHA CHAUDHARY MALHOTRA)
DY. COMMISSIONER (OPERATIONS)

Licence number : 0001 / 2018



CERO

Our facility follows :

- International quality norms
- Environmental compliances



- The Water Act, 1974
- The Air Act, 1981
- The Environment Protection Act, 1986





Processing capability



Trucks & Buses



Cars, 2W , 3W

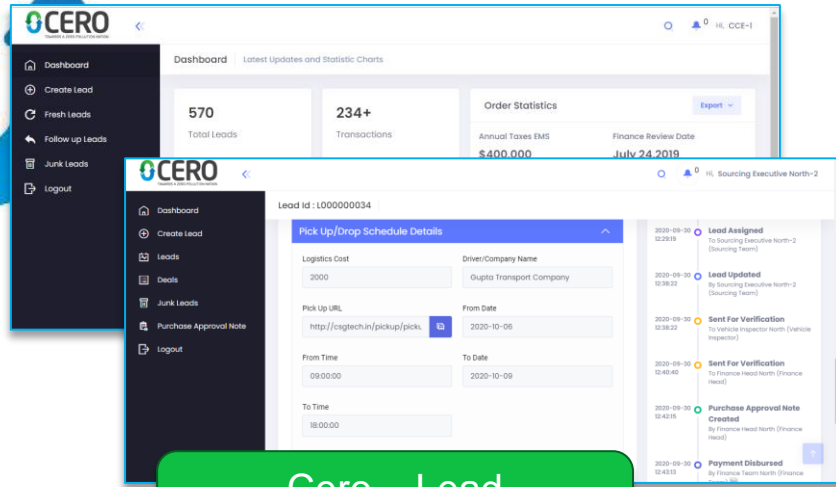


Machinery



Industrial Scrap

Digitally enabled process



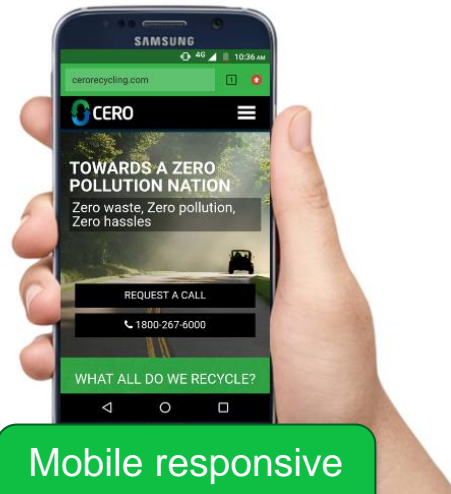
Cero – Lead Management system

The image is a screenshot of a 'Vehicle Valuation' form. It has a pink background and a grey header. The form contains the following fields and labels: 'Website's Valuation of Car' with a rupee symbol and input box; 'Threshold Price for Vehicle' with a rupee symbol and input box; 'Inspector's Price for Vehicle' with a rupee symbol and input box; 'Price Revision Required?' with radio buttons for 'Yes' and 'No'; and 'Price Approval required' with a rupee symbol and input box, followed by a 'Submit' button.

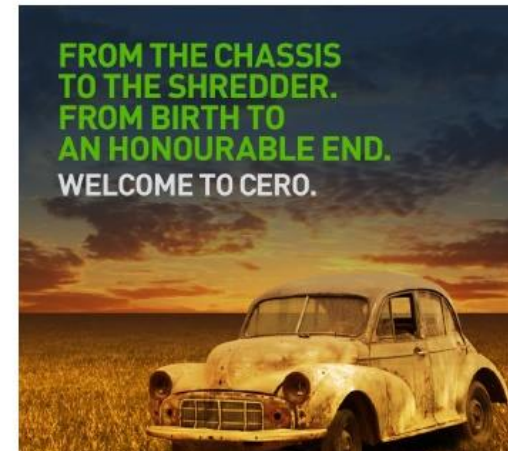
Online logic-based Valuation of vehicles



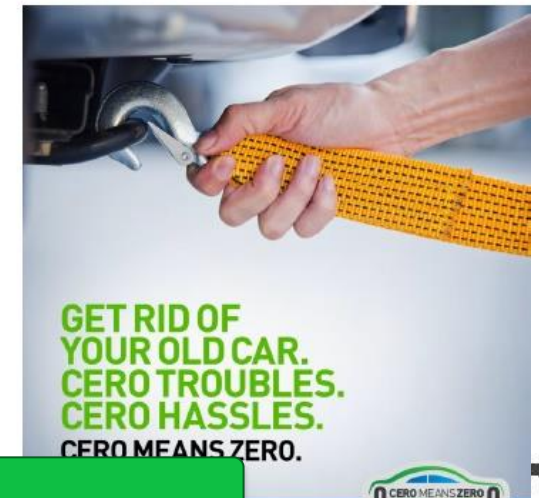
Paperless transactions



Mobile responsive website

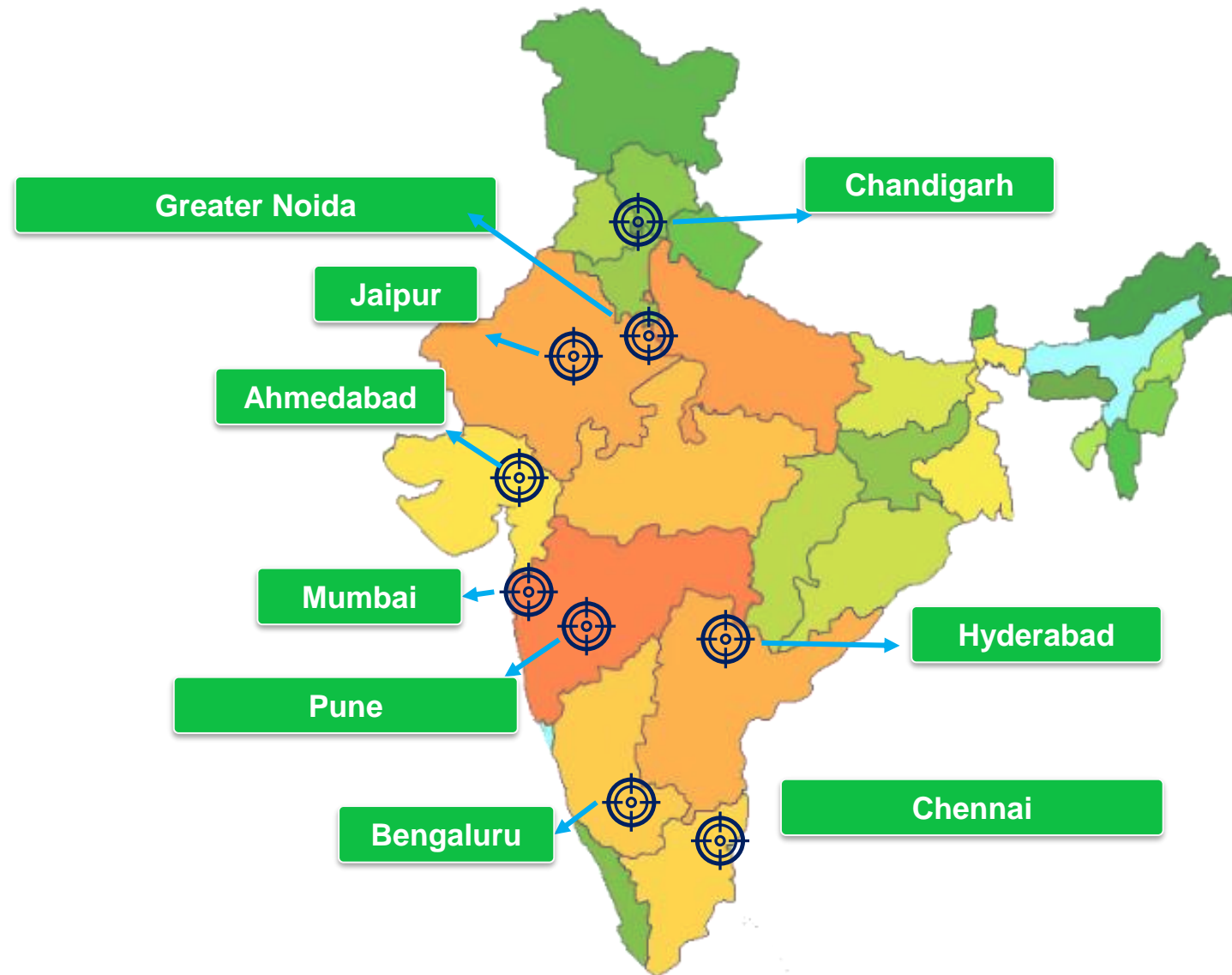


Social media campaign



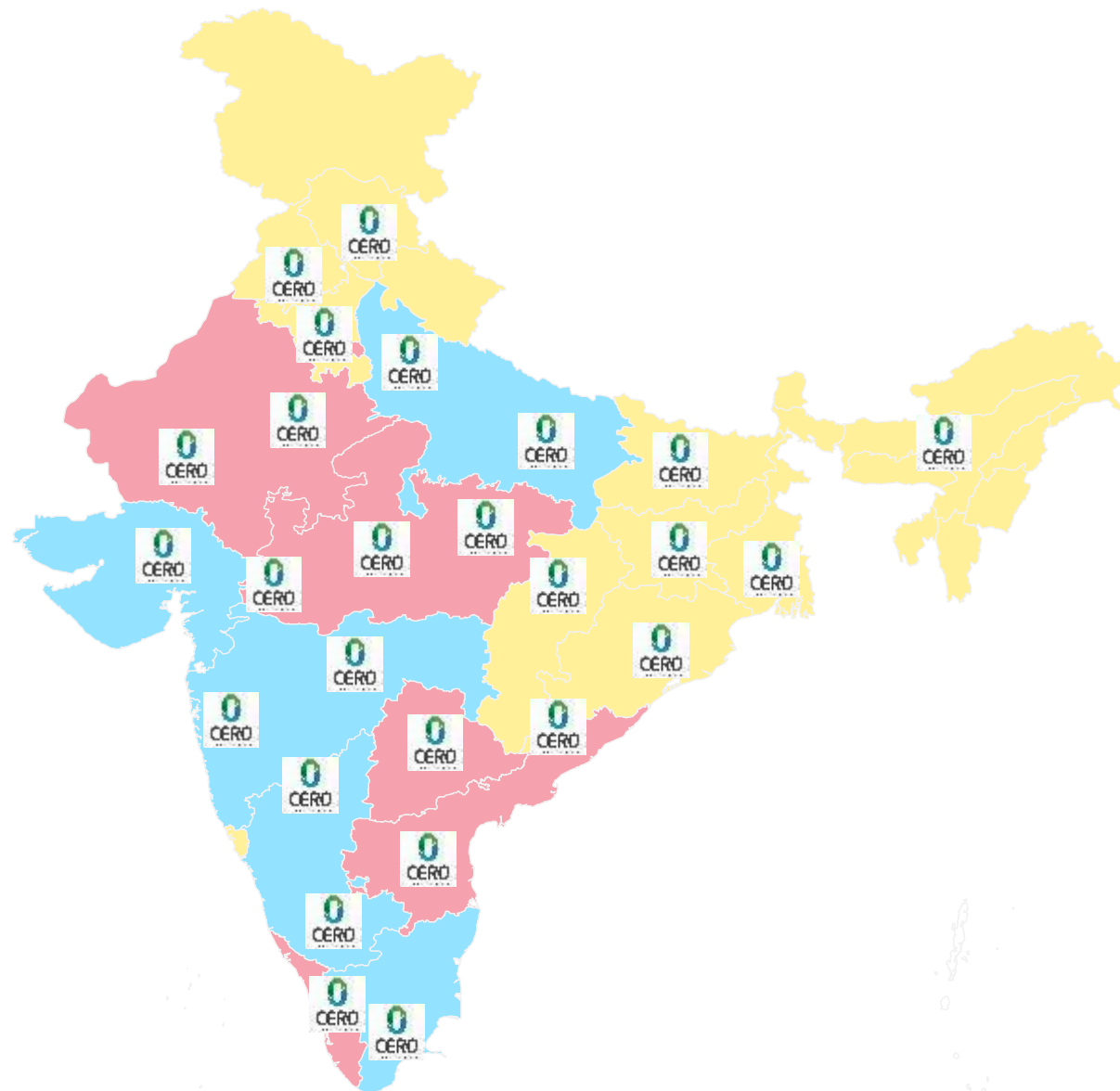
Presence

CERO current presence – Present in 9 cities





Plans to set up 25 centres in next 1 year – Pan India



How are we Integrating the unorganized industry?

Conference with traders of Mayapuri & Jama Masjid in Delhi

We met the traders to understand their aspirations and requirements to integrate them in a formal sector



Government policy interventions



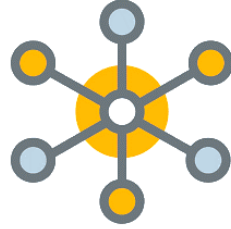
Government schemes in other countries on vehicle recycling

Global automotive shredding policies

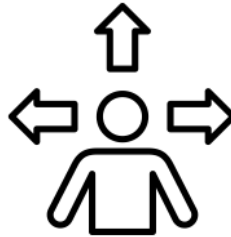
	EU	Japan	China	USA
Recyclability rate¹	95%	85%	95% by 2017	94%
ELV² age	<ul style="list-style-type: none">• No policy	<ul style="list-style-type: none">• Minimum 3 years; inspection once every 2 years	<ul style="list-style-type: none">• 10 years or 500k Km	<ul style="list-style-type: none">• No policy
Recycling model	<ul style="list-style-type: none">• Extended Product Responsibility (EPR) for OEMs; to ensure<ul style="list-style-type: none">– Collection (free take back)– Recycling (incur costs)	<ul style="list-style-type: none">• Shared responsibility model between<ul style="list-style-type: none">– End users (Recycling fees)– OEMs (Facilitate recycling)	<ul style="list-style-type: none">• Shared responsibility model between<ul style="list-style-type: none">– OEMs,– Recyclers– End users	<ul style="list-style-type: none">• No legislative framework; Industry governed primarily by market forces• Accreditation for recyclers but no accountability for OEM
Vehicle scrappage scheme	<ul style="list-style-type: none">• Monetary incentives in Germany, France, Italy, UK and others	<ul style="list-style-type: none">• Buyers pay recycling fee at time of purchase / vehicle inspection	<ul style="list-style-type: none">• Monetary incentives to scrap old cars and buy new ones	<ul style="list-style-type: none">• “Cash for Clunkers” (Car Exchange) scheme<ul style="list-style-type: none">– Considered a failure due to the high incentives• California scrappage scheme considered more successful



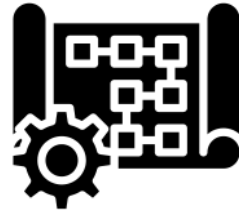
Critical success pointers for policy success



Standardized adoption across states



Fast-tracking the change of nature of policy to Mandatory rather than voluntary



Strict implementation of the fines & penalties for non-adherence to the new guidelines

