

Little traction in scrappage policy

April 2021



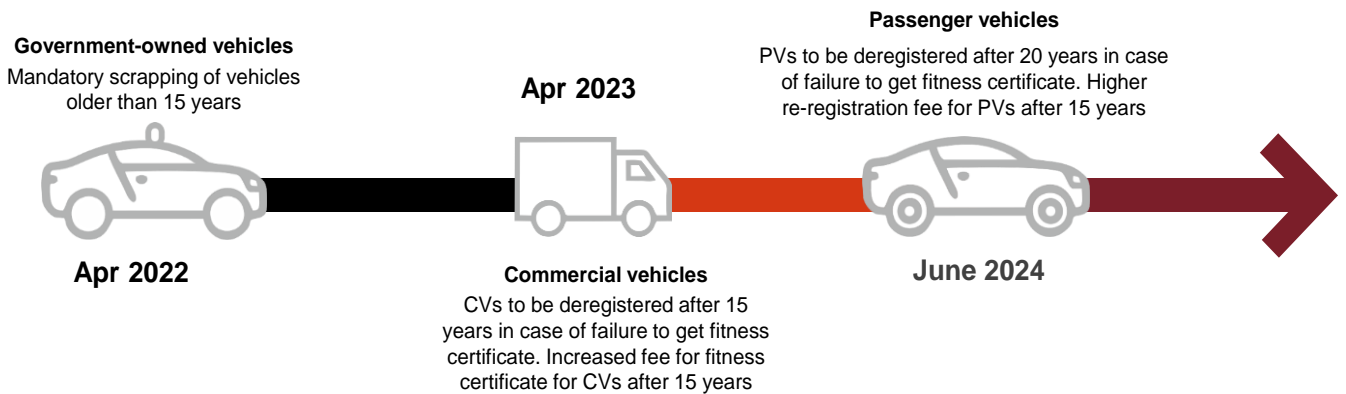
Scrappage offtake to skid on limited incentive and poor cost economics for trucks, lack of addressable volumes for other segments

The Centre’s scrappage policy is unlikely to have freight transporters queuing up to replace old vehicles with new ones. The scrappage volume of buses, passenger vehicles (PVs) and two-wheelers will be limited as well, a CRISIL Research analysis shows.

To be sure, the scrappage policy is much required as older vehicles are 10-12 times more polluting than newer ones. As things stand, India is home to six of the top 10 polluting cities globally, and is among the top five polluting countries. With vehicular pollution contributing nearly 15-30% (PM2.5 and PM10 level) especially in cities such as Delhi, the government is putting greater emphasis on weeding out old polluting vehicles (older vehicles are estimated to be 10-12 times more polluting than newer ones) through the scrappage policy.

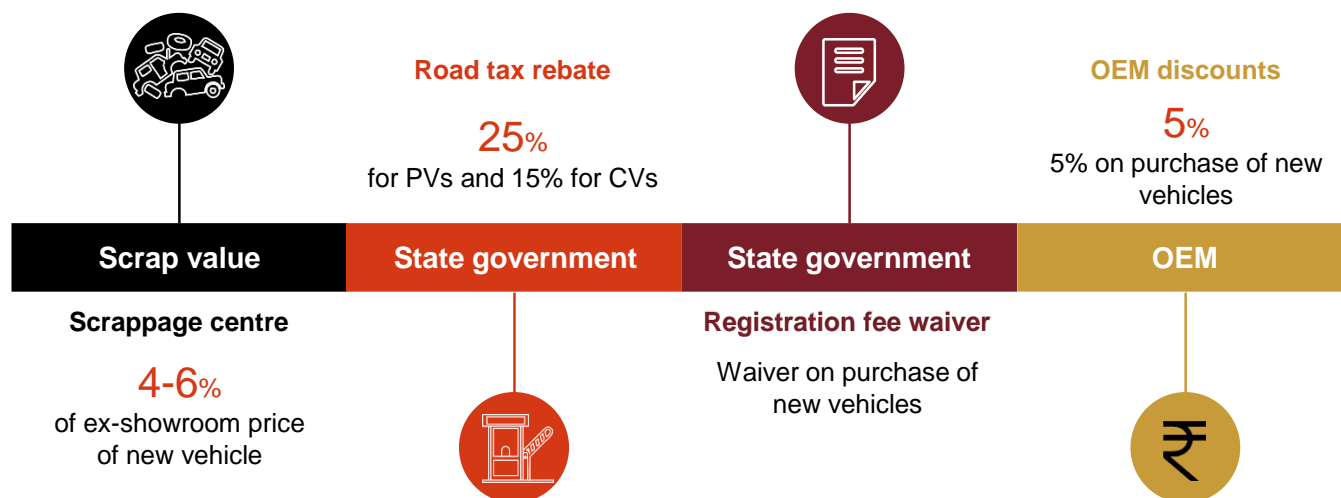
The process kicked off in May 2016, with the Ministry of Road Transport and Highways (MoRTH) issuing a concept paper outlining the Voluntary Vehicle Fleet Modernisation Programme to encourage scrapping of vehicles manufactured before March 31, 2005. And in March 2021, MoRTH announced guidelines for the policy:

Scrappage policy guidelines



The policy provides owners ample incentive to scrap their old vehicles as the date to renew their fitness certificate nears.

The scrappage matrix



*Note: CVs include trucks and buses, Stakeholder dependency is mentioned above for each proposed benefit
Source: Press Information Bureau, CRISIL Research*

A closer look, however, indicates the scrappage policy will find few takers among owners of buses, PVs, and two-wheelers. But the impact on new commercial vehicle (CV) sales could be sizeable, based on addressable volume.

Scrapping of state transport buses depends on state finances; meaningful volume expected only for CVs

In the **bus** segment, many buses owned by state transport undertakings will have a life of over 15 years. In comparison, buses operated for intercity, staff, school and tourist segments typically do not have a life beyond 15 years and would thus be outside the ambit of the scrappage policy. Hence, CRISIL Research estimates ~45,000 buses, largely owned by state transport corporations, could be scrapped and replaced. Assuming a three-year window, starting April 2022, scrappage of ~15,000 buses annually could result in 15-20% incremental new bus sales – based on the average of ~90,000 buses sold between fiscals 2016 and 2020. This, however, would depend on the state government’s wherewithal to purchase new vehicles and therefore will be a monitorable.

As for **PVs**, renewal of registration fees is proposed to increase from Rs 600 to Rs 5,000 (valid for five years) for passenger vehicles older than 15 years, a hike of over 8 times. However, these vehicles mostly ply in the rural areas where enforcement of higher registration fees is difficult to monitor. The potential benefit from scrapping a 15-year-old, entry-level small car will be Rs 70,000, whereas its resale value is ~Rs 95,000. That makes scrapping unattractive. But for vehicles older than 20 years, considering that there is a proposal to deregister them, the potential scrappage benefit is ~Rs 50,000, which is similar to its resale value. That can incentivise scrapping. As a result, 40,000-60,000 PVs can realistically be scrapped. So, the incremental contribution to new vehicle sales works out to 12,000 to 20,000 PVs annually, assuming a three-year window. As the number is less than 1% of the 30 lakh units sold on average over fiscals 2016-2020, scrapping will not contribute substantially to new sales.

In the case of **two-wheelers**, while the fees for renewal of registration is proposed to increase from Rs 300 to Rs 1,000 (valid for five years) for vehicles older than 15 years, the cost burden in absolute terms is minimal. Also, as much of these older two-wheelers ply in Tier II and III cities and rural areas over short distances, so the rise in registration cost may be difficult to implement given traffic scrutiny is weak in those geographies. For two-wheelers,

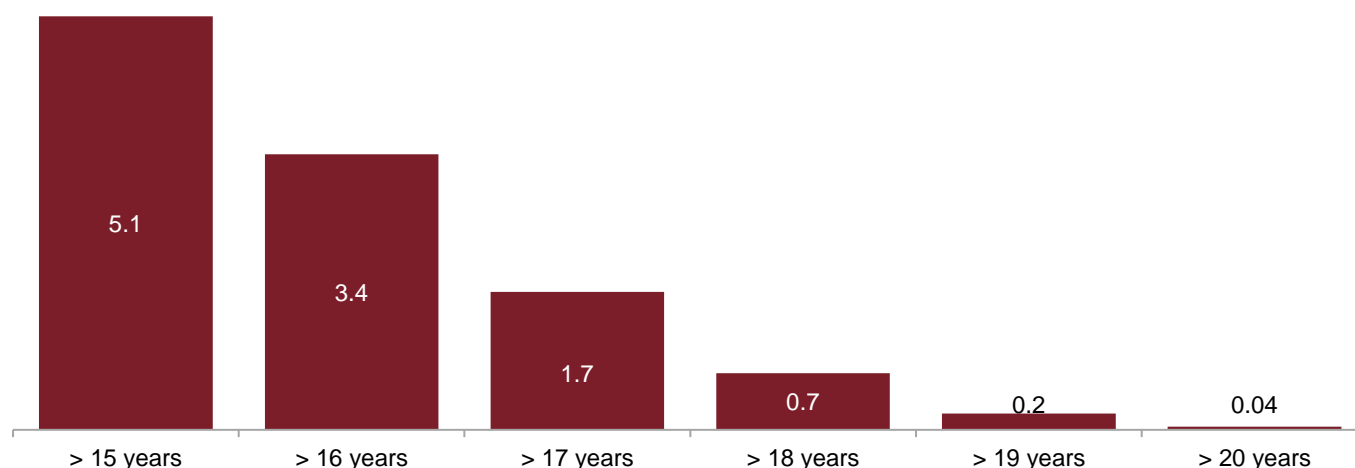
the policy could incentivise scrapping of vehicles older than 15 years with a net benefit of Rs 3,000-4,000 (comparing total potential benefit on scrapping vs resale value).

However, the majority of two-wheelers do not have a life beyond 15 years and volumes (assuming scrapping over a 3-year period) would account for only ~1-2% of the five-year average annual new sales volume of ~185 lakh. The scrapping policy, therefore, will provide no significant lift to sales of two-wheeler manufacturers.

In **medium and heavy commercial vehicles (MHCVs)**, though, the potential scrapping volume is significant. CRISIL Research estimates that ~5.1 lakh MHCVs (>7.5 tonne gross vehicle weight segment, or GVW) are older than 15 years and hence, could potentially be destined for the scrapyards. Currently, ~0.5 lakh trucks are scrapped each year, a number corroborated via industry interactions. That means incremental scrapping of ~3.6 lakh trucks over the policy's three-year window – tantamount to an incremental volume of ~1.2 lakh annually, or ~45% of annual average sales of ~2.7 lakh between fiscals 2016 and 2020, in an ideal scenario.

Year-wise population of MHCVs

(lakh)



Source: Society of Indian Automobile Manufacturers, CRISIL Research

The key question, though, is, will transporters eligible for scrapping their trucks opt for it?

We gauged the scrapping potential of ~18.5 tonne GVW medium commercial vehicles with a sticker price of Rs 18-19 lakh in Maharashtra (erstwhile 16.0 tonne GVW trucks) that are more than 15 and 20 years old. This segment comprises ~20% share of the 5.1 lakh CVs older than 15 years. The insights from this analysis are applicable to the other CV segments as well.

Two scenarios have been reviewed to assess the benefits the scrapping policy will provide:

Assumptions for optimistic and base scenarios

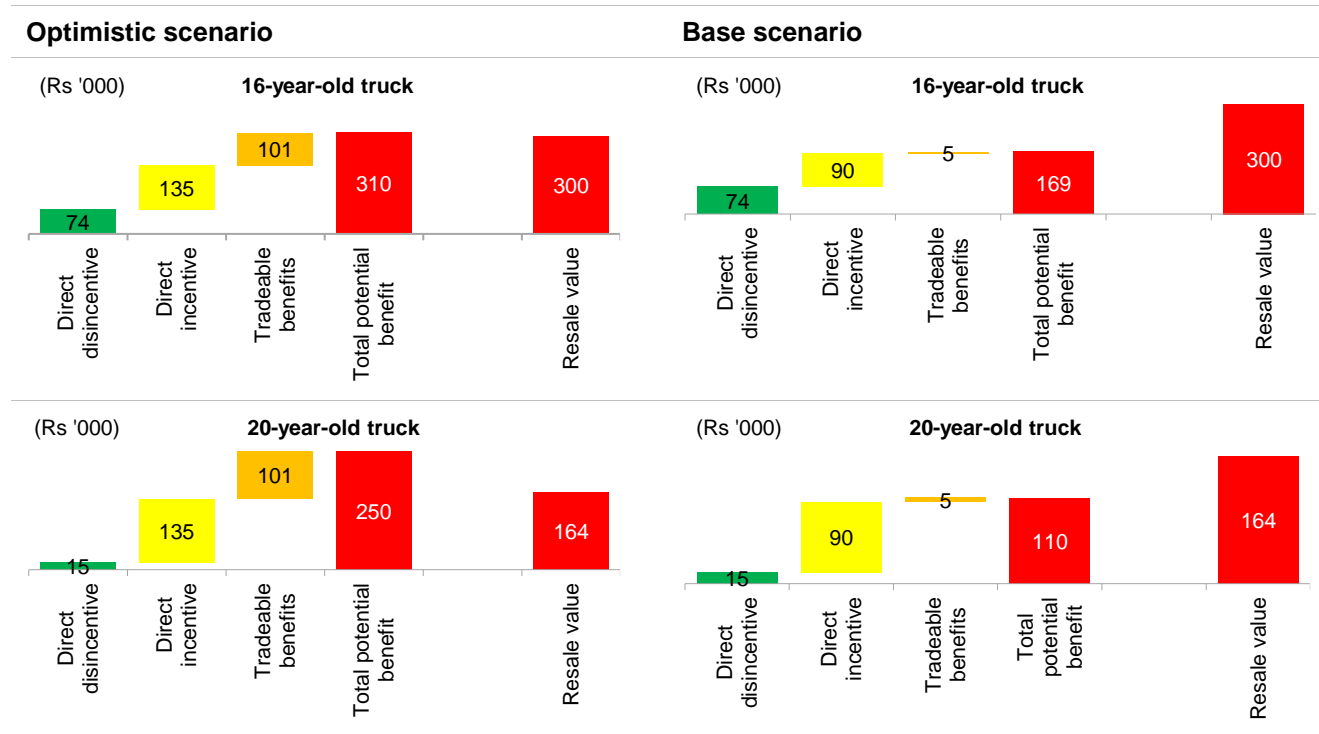
	Optimistic scenario	Base scenario
Direct disincentive	<ul style="list-style-type: none"> Fitness cost: Rs 0.13 lakh per year over 15 years, assuming higher fitness cost for vehicles older than 15 years Green tax: Rs 0.02 lakh per year over 15 years, assuming higher green tax for vehicles older than 15 years 	Same as optimistic scenario
Direct incentive	Scrap value: Rs 1.35 lakh (based on current scrap value rate)	Scrap value: Rs 0.90 lakh at 4-6% of new vehicle cost as per the scrappage policy
Tradeable benefits	<ul style="list-style-type: none"> Road tax rebate: Rs 0.02 lakh per year Registration waiver: Rs 0.02 lakh OEM discount: Rs 0.9 lakh 	Road tax rebate: Rs 0.01 lakh per year* Registration waiver: Rs 0.01 lakh* OEM discount: Nil as current discounts are already higher than ~5%; hence, no incremental discount is expected

*~50% of proposed road tax rebate and registration waiver is considered in the base case as states may want to safeguard revenue

Note: For a 16-year old truck, the fitness cost involved in operating for another five years would be Rs 0.65 lakh, i.e. Rs 0.13 lakh * 5 years

Source: Industry interactions, Maharashtra Motor Vehicles Tax Act, CRISIL Research

Based on these scenarios, total potential benefits of scrapping vehicles older than 15 and 20 years have been compared with their resale values to assess if there is enough incentive for transporters to go for it.



Source: Press Information Bureau, MoRTH, industry interactions, and CRISIL Research

In the optimistic scenario, the potential benefit of scrapping a 15-year-old CV, and its resale value are similar. As the age of vehicle increases, the benefit reduces, while incentives increase. That's because, the resale value of a 20-year-old truck is less compared with a 15-year-old truck, so scrapping makes sense. However, in the base case, the potential benefit is less than the resale value of the truck, so scrapping does not make sense. Even in the optimistic scenario, it doesn't make sense to scrap a 16-year old truck as the analysis below shows.

The economics doesn't work

The distance a truck covers annually decreases with age. Typically, a 16-year-old truck will ply ~40,000 km, while a 20-year-old one will traverse about ~35,000 km or lesser.

In a scenario where a transporter using a 16-year-old truck chooses to scrap it, he will most likely replace with a used truck, say 10 years or more older, instead of buying a brand new vehicle. That's because, typically, his business requirements would warrant a vehicle that can be driven for 4-5 years.

But despite having a better and younger truck, the transporter won't be able to charge higher-than-market freight rates. Consequently, the freight rate will remain ~Rs 40 per km (Rs 3.4 per tonne km) – the same as when using the 16-year-old truck.

Moreover, the annual distance covered would also remain unchanged, while the interest burden would rise because of the higher price paid to buy the younger truck.

As such, the transporter's annual earnings will reduce by a drastic ~20-25% after incremental annual loan payments of Rs ~1.2 lakh for an 11-year-old truck bought in a scrappage deal. Operational profit will be Rs 1.9 lakh compared with Rs 2.4 lakh for a 16-year-old truck.

Thus, the financial burden after replacement increases significantly, hence even in our optimistic scenario, we do not see much traction for the policy from an incremental demand perspective.

That's unviable and small-fleet owners – who account for ~85% of the total transporter segment revenue – are thus likely to stay away from scrapping.

Viability of scrapping a 16-year-old truck and purchasing an 11-year-old used truck in its place

		Units	Transporter chooses to not scrap 16-year-old truck	Transporter scraps 16-year-old truck
Operations and revenue assumptions	Running (annual)	In '000 km	40	40
	Freight rate	Rs / km	39	39
	Revenue (annual)	Rs lakh	15.6	15.6
Optimistic case Assumptions (one-time cost and benefit)	Benefit under scrappage policy	Rs lakh	NA	2.36
	Additional cost incurred by not scrapping	Rs lakh	0.74	NA
	Total potential benefit	Rs lakh	NA	3.1
	Cost of 11-year old truck	Rs lakh	NA	7

		Units	Transporter chooses to not scrap 16-year-old truck	Transporter scraps 16-year-old truck
Investment assumptions	Incremental investment of buying 11-year old truck	Rs lakh	NA	3.9
	Incremental EMI (annual)	Rs lakh	NA	1.2
Cost assumptions	Other operational costs (annual)	Rs lakh	13.2	12.5
	Operating profit (annual)	Rs lakh	2.4	1.9

Key assumptions

- A transporter replaces a 16-year-old truck with an 11-year-old truck costing ~Rs 7 lakh
- Loan is processed for Rs 3.9 lakh for 60 months @ 20% interest
- Average running to remain same post scrapping of a 16-year-old truck and buying a 11-year-older truck

Source: Industry interactions, CRISIL Research

Practical challenges for policy implementation

Typically, a transporter scrapping a truck older than 15 years would be operating in the hinterland, with a travel distance of ~40,000 km per annum, unlike that of a new truck, which needs to travel ~1 lakh km per annum for cost economics to kick in. Therefore, a transporter scrapping an old vehicle is unlikely to be a buyer of a new vehicle. Such a transporter would instead be inclined to trade the benefit to a large fleet operator or a new truck buyer.

Hence, the road tax rebate, registration fee waiver, and OEM discount would need to be in the form of tradeable certificates that can be sold to dealers/ new truck buyers; the procedure for this, though, has not been detailed by the government.

Also, to boost scrapping volume, it was proposed by MoRTH in January 2021 that the Centre should direct state governments to impose 10-25% green tax on old vehicles at the time of renewal of a fitness certificate. To be sure, this is being imposed by many states, albeit at a lesser rate. The scrapping policy could provide them the room to increase the green tax.

Also, our interactions indicate the enforcement of fitness certificate and green tax is difficult, as trucks older than 15 years mainly ply short distances and in rural areas where checking of documentation is low.

Further, materialisation of all benefits from scrapping is expected to be low, as this is a state subject and the state governments may not provide all the benefits as proposed owing to potential revenue loss. OEMs may also not provide additional discount as the current discount levels are already higher than ~5%.

Accordingly, the resale value will remain higher than the total potential benefit under the scrapping policy across vehicle vintage, as in the base case. As such, the incentives will not be sufficient to encourage a transporter to scrap old vehicles.

Scrappage centres may not benefit significantly from scrappage policy

Because of the slim potential, overall volume of vehicles that would require to be scrapped and the unviable economics, the scrappage policy may not lead to substantial uptick in the business of scrappage centres. Also, with limited organised players in this segment, further investment remains a key monitorable.

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