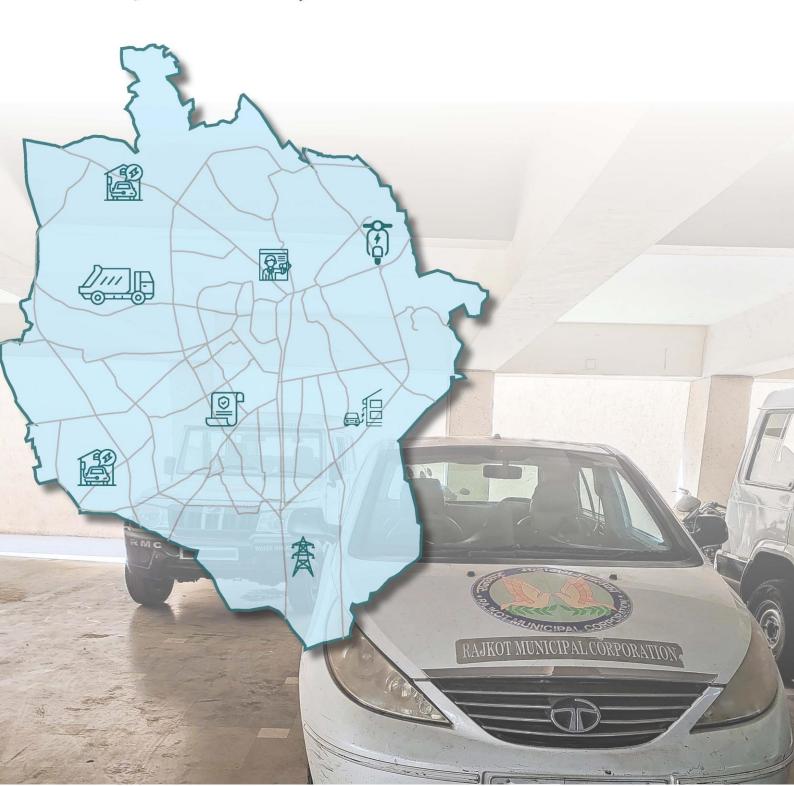


Financial strategy for Municipal fleet Electrification

Rajkot City





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This work builds upon and facilitate the ongoing active support of the CapaCITIES project to Rajkot Municipal Corporation and other government agencies on the electrification transport system. The synergy between the project assisted to achieve larger impact and outcome.

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1. Background

Local Governments in Indian Cities can lead by example and set incremental goals to electrify their municipal fleets. The Rajkot Municipal Corporation have a fleet that includes a mix of passengers as well as commercial vehicles. Many of the vehicles can be electrified in a phased manner. However, considering the technology risk and financial constraint, the transition should be planned in a phased manner to achieve long-term success as it relates to EV fleet transition. In the case of Rajkot, the ability to move forward with EV purchases so quickly could only happen with the support of a comprehensive financial plan. To be prepared for the large number of EVs phased into the city fleet, a financial plan would be essential.

In the same context, ICLEI South Asia embarked on an initiative to "Support Indian Cities in Taking Leadership on Electric Vehicles (EV)" to aid the cities to identify priority interventions and take necessary steps towards accelerated transition to EVs. This initiative included several interactions and discussions with the city stakeholders during visits to 10 project cities - Coimbatore, Gangtok, Kochi, Lakshadweep, Meerut, Nagpur, Panaji, Rajkot, Shimla and Surat. Consultations with the major stakeholders impacting EV transition in cities included advisory groups, industry experts including the advocacy group, charging infrastructure developers, vehicle technology/OEMs and financial institutions. As a part of the initiative, the ICLEI South Asia team visited Rajkot from 30 June to 1 July 2022, 14 September 2022 and then on 11 November to interact with the stakeholders and understand the existing EV transition situation in the city, challenges, opportunities and to suggest a way forward.

This document has been developed as a part of the above mentioned initiative and aims to provide a guideline to city administration to achieve environmental sustainability by accelerated electric vehicle integration and its infrastructure development with city's existing vision. The document highlights the strategy of phased electrification of municipal fleet and support Rajkot to achieve greater electric vehicle adoption.

2. Objective of engagement

The specific objectives of the assignment would be to

- Validate and demonstrate the financial feasibility of the electrification of the current municipal fleet
- Suggest a staggered and year wise phase out plan for the existing municipal fleet
- Estimate year-wise financial plan to achieve fleet conversion for next 10 years
- Support cooperation among city governments to find out appropriate financial resources for fleet conversion.

The transition plan shall assist RMC to lead by example and set incremental goals to electrify their municipal fleets. The electrification shall include workplace charging at municipal buildings and there by encouraging employees to drive EVs. It will help RMC to reduce both fleet emissions and operating costs while improving service to the community by replacing their fleet vehicles with EVs. The step includes

- 1. Complete a Comprehensive Fleet Assessment:
 - a) Collect data on current fleet usage (e.g., types and number of vehicles, common routes, fleet purchase policy).
 - b) Complete a multi-year total cost of ownership analysis for each vehicle (vehicle cost, fuel, maintenance, insurance, etc).
 - c) Update fleet purchasing policy to prioritize electric vehicles (if a vehicle is required).
- 2. Complete a multi-year total cost of ownership analysis for each vehicle (vehicle cost, fuel, maintenance, insurance, etc)
- 3. **Establish City Fleet Electrification targets** and replace conventional gas-powered vehicles when suitable EV options are available with equivalent operational capability.
- 4. Apply for electric vehicle purchase incentives and grants:
- 5. EV Charging Infrastructure:



- a) Evaluate charging requirements: Level 1, Level 2, DC fast charge
- b) Coordinate EV charger deployments with other departments.
- c) Partner with electric utilities to install EV charging infrastructure

3. Finances of Rajkot Municipal Corporation

Finances of RMC indicate that before covid it was not in a financial distress but out of past three years only in one year prior to covid it has registered revenue surplus (see Table 1) but in covid 19 affected two years 2020-22 it has entered in to revenue deficit. (Operating ratio of 1.06 and 1.08).

Finances of RMC are dependent on revenue and capital grants from the Gol and GoG as its own source revenue on an average constitutes 65 % of revenue receipts and 37 % of the total receipts. Its revenue receipts on an average constitute 55% of total income thus it receives 53 % receipts in the form of capital grants and borrowings. Similarly, its revenue expenditure constitutes on an average 50 % of its total expenditure while capital expenditure constitutes 50 % of the total. The data in Table 1 shows volatility in revenue and capital receipts and expenditure.

The financial data analysis also indicates that own source tax and non-tax revenue has registered low annual growth rate this may be due to Covid 19 Pandemic. Even if it is so RMC need to work hard on its revenue front to achieve annual growth rate of at least 10 to 12 % that is in tune with national and state economy growth rate. Looking at the broad picture it seems that RMC will not have problem in funding replacement of its vehicles in future by electrical variants. Detailed analysis is as follows -

Table 1 - Financial Statement of RMC (Rs. in lacs)

| Heads / Particulars | Actual 2019-20 | Actual 2020-21 | Actual 2021-22 | Average Growth Rate |
|--|-------------------|-------------------|-------------------|---------------------------|
| Opening Balance | | | | |
| Revenue Receipts | | | | |
| Municipal Own Tax Income | 17054.51 | 15792.41 | 22250.35 | |
| Water & Sewerage User Charge | 18464.49 | 13098.14 | 17919.02 | |
| Other User Charges / Rent /interest/ sale revenue etc. | 4884.41 | 5393.40 | 8119.13 | |
| Municipal Own Non-tax income | 23348.90 | 18491.54 | 26038.15 | |
| Municipal Own Source Total Income | 40403.41 | 34283.95 | 48288.50 | |
| Municipal OSR as % of Revenue Income | 65 | 61 | 76 | 66 |
| Municipal Own Revenue as % of Total Income | 34 | 37 | 40 | 37 |
| Revenue Grants | | | | |
| Total Revenue Grants (14+17) | 21691.10 | 21626.07 | 15499.68 | |
| Total Revenue Grants as % of Revenue Receipts | | | | |
| Total Revenue Receipts (11+18) | 62094.51 | 55910.02 | 63788.18 | |
| Total Revenue Receipts as % of Total Receipts | 52 | 60 | 52 | 55 |



| Total Capital Grants Received | 45559.09 | 26303.04 | 57628.05 | |
|---|-----------|-----------|-----------|----|
| Borrowings | 1143.59 | 766.09 | 0.00 | |
| Capital Receipts | 57952.74 | 37203.64 | 57628.05 | |
| Total Cap Receipts as % of Total Receipts | 48 | 40 | 48 | 45 |
| Total Municipal Receipts | 120047.25 | 93113.66 | 121416.23 | |
| Municipal Expenditure | | | | |
| Salary Establishment Expenditure | 29437.21 | 30170.68 | 31367.58 | |
| Administrative Expenditure | 1244.23 | 1182.13 | 1364.87 | |
| Operation & Maintenance Expenditure | 23050.86 | 22404.55 | 27281.26 | |
| Loan interest, finance charges paid | 71.40 | 67.66 | 22.63 | |
| Program expenditure | 1119.03 | 1286.88 | 932.61 | |
| Other expenditure Revenue Grants, subsidies | 2724.74 | 4376.85 | 7725.07 | |
| Revenue Expenditure | 57647.47 | 59488.75 | 68694.02 | |
| Total Rev Expenditure as % of Total Expenditure | 47 | 53 | 49 | 50 |
| Capital Expenditure Total | | | 72552.89 | |
| Loan Repayment | | | 41.38 | |
| Capital Expenditure | 64601.05 | 52513.56 | 72594.27 | |
| Total Capital Expenditure as % of Total Expenditure | 53 | 47 | 51 | 50 |
| Total Municipal Expenditure (31+36) | 122248.52 | 112002.31 | 141288.29 | |
| Year End Closing Balance (3+25 – 37) | | | | |
| Operating ratio | 0.93 | 1.06 | 1.08 | |
| Revenue Surplus/Deficit (19-31) | 4447.04 | -3578.73 | -4905.84 | |
| Capital Account surplus /Deficit (24 – 36) | -6648.31 | -15309.92 | -14966.22 | |
| Fiscal Surplus/Deficit (25 – 37) | -2201.27 | -18888.65 | -19872.06 | |



4. Future Vehicle Replacement Needs of Rajkot Municipal Corporation

Future vehicle replacement needs have been worked out under three heads 1. Replacement of Vehicles owned by the RMC; 2. Replacement of Vehicles hired by the RMC and 3. Additional Vehicles needed in future by RMC in the light of population, area and service quality improvement.

4.1. Replacement of Vehicles owned by the RMC by electric vehicles

Future vehicle replacement needs of vehicles owned by RMC has been worked out by collecting data about number, type and age of vehicles it has at present. As RMC has policy of retiring vehicles at the age of 10 years (but in actual practice it is not observed strictly) while Motor Vehicles Act provides scrapping of vehicles on completion of 15 years of age so age profiling of RMC vehicles has been done on retiring vehicles after 10 and 15 years of operations (see Table 2 and 3).

It can be observed from the Table 2 (for details see Annexure 1) that in all RMC has 368 vehicles comprising — office vehicles (Cars, Jeeps, SUVs), Health and Sanitation related (open and close tippers, refuse compactor, 3 and 4 wheelers, JCB and Ambulance). As per RMC policy of scrapping vehicles after 10 years in all 128 vehicles (See Table 2) have become due for replacement but most of them even more than 15 years old have not been replaced by RMC.

If we take realistic and law mandated time limit of 15 years for scrapping/replacing the vehicles then there are 23 vehicles which were purchased during the period 1998 to 2007 and have become due for replacement in 2022 and another 21 vehicles will become due in current year 2023 (See Table 3). Also, another 8 vehicles will become due for replacement in the next year 2024. In all there are 52 vehicles which are due for replaced in the current and next year. Out of these 52 vehicles only 13 vehicles which belongs to Car/Jeep category can be replaced with e-vehicles (electrical alternative) immediately and rest of the vehicles which belong to Truck / Water Tanker/ Fire Tanker, Trailor, Crains, Mini Trucks etc of 16 ton and 8-ton capacity cannot be replaced at present as these categories do not have electric alternative but it is expected that year 2025-26 suitable electrical alternatives will become available. According all these vehicles replacement is assumed and suggested in the year 2025-26 in Table 2 and 3.

In the light of this first important recommendation is that RMC should not go for replacement of all the heavy vehicles with electric alternative till they become available in year 2025-26. If replacement of any such heavy vehicle is required due to breakdown or because of legal mandate then RMC should not purchase new conventional fuel-based vehicles rather for time being RMC should go for hiring of these vehicles for time being and as soon as electric alternative becomes available it should go for purchase or hiring of electric vehicles.

Funding requirement for replacement of vehicles with electric variant has been worked out by taking present price and increasing it by 5 % per annum. It is possible that in future prices of electric vehicles as they get mainstreamed may go down and may not increase at assumed 5% growth per annum; but at the same time, it is also a fact that though with mainstreaming of technological innovation price may not go down as manufacturer / market brings in higher version of technology to maintain growth in pricing. So, prices of electric vehicle of present make and capacity may go down as it gets mainstreamed but then higher capacity e-vehicles will also become available with slight increase in prices and RMC being public body will require and should go for e-vehicles with higher capacity and of higher version so 5 % annual growth assumed is justified.

It can be observed from the Table 2 and Table 3 that RMC will require funds for replacement of vehicles as follows –

| | | As per Table 2 (10- | year age basis) | As per Table 2 (15-year a | ige basis) |
|------------------|-----------|---------------------|-----------------|---------------------------|-------------|
| | | No. of Vehicles | Amount | No. of Vehicles | Amount |
| > | 2022 - 23 | 53 | Rs. 478 lacs | 3 | Rs. 50 lacs |
| \triangleright | 2023 - 24 | 21 | Rs. 366 lacs | 5 | Rs. 80 lacs |



| | 2024 - 25 | 41 | Rs. 342 lacs | 5 | Rs. 82 lacs |
|------------------|-----------|-----|---------------|----|---------------|
| > | 2025 - 26 | 106 | Rs. 5655 lacs | 36 | Rs. 2100 lacs |
| \triangleright | 2026 - 27 | 56 | Rs. 2111 lacs | 19 | Rs. 867 lacs |
| | 2027 - 28 | 9 | Rs. 299 lacs | 23 | Rs. 744 lacs |
| | 2028 - 29 | 29 | Rs. 1212 lacs | 25 | Rs. 717 lacs |
| | 2029 - 30 | 13 | Rs. 298 lacs | 48 | Rs. 1977 lacs |

It can be seen from the above summary of vehicle replacement needs and funds required for replacement by electrical alternative clearly shows that following legally mandated 15 years rule is beneficially as it is spreading replacement and funding needs evenly.

The funding requirement for replacement of existing vehicles by electric vehicles is very small/miniscule. Though it is recommended RMC should follow 15-year replacement rule but even if we compare maximum exceptional funding requirement of Rs. 5655 lacs (2025-26) to clear backlog with existing size (not the future) of revenue receipts of RMC then also it is less than 9 % thus there should not be any problem in future to fund replacement of vehicles owned by the RMC. But if we take 15 years base for replacement of vehicles then maximum amount required comes around Rs. 2100 lacs (2025-26) which is less than 3 % of present revenue receipts. If we take average funding requirement of Rs. 1300 lacs per annum during the period 2025-2030, the amount required come out just 2 %. Assuming RMC will achieve normal growth rate of 10% per annum for its revenue receipts, the funds required for replacement of existing vehicles by electric vehicles will be around 1 to 2 of future revenue receipts of RMC. Thus, RMC is financially capable of funding its future vehicle replacements through electrical alternatives.



Table 2 - Existing Fleet of Vehicles and its future phasing out (10 years life cycle) and requirement of funds for electric replacement (Rs. in lac)

| Type of Vehicle | 2022-2 | 23 | 2023- | 24 | 2024-2 | 25 | 2025-2 | 26 | 2026- | 27 | 2027-2 | 28 | 2028 | 3-29 | 2029- | 30 | 2030- | 31 | 2031- | 32 | 2032- | 33 | Total |
|---------------------------------|-----------------|------------------|-------|------------------|-----------------|------------------|------------|------------------|-------|------------------|--------|-----|---------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| | Nos | Amt | Nos | Amt | Nos | Amt | Nos | Amt | Nos | Amt | Nos | Amt | No s | Amt | Nos | Amt | Nos | Amt | Nos | Amt | Nos | Amt | |
| 2 Wheelers | | | 1 | 1.2 | 2 | 3.0 | 2 | 2.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 |
| 4 -Wheeler | 23 | 345 | 9 | 144 | 12 | 198 | 4 | 70 | 4 | 72 | 3 | 57 | - | - | - | - | 1 | 22 | 8 | 184 | 1 | 24 | 65 |
| Ambulance | 1 | 20 | 9 | 189 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3 | 93 | - | - | 13 |
| Crains | 4 | NA | | | 19 | NA | 1 | | 1 | NA | | | 8 | NA | 1 | NA | | | 1 | NA | | | 35 |
| Dumper 16 tones | 9 | <mark>540</mark> | - | - | - | - | 9 | 630 | 12 | 876 | - | - | - | - | - | - | - | - | - | - | 2 | 196 | 23 |
| Fire Fighter 16 tones | <mark>14</mark> | <mark>840</mark> | - | - | 4 | <mark>252</mark> | 14+ 4 | 1260 | - | _ | - | - | 7 | 560 | - | - | 6 | 534 | - | - | - | - | 31 |
| Form Nurser | 1 | NA | | | | | | | | | | | | | | | | | | | | | 1 |
| Major Trucks | <mark>5</mark> | <mark>300</mark> | 1 | <mark>63</mark> | - | - | 5+1 | <mark>420</mark> | 4 | 292 | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| Mini Tipper – 8 tones | <mark>4</mark> | <mark>160</mark> | | | <mark>15</mark> | <mark>630</mark> | 4+1 +15 | 1400 | 5 | 362 | | | 10 | 540 | | | 7 | 350 | | | | | 42 |
| Mini Trucks – 8 tones | <mark>10</mark> | <mark>400</mark> | 3 | <mark>126</mark> | 5 | <mark>210</mark> | 10+ 3+5 | 1260 | | | 4 | 204 | | | 1 | 56 | | | 5 | 310 | | | 28 |
| Road Rollers | 5 | NA | | | | | | | | | | | | | | | | | | | | | 5 |
| Small Trucks - 2 tones | 4 | 68 | | | 1 | 19 | - | - | 3 | | | | | | 3 | 72 | | | | | | | 11 |
| Toilet Seat Trailers | | NA | | | | | 13 | | 16 | | | | | | | | | | | | | | 29 |
| Tractors | <mark>2</mark> | NA | | | <mark>2</mark> | <mark>NA</mark> | | | 4+4 | <mark>400</mark> | | | 2 | 112 | | | | | 3 | 186 | | | 13 |
| Trailers without Tractors | 10 | | | | | | 4 | - | | | | | 2 | | | | | | 3 | | | | 19 |
| Water tankers - 16 tons | 8 | <mark>480</mark> | | | | | 8 | 560 | 1 | 73 | | | | | | | | | | | | | 9 |
| XUVs | 3 | 45 | 2 | 32 | 7 | 122 | 3 | 53 | 2 | 36 | 2 | 38 | | | 8 | 170 | | | | | 2 | 50 | 29 |
| Total | 103 | | 25 | | 67 | | 28 | | 52 | | 9 | 299 | 29 | 1212 | 13 | 298 | 14 | 906 | 23 | 773 | 5 | 270 | 368 |
| Actual | 53 | 478 | 21 | 366 | 41 | 342 | 106 | 5655 | 56 | 2111 | | | | | | | | | | | | | |



Table 3 - Existing Fleet of Vehicles and its future phasing out (15 years life cycle) and requirement of funds for electric replacement (Rs. in lac)

| Type of Vehicle | 2022- | 23 | 2023- | 24 | 2024- | 25 | 2025- | 26 | 2026-27 | 7 | 2027- | 28 | Total | 2028- | 29 | 2029- | 30 | 2030- | 31 |
|---------------------------|-------|-----|-------|-----|-------|-----|-----------|------------------|---------|-----|-------|-----|-------|-------|-----|-------|------|-------|-----|
| | Nos | Amt | Nos | Amt | Nos | Amt | Nos | Amt | Nos | Amt | Nos | Amt | | Nos | Amt | Nos | Amt | Nos | Amt |
| 2 Wheelers | - | - | - | - | - | - | - | - | - | - | - | - | | 1 | 2 | 2 | 5 | 2 | 6 |
| 4 - Wheeler | 2 | 30 | 4 | 64 | 5 | 82 | 2 | 35 | 2 | 36 | 8 | 152 | 23 | 9 | 180 | 12 | 252 | 4 | 92 |
| Ambulance | 1 | 20 | - | - | - | - | - | - | - | - | - | - | | 9 | 243 | - | - | - | - |
| Crains | | | 1 | | | | | | 2 | | 1 | | 5 | | | 19 | | 1 | |
| Dumper 16 tones | | | 4 | | 1 | | 4+1 | <mark>350</mark> | 4 | 292 | | | 9 | | | | | | |
| Fire Fighter 16 tones | 7 | NA | 3 | NA | 2 | NA | 7+3 +2 | 840 | | | 2 | 144 | 14 | | | 4 | 340 | _ | - |
| Form Nurser | | | 1 | | | | | | | | | | | | | | | | |
| Major Trucks- 16 ton | 3 | | | | | | 3 | <mark>210</mark> | | | 2 | 144 | 5 | 1 | 80 | - | - | - | - |
| Mini Tipper – 8 tones | | | 2 | | | | 2 | <mark>92</mark> | 2 | 98 | | | 4 | | | 15 | 840 | 1 | 60 |
| Mini Trucks – 8 tones | | | | | | | 3 | 148 | 6 | 294 | 1 | 51 | 9 | 3 | 162 | 5 | 280 | | |
| Road Rollers | | | | | | | | | | | 5 | | 5 | | | | | | |
| Small Trucks - 2 tones | | | | | | | 2 | 40 | 1 | 21 | 1 | 22 | 4 | | | 1 | | | |
| Toilet Seat Trailers | | | | | | | | | | | | | | | | | | 13 | |
| Tractors | | | | | | | | | 2 | 98 | | | 2 | | | 2 | 112 | | |
| Trailers without Tractors | 8 | | 2 | | | | | | | | | | | | | | | 4 | |
| Water Tankers -16 tons | 2 | | 3 | | | | 2+3 | 350 | | | 3 | 231 | 8 | | | | | | |
| XUVs | | | 1 | 16 | | | 2 | 35 | | | | | 3 | 2 | 40 | 7 | 148 | 3 | 66 |
| Total | 23 | | 21 | | 8 | | 9 | | 19 | 867 | 23 | 744 | | 25 | 717 | 67 | | 28 | |
| Actual Purchase | 3 | 50 | 5 | 80 | 5 | 82 | 36 | 2100 | | | | | 91 | | | 48 | 1977 | 10 | 224 |



Table 3 - Existing Fleet of Vehicles and its future phasing out (15 years life cycle) and requirement of funds for electric replacement (Rs. in lac)

| 92 111 6 | Nos 3 | 75 | Nos 8 | Amt | Nos | Amt | Nos 1 | Amt | Nos 8 | Amt | Nos | Amt | 5 |
|----------------|-----------------|-------------------|--------------------------|-------------------------------------|------------------------|---|---|--|--|---------------------------------------|---------------------------------------|---|---|
| 111 6 | 3 | 75 | 8 | | | | 1 | | 8 | | 1 | | |
| 111 6 | 3 | 75 | 8 | | | | 1 | | 8 | | 1 | | |
| 6 | | | 8 | | | | | | | l | 1 | | 65 |
| 6 | | | 8 | | | | | | 3 | | | | 13 |
| 6 | | | | | 1 | | | | 1 | | | | 35 |
| 270 | | | | | | | | | | | 2 | | 23 |
| 272 | | | 7 | | | | 6 | | | | | | 31 |
| 2-2 | | | | | | | | | | | | | 1 |
| 372 | | | | | | | | | | | | | 10 |
| 310 | | | 10 | | | | 7 | | | | | | 42 |
| | 4 | 260 | | | 1 | | | | 5 | | | | 28 |
| | | | | | | | | | | | | | 5 |
| 78 | | | | | 3 | | | | | | | | 11 |
| | | | | | | | | | | | | | 29 |
| | | | 2 | | | | | | 3 | | | | 13 |
| | | | 2 | | | | | | 3 | | | | 19 |
| 93 | | | | | | | | | | | | | 9 |
| 46 | 2 | 50 | | | 8 | | | | | | 2 | | 29 |
| 210 7 | 9 | 385 | 29 | | 13 | | 14 | | 23 | | 5 | | 368 |
| | 93 46 210 | 93 46 2 210 | 93 46 2 50 210 385 | 93 2 93 2 946 2 50 210 385 | 2 2 93 46 2 50 210 385 | 3 2 2 93 46 2 50 8 210 385 | 3 2 2 93 46 2 50 8 210 385 | 93 2 93 8 2 10 385 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 3 3 3 4 46 2 50 8 2 10 385 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 | 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | 3 2 3 46 2 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 46 2 2 3 3 3 3 3 3 3 3 3 3 | 3 3 |



4.2. Replacement of Vehicles currently hired by the RMC by electric vehicles

RMC spends around Rs. 1300 lacs per year for staff salary, fuel and 0&M of the vehicles owned by it. While it spends around Rs. lacs per year for the vehicles hired by it. Data received indicate that RMC is hiring 34 Sedan and 8 SUVs at present every day. It is necessary that these vehicles should also be replaced in future by electric vehicles to achieve twin objective of climate protection and cost economy. As suitable electric alternatives are available for Sedan Car and SUVs RMC can and should adopt practice of hiring only electric version of these cars from Vehicle Service Providers immediately.

4.3. Replacement of additional Vehicles required in future by the RMC by electric vehicles

Inquiry with the RMC indicated that RMC has not forecasted future requirement of vehicles in the light of increased population, area and service delivery improvements required. Consequently, it was not possible to work out this analysis for this report.

5. Way Forward / Recommendations

In the light of foregone analysis, it can be said that RMC has financial capacity to fund its future vehicles requirements in terms of conventional or electrical option. Following are the recommendations to achieve optimum electrification of vehicles owned or hired by the KMC —

- 1. Out of 368 vehicles at present owned by RMC only 91 vehicles will require replacement in next five years 2023 2027 as per present legal mandate of 15 years regarding age and scraping of the vehicles. RMC will be able to replace all these vehicles with electric variant and has necessary funds available for the same. So, RMC should go with 100 % replacement of 91 vehicles (retiring in coming five years) by electric version.
- 2. During coming five years if there arise a need of replacement of a vehicle for which electric alternative is not available then RMC should not purchase a conventional fossil fuel-based vehicle and should go for hiring of the vehicle to overcome vehicle shortage / need and should purchase vehicle when suitable electric alternative becomes available for purchase or rent.
- 3. As noted above only 91 vehicles out of 368 vehicles (only one third of total) will require replacement by the year 2027-28 and there are 277 vehicles which will be falling due for replacement as per present rule during the period 2028 to 2037 as these vehicles have been purchased during 2013 2022. Thus, even if RMC replaces these 91 vehicles by electric alternative it will be able to achieve only 33 % electrification of its vehicles.

If RMC wish to attend 100 % electrification of its vehicles in reasonable time (five years) then RMC need to make a real policy decision with regard to these 277 vehicles. If RMC decides to replace these vehicles with electric version as and when they become due for replacement in 2030 onwards then RMC will be able to achieve 100 % electrification of its vehicles only by 2037. If RMC wish to achieve 100 % electrification of vehicles (owned or hired by the RMC) then RMC should auction its 277 vehicles in coming three to five years and should replace them with electric version. In other words, RMC can consider adoption of a Vision / a Policy of electrification of its vehicles (owned or higher) by 2027-28 and work towards it systematically and in planning manner. Auctioning these 277 vehicles which were purchased during 2014-2022 by the year 2027 when they are in good condition is likely to achieve good price and which will help their replacement with electric version as per vision and time line.

4. RMC at present hires on an average 42 vehicles of Sedan and SUV category. Replacement of these vehicles by electric version is fully possible in short term of six months to one year and so it should carry out in next six months giving appropriate initiation to private sector to procure electric vehicles to supply it to RMC for operations. It is recommended that while hiring electric vehicles to replace existing conventional vehicles a proper analysis of hiring cost /rates should be done.



6. Annexure

6.1. Annexure 1 – Information about age, type of vehicles owned by RMC

| Department | Vehicl | e No | | Type of vehicle | Agency | Year | Fuel |
|-------------|--------|------|------|-----------------------------------|-------------------------------------|------|--------|
| F&E | GJ 3 | GA | 1604 | Ambulance | FORCE TRAX CRUISER | 2021 | Diesel |
| F&E | GJ 3 | GA | 1830 | Ambulance | FORCE TRAX CRUISER | 2021 | Diesel |
| F&E | GJ 3 | GA | 1718 | Ambulance | TATA WINGER | 2021 | Diesel |
| F&E | GJ 3 | AT | 6080 | Ambulance SUMO | TATA | 2007 | Diesel |
| F&E | GJ 3 | G | 923 | Ambulance Traveler | FORCE MOTORS | 2013 | Diesel |
| F&E | GJ 3 | G | 924 | Ambulance Traveler | FORCE MOTORS | 2013 | Diesel |
| F&E | GJ 3 | G | 925 | Ambulance Traveler | FORCE MOTORS | 2013 | Diesel |
| F&E | GJ 3 | G | 926 | Ambulance Traveler | FORCE MOTORS | 2013 | Diesel |
| F&E | GJ 3 | G | 927 | Ambulance Traveler | FORCE MOTORS | 2013 | Diesel |
| F&E | GJ 3 | G | 1957 | Ambulance Winger AC | TATA | 2013 | Diesel |
| F&E | GJ 3 | G | 1958 | Ambulance Winger AC | TATA | 2013 | Diesel |
| F&E | GJ 3 | G | 1959 | Ambulance Winger AC | TATA | 2013 | Diesel |
| F&E | GJ 3 | G | 1960 | Ambulance Winger AC | TATA | 2013 | Diesel |
| ANCD | GJ 3 | Υ | 3550 | Animal trailer | Valambhiya body Builders, Rajkot | 2005 | - |
| ANCD | GJ 3 | Υ | 3553 | Animal trailer | Valambhiya body Builders, Rajkot | 2005 | - |
| SWM | GJ 3 | GA | 1707 | Bolero B2 BVI | Mahindra & Mahindra | 2021 | Diesel |
| Water Works | GJ 3 | GA | 1833 | Bolero B2 BVI | Mahindra & Mahindra | 2021 | Diesel |
| Estate | GJ 3 | GA | 1870 | Bolero Camper 2WD PS BSVI Utility | Mahindra & Mahindra | 2021 | Diesel |
| Estate | GJ 3 | GA | 1960 | Bolero Camper 2WD PS BSVI Utility | Mahindra & Mahindra | 2021 | Diesel |
| Estate | GJ 3 | GA | 1836 | Bolero Camper 2WD PS BSVI Utility | Mahindra & Mahindra | 2021 | Diesel |
| Estate | GJ 3 | GA | 1552 | Bolero Camper 2WD PS BSVI Utility | Mahindra & Mahindra | 2021 | Diesel |
| Estate | GJ 3 | GA | 1581 | Bolero Camper 2WD PS BSVI Utility | Mahindra & Mahindra | 2021 | Diesel |
| Water Works | GJ 3 | GA | 1980 | Bolero Camper 2WD PS BSVI Utility | Mahindra & Mahindra | 2021 | Diesel |
| Water Works | GJ 3 | G | 2018 | Bolero Champers BSIII utility | M&M | 2014 | Diesel |
| Water Works | GJ 3 | GA | 58 | Bolero Champers BSIII utility | M&M | 2016 | Diesel |
| Water Works | GJ 3 | GA | 483 | Bolero Champers BSIII utility | M&M | 2016 | Diesel |
| Workshop | GJ 3 | GA | 211 | Bolero Champers BSIII utility | M&M | 2016 | Diesel |
| Water Works | GJ 3 | GA | 1872 | Bolero Champers BSVI utility | Mahindra & Mahindra | 2020 | Diesel |



| Department | Vehicl | e No | | Type of vehicle | Agency | Year | Fuel |
|-------------------|--------|------|------|---------------------------------------|--------------------------|------|--------|
| Estate | GJ 3 | BA | 1624 | Bolero Jeep | M&M | 2005 | Diesel |
| ANCD | GJ 3 | G | 1613 | Bolero Jeep | M&M | 2008 | Diesel |
| Health | GJ 3 | G | 1658 | Bolero Jeep | M&M | 2009 | Diesel |
| SWM | GJ 3 | G | 1619 | Bolero Jeep | M&M | 2008 | Diesel |
| SWM | GJ 3 | G | 1723 | Bolero Jeep | M&M | 2010 | Diesel |
| Water Works | GJ 3 | G | 2635 | Bolero Jeep | M&M | 2014 | Diesel |
| Estate | GJ 3 | G | 2017 | Bolero Jeep 7seater | M&M | 2014 | Diesel |
| SWM | GJ 3 | GA | 287 | Bolero Jeep 7seater BSIII | M&M | 2015 | Diesel |
| Estate | GJ 3 | GA | 308 | Bolero Jeep 9seater | M&M | 2015 | Diesel |
| Vigilance | GJ 3 | G | 2026 | Bolero Jeep 9seater | M&M | 2014 | Diesel |
| Vigilance | GJ 3 | GA | 193 | Bolero Jeep 9seater | M&M | 2015 | Diesel |
| ANCD | GJ 3 | G | 2029 | Bolero Jeep 9seater BSIII | M&M | 2014 | Diesel |
| ANCD | GJ 3 | G | 2031 | Bolero Jeep 9seater BSIII | M&M | 2014 | Diesel |
| ANCD | GJ 3 | GA | 212 | Bolero Jeep 9seater BSIII | M&M | 2015 | Diesel |
| Health | GJ 18 | GA | 754 | Bolero single cab | M&M | 2014 | Diesel |
| SWM | GJ 3 | Z | 7481 | Car Cass Van 10.50 | EICHER | 2008 | Diesel |
| SWM | GJ 3 | Z | 7482 | Car Cass Van 10.50 | EICHER | 2008 | Diesel |
| Vigilance (Tech.) | GJ 3 | G | 2027 | CRUZER | FORCE MOTORS | 2014 | Diesel |
| ERC | GJ 3 | G | 740 | Dewatering pump 712 EX | TATA | 2008 | Diesel |
| ERC | GJ 3 | G | 741 | Dewatering pump 712 EX | TATA | 2008 | Diesel |
| ERC | GJ 1 | G | 7017 | Dewatering pump 712 EX | TATA | 2008 | Diesel |
| ERC | GJ 1 | G | 7016 | Dewatering pump 712 EX | TATA | 2009 | Diesel |
| SWM | GJ 3 | AT | 691 | Dumper placer tera-16 | EICHER | 2008 | Diesel |
| SWM | GJ 3 | G | 794 | Dumper Placer 10.80 | EICHER | 2011 | Diesel |
| SWM | GJ 3 | G | 790 | Dumper Placer 10.80 | EICHER | 2011 | Diesel |
| SWM | GJ 3 | G | 791 | Dumper Placer 10.80 | EICHER | 2011 | Diesel |
| SWM | GJ 3 | G | 793 | Dumper Placer 10.80 | EICHER | 2011 | Diesel |
| ICDS | GJ 3 | G | 1976 | EECO GREEN 5-SEATER | MARUTI SUZUKI LTD. | 2013 | CNG |
| ICDS | GJ 3 | G | 1977 | EECO GREEN 5-SEATER | MARUTI SUZUKI LTD. | 2013 | CNG |
| ICDS | GJ 3 | G | 1978 | EECO GREEN 5-SEATER | MARUTI SUZUKI LTD. | 2013 | CNG |
| ICDS | GJ 3 | G | 1979 | EECO GREEN 5-SEATER | MARUTI SUZUKI LTD. | 2013 | CNG |
| Z00 | GJ 3 | GA | 309 | EECO GREEN 5-SEATER | MARUTI SUZUKI LTD. | 2014 | CNG |
| SWM | GJ 3 | GA | 1820 | EICHER PRO-2110 (CLOSED BODY VEHICLE) | Giriraj Tractors, Gondal | 2022 | Diesel |



| Department | Vehicl | e No | | Type of vehicle | Agency | Year | Fuel |
|------------|--------|------|------|---------------------------------------|--------------------------|------|--------|
| SWM | GJ 3 | GA | 1619 | EICHER PRO-2110 (CLOSED BODY VEHICLE) | Giriraj Tractors, Gondal | 2022 | Diesel |
| F&E | GJ 3 | G | 5228 | Fire Bullet | ENFIELD | 2013 | PETROL |
| F&E | GJ 18 | G | 7875 | Fire Bullet | ENFIELD | 2014 | PETROL |
| F&E | GJ 18 | G | 7876 | Fire Bullet | ENFIELD | 2014 | PETROL |
| F&E | GJ 3 | Υ | 8093 | Fire Fighter 1613 | TATA | 2002 | Diesel |
| F&E | GJ 3 | G | 2590 | Fire Fighter 1613 | TATA | 2014 | Diesel |
| F&E | GJ 3 | G | 2591 | Fire Fighter 1613 | TATA | 2014 | Diesel |
| F&E | GJ 3 | G | 2592 | Fire Fighter 1613 | TATA | 2014 | Diesel |
| F&E | GJ 3 | G | 2593 | Fire Fighter 1613 | TATA | 2014 | Diesel |
| F&E | GJ 3 | Υ | 9004 | Fire Fighter 1616 | Ashok Leyland | 2002 | Diesel |
| F&E | GJ 3 | Υ | 9008 | Fire Fighter 1616 | Ashok Leyland | 2002 | Diesel |
| F&E | GJ 3 | AT | 1570 | Fire Fighter Brausar 2518 | TATA | 2009 | Diesel |
| F&E | GJ 3 | AT | 1573 | Fire Fighter Brausar 2518 | TATA | 2009 | Diesel |
| F&E | GJ 3 | G | 866 | Fire Fighter Brausar 25180 | Man Force | 2012 | Diesel |
| F&E | GJ 3 | G | 865 | Fire Fighter MINI | M&M | 2012 | Diesel |
| F&E | GJ 3 | AT | 1363 | Fire Fighter MINI 10.80 | EICHER | 2008 | Diesel |
| F&E | GJ 3 | AT | 1364 | Fire Fighter MINI 10.80 | EICHER | 2008 | Diesel |
| F&E | GJ 3 | AT | 1366 | Fire Fighter MINI 10.80 | EICHER | 2008 | Diesel |
| F&E | GJ 3 | Υ | 7093 | Fire Fighter MINI 407 | TATA | 2002 | Diesel |
| F&E | GJ 3 | GA | 1154 | Fire Fighter MINI BOLERO | M&M | 2018 | Diesel |
| F&E | GJ 3 | GA | 1220 | Fire Fighter MINI BOLERO | M&M | 2018 | Diesel |
| F&E | GJ 3 | GA | 1378 | Fire Fighter MINI BOLERO | M&M | 2018 | Diesel |
| F&E | GJ 3 | ٧ | 9758 | Fire tanker | TATA | 2000 | Diesel |
| F&E | GJ 3 | W | 8752 | Fire tanker 1613 | TATA | 2006 | Diesel |
| F&E | GJ 3 | W | 8756 | Fire tanker 1613 | TATA | 2006 | Diesel |
| F&E | GJ 3 | GA | 1129 | Fire tanker PRO 5016H 8000L | EICHER | 2018 | Diesel |
| F&E | GJ 3 | GA | 1209 | Fire tanker PRO 5016H 8000L | EICHER | 2018 | Diesel |
| F&E | GJ 3 | GA | 1340 | Fire tanker PRO 5016H 8000L | EICHER | 2018 | Diesel |
| F&E | GJ 3 | GA | 1468 | Fire tanker PRO 5016H 8000L | EICHER | 2018 | Diesel |
| F&E | GJ 3 | GA | 1755 | FIRE WATER TANKER - 10KL | TATA 1913 | 2020 | Diesel |
| F&E | GJ 3 | GA | 1761 | FIRE WATER TANKER - 10KL | TATA 1913 | 2020 | Diesel |
| F&E | GJ 3 | GA | 1792 | FIRE WATER TANKER - 10KL | TATA 1913 | 2020 | Diesel |
| F&E | GJ 3 | GA | 1997 | FIRE WATER TANKER - 10KL | TATA 1913 | 2020 | Diesel |



| Department | Vehic | e No | | Type of vehicle Agency | Year | Fuel |
|----------------|-------|------|------|--|--------|--------|
| ERC | GJ 3 | G | 736 | Form Nurser Man Force | 2008 | Diesel |
| Estate | GJ3 | G | 1757 | Gama Jeep FORCE MOTORS | 2010 | Diesel |
| SWM | GJ3 | GA | 2 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| SWM | GJ 3 | GA | 35 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| SWM | GJ3 | GA | 55 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| SWM | GJ3 | GA | 57 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| SWM | GJ3 | GA | 69 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| SWM | GJ3 | GA | 108 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| SWM | GJ3 | GA | 127 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| SWM | GJ3 | GA | 195 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| SWM | GJ3 | GA | 463 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| SWM | GJ3 | GA | 470 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| SWM | GJ3 | GA | 471 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| SWM | GJ3 | GA | 474 | Garbage Compacter 1613 TATA | 2016 | Diesel |
| Drainage | GJ 3 | G | 801 | GENIO DC 2WD M&M | 2012 | Diesel |
| CRICKET GROUND | | | | GROUND ROLLER HAKO ENGG., MUMBA | 2012 | Diesel |
| ERC | GJ3 | G | 804 | Hook arm truck 2516 Ashok Leyland | 2011 | Diesel |
| ERC | GJ3 | G | 805 | Hook arm truck 2516 Ashok Leyland | 2011 | Diesel |
| Roshni | GJ3 | GA | 368 | Hydraulic ladder van 10.50 EICHER | 2015 | Diesel |
| Roshni | GJ3 | GA | 466 | Hydraulic ladder van 10.50 EICHER | 2016 | Diesel |
| Roshni | GJ3 | GA | 1032 | HYDRAULIC LADDER VEHICLE EICHER 1055 | 2019 | Diesel |
| F&E | GJ3 | G | 818 | Hydraulic Platform VOLVO VEMA | 2012 | Diesel |
| F&E | GJ 3 | GA | 1558 | HYDRAULIC PLATFORM VOLVO + BRONTO SK LIFT | Y 2021 | Diesel |
| RRL | GJ3 | G | 1826 | Indica vista car TATA | 2012 | Diesel |
| Main branch | GJ3 | G | 1947 | Indica vista car TATA | 2013 | Diesel |
| Main branch | GJ3 | G | 1949 | Indica vista car TATA | 2013 | Diesel |
| Main branch | GJ 3 | G | 1950 | Indica vista car TATA | 2013 | Diesel |
| Main branch | GJ3 | G | 1995 | Indica vista car TATA | 2014 | Diesel |
| Main branch | GJ 3 | G | 1996 | Indica vista car TATA | 2014 | Diesel |
| Main branch | GJ 3 | G | 1997 | Indica vista car TATA | 2014 | Diesel |
| Main branch | GJ 3 | G | 2023 | Indica vista car TATA | 2014 | Diesel |
| Main branch | GJ 3 | GA | 363 | Indica vista car TATA | 2015 | Diesel |
| Main branch | GJ3 | G | 1617 | Innova TOYOTA | 2008 | Diesel |



| Department | Vehic | e No | | Type of vehicle | Agency | Year | Fuel |
|-------------|-------|------|------|--------------------------------|--------------------------|----------|--------|
| Main | GJ 3 | GA | 2020 | INNOVA 2.4 VX, 7-SEATER | ТОУОТА | 2019 | Diesel |
| Main | GJ3 | GA | 4545 | INNOVA 2.4 VX, 7-SEATER | ТОУОТА | 2019 | Diesel |
| Main | GJ3 | GA | 5555 | INNOVA 2.4 VX, 7-SEATER | ТОУОТА | 2019 | Diesel |
| Main branch | GJ3 | G | 269 | Innova 7-seater (2.5 G) | ТОУОТА | 2014 | Diesel |
| Main branch | GJ 3 | G | 303 | Innova 7-seater (2.5 G) | ТОУОТА | 2014 | Diesel |
| Main branch | GJ3 | G | 2020 | Innova 7-seater (2.5 Z E3) | ТОУОТА | 2013 | Diesel |
| Main branch | GJ3 | G | 5555 | Innova 7-seater (2.5 Z E3) | ТОУОТА | 2014 | Diesel |
| Main branch | GJ3 | GA | 1818 | Innova 8-seater (2.5G E3) | ТОҮОТА | 2016 | Diesel |
| Main branch | GJ3 | GA | 8888 | Innova cresta | ТОУОТА | 2017 | Diesel |
| Main branch | GJ3 | GA | 7777 | Innova cresta | ТОУОТА | 2017 | Diesel |
| Main | GJ3 | GA | 5050 | INNOVA CRYSTA 2.4 VX, 7-SEATER | ТОУОТА | 2022 Die | |
| Tax | GJ3 | DD | 9851 | Jeep | M&M | 2002 | Diesel |
| Roshni | GJ3 | GA | 334 | Jeep ladder van THAR DI 7str | M&M | 2015 | Diesel |
| Estate | GJ 3 | GA | 160 | Law bed trailer | BALVIKRUPA INDUSTRIES | 2015 | - |
| Estate | GJ 3 | GA | 170 | Law bed trailer | BALVIKRUPA INDUSTRIES | 2015 | - |
| Estate | GJ 3 | GA | 263 | Law bed trailer | BALVIKRUPA INDUSTRIES | 2015 | - |
| Estate | GJ 3 | GA | 424 | Law bed trailer | BALVIKRUPA INDUSTRIES | 2015 | - |
| Bandhkam | GJ 3 | G | 1239 | LOADER EXCAVATOR 3DX | JCB | 2014 | Diesel |
| Bandhkam | GJ 3 | G | 1240 | LOADER EXCAVATOR 3DX | JCB | 2014 | Diesel |
| Bandhkam | GJ 3 | G | 1241 | LOADER EXCAVATOR 3DX | JCB | 2014 | Diesel |
| SWM | GJ 3 | G | 1229 | LOADER EXCAVATOR 3DX | JCB | 2014 | Diesel |
| SWM | GJ 3 | G | 1230 | LOADER EXCAVATOR 3DX | JCB | 2014 | Diesel |
| SWM | GJ 3 | G | 1231 | LOADER EXCAVATOR 3DX | JCB | 2014 | Diesel |
| SWM | GJ 3 | G | 1232 | LOADER EXCAVATOR 3DX | JCB | 2014 | Diesel |
| SWM | GJ 3 | G | 1245 | LOADER EXCAVATOR 3DX | JCB | 2014 | Diesel |
| SWM | GJ 3 | G | 1246 | LOADER EXCAVATOR 3DX | JCB | 2014 | Diesel |
| SWM | GJ 3 | G | 1247 | LOADER EXCAVATOR 3DX | JCB | 2014 | Diesel |
| SWM | GJ 3 | G | 1248 | LOADER EXCAVATOR 3DX | JCB | 2014 | Diesel |
| SWM | GJ 3 | GA | 1013 | LOADER EXCAVATOR 770 EX | L&T CASE | 2018 | Diesel |
| SWM | GJ 3 | GA | 1090 | LOADER EXCAVATOR 770 EX | L&T CASE | 2018 | Diesel |



| Department | Vehicl | e No | | Type of vehicle | Agency | Year | Fuel |
|------------------------|--------|------|------|---------------------------------|---------------------|------|----------------|
| SWM | GJ3 | GA | 1151 | LOADER EXCAVATOR 770 EX | L&T CASE | 2018 | Diesel |
| SWM | GJ3 | GA | 1166 | LOADER EXCAVATOR 770 EX | L&T CASE | 2018 | Diesel |
| SWM | GJ3 | GA | 1247 | LOADER EXCAVATOR 770 EX | L&T CASE | 2018 | Diesel |
| SWM | GJ3 | GA | 1319 | LOADER EXCAVATOR 770 EX | L&T CASE | 2018 | Diesel |
| Main | GJ3 | GA | 1930 | MAHINDRA MARAZZO, M4+, 7-SEATER | Mahindra & Mahindra | 2022 | Diesel |
| SWM | GJ3 | G | 988 | manure lifting m/c XTRA PV | PIAGGIO | 2014 | Diesel |
| SWM | GJ3 | G | 1000 | manure lifting m/c XTRA PV | PIAGGIO | 2014 | Diesel |
| SWM | GJ3 | G | 2501 | manure lifting m/c XTRA PV | PIAGGIO | 2014 | Diesel |
| SWM | GJ3 | G | 2502 | manure lifting m/c XTRA PV | PIAGGIO | 2014 | Diesel |
| SWM | GJ3 | G | 2503 | manure lifting m/c XTRA PV | PIAGGIO | 2014 | Diesel |
| SWM | GJ3 | G | 2504 | manure lifting m/c XTRA PV | PIAGGIO | 2014 | Diesel |
| ICDS | GJ 18 | G | 3618 | Maruti Van | MARUTI SUZUKI LTD. | 2009 | Petrol /CNG |
| ICDS | GJ 18 | G | 3619 | Maruti Van | MARUTI SUZUKI LTD. | 2009 | Petrol /CNG |
| Traffic & Transport | GJ 3 | GA | 1038 | Mini Crain XENON | TATA | 2018 | Diesel |
| Traffic & Transport | GJ 3 | GA | 1060 | Mini Crain XENON | TATA | 2018 | Diesel |
| F&E | GJ3 | GA | 1624 | Mini Fire Fighter | TATA | 2020 | Diesel |
| F&E | GJ3 | GA | 1645 | Mini Fire Fighter | TATA | 2020 | Diesel |
| ERC | GJ3 | G | 744 | Mini pickup van 207 | TATA | 2009 | Diesel |
| ERC | GJ 1 | G | 4794 | Mini pickup van 207 | TATA | 2009 | Diesel |
| ERC | GJ3 | G | 745 | Mini Rescue AVICO e COMET | Ashok Leyland | 2008 | Diesel |
| ERC | GJ3 | G | 746 | Mini Rescue AVICO e COMET | Ashok Leyland | 2008 | Diesel |
| SWM | GJ3 | GA | 1235 | MINI Tipper | TATA | 2020 | Diesel |
| SWM | GJ3 | GA | 1261 | MINI Tipper | TATA | 2020 | Diesel |
| SWM | GJ3 | GA | 1267 | MINI Tipper | TATA | 2020 | Diesel |
| SWM | GJ3 | GA | 1310 | MINI Tipper | TATA | 2020 | Diesel |
| SWM | GJ3 | GA | 1381 | MINI Tipper | TATA | 2020 | Diesel |
| SWM | GJ3 | GA | 1409 | MINI Tipper | TATA | 2020 | Diesel |
| SWM | GJ3 | GA | 1475 | MINI Tipper | TATA | 2020 | Diesel |
| SWM | GJ3 | G | 92 | MINI TIPPER- Dost | Ashok Leyland | 2015 | Diesel |
| SWM | GJ3 | GA | 691 | MINI TIPPER- Super ACE | TATA | 2016 | Diesel |



| Department | Vehicl | e No | | Type of vehicle | Agency | Year | Fuel |
|------------|--------|------|-----|---|--------------------------|------|--------|
| SWM | GJ 3 | GA | 712 | MINI TIPPER- Super ACE | TATA | 2016 | Diesel |
| SWM | GJ 3 | GA | 734 | MINI TIPPER- Super ACE | TATA | 2016 | Diesel |
| SWM | GJ 3 | GA | 737 | MINITIPPER- Super ACE | TATA | 2016 | Diesel |
| SWM | GJ 3 | GA | 739 | MINI TIPPER- Super ACE | TATA | 2016 | Diesel |
| SWM | GJ 3 | G | 974 | MINI TIPPER- Trump 40 | FORCE MOTORS | 2014 | Diesel |
| SWM | GJ 3 | G | 980 | MINI TIPPER- Trump 40 | FORCE MOTORS | 2014 | Diesel |
| SWM | GJ 3 | G | 981 | MINI TIPPER- Trump 40 | FORCE MOTORS | 2014 | Diesel |
| Estate | GJ 3 | G | 778 | Mini Truck 709 | TATA | 2011 | Diesel |
| Estate | GJ 3 | G | 783 | Mini Truck 709 | TATA | 2012 | Diesel |
| SWM | GJ 3 | GA | 850 | Mobile Court 20.15 | EICHER | 2016 | Diesel |
| Health | GJ 3 | G | 766 | MOBILE DISPENSARY 10.75 | EICHER | 2011 | Diesel |
| Health | GJ 3 | G | 767 | MOBILE DISPENSARY 10.75 | EICHER | 2011 | Diesel |
| SWM | GJ 3 | GA | 45 | Mobile High Pressure Washing System 3000L PRO | EICHER | 2016 | Diesel |
| SWM | GJ 3 | GA | 51 | Mobile High Pressure Washing System 3000L PRO | EICHER | 2016 | Diesel |
| SWM | GJ 3 | GA | 498 | Mobile High Pressure Washing System 3000L PRO | EICHER | 2016 | Diesel |
| Library | GJ 3 | G | 780 | Mobile Library Van 1075 | EICHER | 2011 | Diesel |
| Library | GJ 3 | G | 781 | Mobile Library Van 1075 | EICHER | 2011 | Diesel |
| SWM | GJ 3 | GA | 194 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 204 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 302 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 41 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 78 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 219 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 488 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 4 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 80 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 427 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 439 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 70 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 197 | Mobile Toilet 10-seater | Raj-shree & Company | 2015 | - |
| SWM | GJ 3 | GA | 641 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |



| Department | Vehic | e No | | Type of vehicle | Agency | Year | Fuel |
|-------------|-------|------|------|------------------------------------|--------------------------|------|--------|
| SWM | GJ3 | GA | 644 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 765 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 788 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 789 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 791 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 852 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 889 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 638 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 649 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 758 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 760 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 786 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 792 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 858 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | GA | 861 | Mobile Toilet 10-seater | Giriraj Tractors, Gondal | 2016 | - |
| SWM | GJ3 | AV | 8770 | Mobile Washing Van ACE | TATA | 2010 | Diesel |
| SWM | GJ3 | AV | 8771 | Mobile Washing Van ACE | TATA | 2010 | Diesel |
| ERC | GJ3 | G | 735 | Multi-function rescue with crane | Man Force | 2008 | Diesel |
| Water Works | GJ3 | G | 770 | Pick up Van407 | TATA | 2011 | Diesel |
| Water Works | GJ3 | G | 799 | Pick up Van407 | TATA | 2012 | Diesel |
| SWM | GJ3 | G | 2594 | PORTER 600 | PIAGGIO | 2014 | Diesel |
| SWM | GJ3 | GA | 491 | PORTER 600 | PIAGGIO | 2016 | Diesel |
| SWM | GJ3 | GA | 125 | PORTER 600 mobile dispenser | PIAGGIO | 2016 | Diesel |
| SWM | GJ3 | GA | 490 | PORTER 600 mobile dispenser | PIAGGIO | 2016 | Diesel |
| Estate | GRP | | 6354 | Recovery van 12.10 | TATA | 1988 | Diesel |
| F&E | GJ3 | T | 3074 | RESCUE | Ashok Leyland | 1991 | Diesel |
| F&E | GJ3 | Υ | 8941 | RESCUE | Ashok Leyland | 2002 | Diesel |
| Bandhkam | GJ3 | G | 1216 | Road roller 752 Vibratory | L & T – CASE | 2012 | Diesel |
| Bandhkam | GJ3 | G | 1217 | Road roller 752 Vibratory | L & T – CASE | 2012 | Diesel |
| Bandhkam | GJ3 | G | 1218 | Road roller Soil Compactor VM 115 | JCB | 2012 | Diesel |
| Bandhkam | GJ 3 | G | 1219 | Road roller Soil Compactor VMT 860 | JCB | 2012 | Diesel |
| ERC | GJ 3 | G | 1720 | Scorpio | M&M | 2010 | Diesel |
| ERC | GJ3 | G | 1722 | Scorpio | M&M | 2010 | Diesel |



| Department | Vehic | e No | | Type of vehicle | Agency | Year | Fuel |
|-------------|-------|------|------|--------------------------|----------------------|------|--------|
| Main branch | GJ 3 | G | 1998 | Scorpio | M&M | 2013 | Diesel |
| Main | GJ 3 | GA | 9945 | SCORPIO S11 7CC | Mahindra & Mahindra | 2022 | Diesel |
| Vigilance | GJ 3 | GA | 183 | Splendorspoke | HERO | 2015 | Petrol |
| Vigilance | GJ 3 | GA | 377 | Splendorspoke | HERO | 2015 | Petrol |
| F&E | GJ 3 | GA | 1239 | Subvahini | TATA-Winger | 2019 | Diesel |
| F&E | GJ 3 | GA | 1293 | Subvahini | TATA-Winger | 2019 | Diesel |
| F&E | GJ 3 | GA | 1461 | Subvahini | TATA-Winger | 2019 | Diesel |
| F&E | GJ 3 | GA | 1594 | Subvahini | TATA SFC 510 TT BSVI | 2021 | Diesel |
| F&E | GJ 3 | GA | 1922 | Subvahini | TATA SFC 510 TT BSVI | 2021 | Diesel |
| F&E | GJ 3 | GA | 1657 | Subvahini | TATA SFC 510 TT BSVI | 2021 | Diesel |
| F&E | GJ 3 | GA | 1617 | Subvahini | TATA SFC 510 TT BSVI | 2021 | Diesel |
| F&E | GJ 3 | GA | 1831 | Subvahini | TATA SFC 510 TT BSVI | 2021 | Diesel |
| F&E | GJ 3 | G | 920 | Subvahini 10.50 | EICHER | 2013 | Diesel |
| F&E | GJ 3 | G | 921 | Subvahini 10.50 | EICHER | 2013 | Diesel |
| F&E | GJ 3 | G | 922 | Subvahini 10.50 | EICHER | 2013 | Diesel |
| F&E | GJ 3 | AW | 9563 | Subvahini 10.75 | EICHER | 2010 | Diesel |
| F&E | GJ 3 | AW | 9582 | Subvahini 10.75 | EICHER | 2010 | Diesel |
| F&E | GJ 3 | GA | 1064 | Subvahini 407 | TATA | 2017 | Diesel |
| F&E | GJ 3 | GA | 1087 | Subvahini 407 | TATA | 2017 | Diesel |
| F&E | GJ 3 | GA | 1253 | Subvahini 407 | TATA | 2017 | Diesel |
| F&E | GJ 3 | GA | 1355 | Subvahini 407 | TATA | 2017 | Diesel |
| F&E | GJ 3 | AT | 6426 | Subvahini open 10.59 | EICHER | 2010 | Diesel |
| SWM | GJ 3 | G | 905 | Suction m/c (4000 L)909 | TATA | 2012 | Diesel |
| SWM | GJ 3 | G | 906 | Suction m/c (4000 L)909 | TATA | 2012 | Diesel |
| SWM | GJ 3 | G | 903 | Suction m/c (8000 L)1613 | TATA | 2013 | Diesel |
| Vigilance | GJ 3 | G | 1773 | SUMO | TATA | 2011 | Diesel |
| ANCD | GJ 3 | G | 1825 | SUMO GOLD | TATA | 2012 | Diesel |
| Health | GJ 3 | G | 1843 | SUMO GOLD | TATA | 2012 | Diesel |
| Health | GJ 3 | G | 2009 | SUMO GOLD | TATA | 2014 | Diesel |
| Tax | GJ 3 | G | 407 | SUMO GOLD | TATA | 2012 | Diesel |
| Tax | GJ 3 | G | 1846 | SUMO GOLD | TATA | 2012 | Diesel |
| Water Works | GJ 3 | G | 1921 | SUMO GOLD | TATA | 2013 | Diesel |
| Water Works | GJ 3 | GA | 843 | SUMO GOLD | TATA | 2016 | Diesel |



| Department | Vehic | e No | | Type of vehicle | Agency | Year | Fuel | |
|-------------------|-------|------|------|-----------------------------------|--|------|-----------|--|
| Z00 | GJ 3 | G | 2008 | SUMO GOLD 9-seater | TATA | 2014 | Diesel | |
| Vigilance (Tech.) | GJ3 | G | 884 | TEMPO TRAVELLAR | FORCE MOTORS | 2013 | Diesel | |
| SWM | GJ3 | AT | 2978 | Tipper BIG 1616 | TATA | 2011 | Diesel | |
| SWM | GJ 3 | AV | 9372 | Tipper small 407 | TATA | 2011 | Diesel | |
| SWM | GJ 3 | G | 959 | TIPPER TERAA 16 | EICHER | 2014 | Diesel | |
| SWM | GJ3 | G | 960 | TIPPER TERAA 16 | EICHER | 2014 | Diesel | |
| SWM | GJ 3 | G | 961 | TIPPER TERAA 16 | EICHER | 2014 | Diesel | |
| SWM | GJ 3 | G | 967 | TIPPER TERAA 16 | EICHER | 2014 | Diesel | |
| SWM | GJ3 | G | 968 | TIPPER TERAA 16 | EICHER | 2014 | Diesel | |
| SWM | GJ3 | G | 969 | TIPPER TERAA 16 | EICHER | 2014 | 14 Diesel | |
| SWM | GJ 3 | G | 962 | TIPPER TERAA 25 | EICHER | 2014 | Diesel | |
| SWM | GJ 3 | G | 963 | TIPPER TERAA 25 | EICHER | 2014 | Diesel | |
| SWM | GJ3 | G | 964 | TIPPER TERAA 25 | EICHER | 2014 | Diesel | |
| SWM | GJ3 | G | 965 | TIPPER TERAA 25 | EICHER | 2014 | Diesel | |
| SWM | GJ 3 | G | 966 | TIPPER TERAA 25 | EICHER | 2014 | Diesel | |
| SWM | GJ 3 | G | 970 | TIPPER TERAA 25 | EICHER | 2014 | Diesel | |
| SWM | GJ 3 | GA | 1025 | Tipper Truck (Dumper) | TATA LPK 2518 | 2018 | Diesel | |
| SWM | GJ 3 | GA | 1048 | Tipper Truck (Dumper) | TATA LPK 2518 | 2018 | Diesel | |
| SWM | GJ 3 | GA | 1068 | Tipper Truck (Dumper) | TATA LPK 2518 | 2018 | Diesel | |
| SWM | GJ 3 | GA | 1173 | Tipper Truck (Dumper) | TATA LPK 2518 | 2018 | Diesel | |
| SWM | GJ3 | GA | 1226 | Tipper Truck (Dumper) | TATA LPK 2518 | 2018 | Diesel | |
| SWM | GJ 3 | GA | 1257 | Tipper Truck (Dumper) | TATA LPK 2518 | 2018 | Diesel | |
| SWM | GJ 3 | GA | 1273 | Tipper Truck (Dumper) | TATA LPK 2518 | 2018 | Diesel | |
| SWM | GJ 3 | GA | 1316 | Tipper Truck (Dumper) | TATA LPK 2518 | 2018 | Diesel | |
| SWM | GJ 3 | GA | 1419 | Tipper Truck (Dumper) | TATA LPK 2518 | 2018 | Diesel | |
| SWM | GJ 3 | GA | 1431 | Tipper Truck (Dumper) | TATA LPK 2518 | 2018 | Diesel | |
| CRICKET GROUND | | | | TORO LAWN MOVER GREEN MASTER 1000 | Irrigation Product International Pvt.Ltd., Chennai | 2014 | Petrol | |
| CRICKET GROUND | | | | TORO LAWN MOVER TIME CUTTER | Irrigation Product International Pvt.Ltd., Chennai | 2014 | Petrol | |
| Estate | GJ 3 | GA | 56 | Tractor 380 | EICHER | 2016 | Diesel | |
| SWM | GJ3 | GA | 44 | Tractor 380 | EICHER | 2016 | Diesel | |



| Department | | Vehic | e No | | Type of vehicle Agency | Year | Fuel |
|----------------------|---|-------|------|------|--------------------------------|---------------------|--------|
| SWM | | GJ3 | GA | 52 | Tractor 380 EICHER | 2016 | Diesel |
| SWM | | GJ3 | GA | 106 | Tractor 380 EICHER | 2016 | Diesel |
| Estate | | GJ3 | GA | 1845 | Tractor 380 HP EICHER 3 | 880 R LINE USG 2021 | Diesel |
| Estate | | GJ3 | GA | 1548 | Tractor 380 HP EICHER 3 | 880 R LINE USG 2021 | Diesel |
| Estate | | GJ3 | GA | 1537 | Tractor 380 HP EICHER 3 | 880 R LINE USG 2021 | Diesel |
| Z00 | | GJ3 | GA | 1379 | TRACTOR 39 HP JOHN DH | EERE 2018 | Diesel |
| ANCD | | GJ3 | GA | 1043 | Tractor 50 HP SONALIK | A 2018 | Diesel |
| ANCD | | GJ3 | G | 1210 | Tractor 5660 EICHER | 2011 | Diesel |
| ANCD | | GJ3 | G | 1211 | Tractor 5660 EICHER | 2011 | Diesel |
| ANCD | | GJ3 | G | 1243 | Tractor 5660 EICHER | 2014 | Diesel |
| ANCD | | GJ3 | G | 1244 | Tractor 5660 EICHER | 2014 | Diesel |
| Z00 | | GJ3 | G | 1204 | Tractor mini-DI 2600 Captain | 2008 | Diesel |
| Estate | | GJ 3 | GA | 1835 | Tractor Trolly BALVIKR INDUSTR | | |
| Estate | | GJ 3 | GA | 1741 | Tractor Trolly BALVIKR INDUSTR | | |
| Estate | | GJ 3 | GA | 1902 | Tractor Trolly BALVIKR INDUSTR | | |
| F&E | | GJ3 | γ | 3901 | Trailer boat VADIA LN | MV 2003 | Diesel |
| F&E | | GJ3 | Υ | 3902 | Trailer boat VADIA LA | MV 2003 | Diesel |
| ANCD | | GJ3 | χ | 7405 | Trailer Ambica v | velding works 2000 | - |
| Garden | | GJ3 | χ | 7406 | Trailer Ambica v | velding works 2000 | - |
| SWM | | GJ3 | U | 2704 | Trailer Ambica v | velding works 1997 | - |
| Z00 | | GJ3 | ٧ | 1615 | Trailer | 1998 | - |
| Vigilance | | GJ3 | GA | 286 | Traveler FORCE M | OTORS 2015 | Diesel |
| Z00 | | GJ3 | G | 1108 | Trolly Star Trail | er, Rajkot 2008 | - |
| Traffic Transport | & | GJ 3 | GA | 1026 | Trolly four wheel Giriraj Tr | actors, Gondal 2018 | - |
| Traffic Transport | & | GJ 3 | GA | 1222 | Trolly four wheel Giriraj Tr | actors, Gondal 2018 | - |
| Estate | | GJ3 | GA | 1196 | Truck 1080 EICHER | 2019 | Diesel |
| Main branch | | GJ3 | GA | 848 | TUV 300 M&M | 2016 | Diesel |
| Main | | GJ3 | GA | 1047 | TUV 300 T6+ Mahindra | a & Mahindra 2019 | Diesel |
| Main | | GJ 3 | GA | 1141 | TUV 300 T6+ Mahindra | a & Mahindra 2019 | Diesel |



| Department | Vehicl | Vehicle No | | Type of vehicle | Agency | Year | Fuel |
|-------------|--------|------------|------|----------------------------------|---------------------|------|--------|
| Main | GJ 3 | GA | 1221 | TUV 300 T6+ | Mahindra & Mahindra | 2019 | Diesel |
| Main | GJ3 | GA | 1426 | TUV 300 T6+ | Mahindra & Mahindra | 2019 | Diesel |
| Main | GJ3 | GA | 1950 | TUV 300 T6+ | Mahindra & Mahindra | 2019 | Diesel |
| SWM | GJ3 | G | 995 | URINAL cum toilet VAN | FORCE MOTORS | 2014 | Diesel |
| SWM | GJ 3 | G | 996 | URINAL cun toilet VAN | FORCE MOTORS | 2014 | Diesel |
| SWM | GJ3 | G | 997 | URINAL cun toilet VAN | FORCE MOTORS | 2014 | Diesel |
| SWM | GJ 3 | G | 998 | URINAL cun toilet VAN | FORCE MOTORS | 2014 | Diesel |
| SWM | GJ 3 | G | 999 | URINAL cun toilet VAN | FORCE MOTORS | 2014 | Diesel |
| Roshni | GJ3 | AV | 9543 | UTILITY (207 DI) | TATA | 2011 | Diesel |
| Roshni | GJ 3 | G | 806 | UTILITY (207 DI) | TATA | 2012 | Diesel |
| Water Works | GJ 3 | AV | 9807 | UTILITY (207 DI) | TATA | 2011 | Diesel |
| Z00 | GJ3 | GA | 1130 | VISITOR ZYPSY | MARUTI SUZUKI LTD. | 2017 | Diesel |
| Z00 | GJ3 | GA | 1165 | VISITOR ZYPSY | MARUTI SUZUKI LTD. | 2017 | Diesel |
| Bandhkam | GJ3 | G | 874 | Water tanker 20.16 (10000 Ltrs.) | EICHER | 2012 | Diesel |
| Bandhkam | GJ3 | G | 875 | Water tanker 20.16 (10000 Ltrs.) | EICHER | 2012 | Diesel |
| Bandhkam | GJ3 | G | 876 | Water tanker 20.16 (10000 Ltrs.) | EICHER | 2012 | Diesel |
| Water Works | GJ3 | W | 9022 | Water tanker16.13 (9000 Ltrs.) | TATA | 2006 | Diesel |
| Water Works | GJ 3 | W | 9031 | Water tanker16.13 (9000 Ltrs.) | TATA | 2006 | Diesel |
| ERC | GJ3 | G | 737 | Water Tanker | Man Force | 2008 | Diesel |
| ERC | GJ3 | G | 738 | Water Tanker | Man Force | 2008 | Diesel |
| ERC | GJ 3 | G | 739 | Water Tanker 1615 | TATA | 2008 | Diesel |
| SWM | GJ 3 | GA | 508 | Water Tanker 20.16 | EICHER | 2016 | Diesel |
| Main branch | GJ 3 | G | 2012 | XYLO | M&M | 2012 | Diesel |
| Vigilance | GJ 3 | GA | 1133 | XYLO | M&M | 2017 | Diesel |
| Main branch | GJ 3 | G | 2223 | XYLO 8 str | M&M | 2014 | Diesel |



6.2. Annexure 2 – Price of Alternative E-Vehicles with Cost Escalation

| Type of Vehicle | Electric variant to be replaced | Cost of | Per | 2023- | 2024- | 2025- | 2026- | 2027- | 2028- | 2029- | 2030- | 2031- | 2032- |
|-------------------|--|-------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Electric | annum | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
| | | alternative | Price | Price | Price | Price | Price | Price | Price | Price | Price | Price | Price |
| | | 2022-23 | escalation | Rs. in |
| | | Rs. in lacs | assumed | lakhs |
| Car | Tata Tigor- EV | 12 | 5% | 12.6 | 13.2 | 13.9 | 14.6 | 15.3 | 16.1 | 16.9 | 17.7 | 18.6 | 19.5 |
| Scorpio, Jeep, | Tata Nexon | 15 | 5% | 15.8 | 16.5 | 17.4 | 18.2 | 19.1 | 20.1 | 21.1 | 22.2 | 23.3 | 24.4 |
| Bolero, Sumo | | | | | | | | | | | | | |
| Refuse Compactor | Alternative not yet available | 40 | 5% | 42.0 | 44.1 | 46.3 | 48.6 | 51.1 | 53.6 | 56.3 | 59.1 | 62.1 | 65.2 |
| (10 Tons) | | | | | | | | | | | | | |
| Covered Tipper- | Prototypes under development. | 60 | 5% | 63.0 | 66.2 | 69.5 | 72.9 | 76.6 | 80.4 | 84.4 | 88.6 | 93.1 | 97.7 |
| 16 tonnes | Launch expected in 2024. | | | | | | | | | | | | |
| | Replacement assumed in 2025 | | | | | | | | | | | | |
| Open Tipper/ mini | Alternative shall be available in 2025 | 40 | 5% | 42.0 | 44.1 | 46.3 | 48.6 | 51.1 | 53.6 | 56.3 | 59.1 | 62.1 | 65.2 |
| trucks 8 tonnes | | | | | | | | | | | | | |
| APE 3-Wheeler | Piaggio Ape | 4 | 5% | 4.2 | 4.4 | 4.6 | 4.9 | 5.1 | 5.4 | 5.6 | 5.9 | 6.2 | 6.5 |
| APE 4-Wheeler | Tata ACE | 9.5 | 5% | 10.0 | 10.5 | 11.0 | 11.5 | 12.1 | 12.7 | 13.4 | 14.0 | 14.7 | 15.5 |
| Jeep | Tata Nexon | 15 | 5% | 15.8 | 16.5 | 17.4 | 18.2 | 19.1 | 20.1 | 21.1 | 22.2 | 23.3 | 24.4 |
| Crew Van | Tata open tipper | 40 | 5% | 42.0 | 44.1 | 46.3 | 48.6 | 51.1 | 53.6 | 56.3 | 59.1 | 62.1 | 65.2 |
| JCB | Not available | | 5% | | | | | | | | | | |
| Maruti van | Omni E- version may be launched in | 12 | 5% | 12.6 | 13.2 | 13.9 | 14.6 | 15.3 | 16.1 | 16.9 | 17.7 | 18.6 | 19.5 |
| | 2024 | | | | | | | | | | | | |
| Ambulance | Depends on base vehicle used | 20 | 5% | 21.0 | 22.1 | 23.2 | 24.3 | 25.5 | 26.8 | 28.1 | 29.5 | 31.0 | 32.6 |
| Small Truck | 2-3 tones Tata ULTRA T.7 | 17 | 5% | 17.9 | 18.7 | 19.7 | 20.7 | 21.7 | 22.8 | 23.9 | 25.1 | 26.4 | 27.7 |
| Tractor | Alternative shall be available since | 40 | 5% | 42 | 44.1 | 46.31 | 48.62 | 51.05 | 53.6 | 56.28 | 59.1 | 62.1 | 65.2 |
| | 2025 | | | | | | | | | | | | |



