SOUTH CAROLINA

Waste Tire Management at a Crossroads

NO.2

February 8, 2023

A Special Report Prepared by the S.C. Department of Health and Environmental Control







Scrap Tire Management Projections

Prepared for the S.C. Association of Counties and the S.C. Scrap Tire Sustainability Coalition (Revised February 8, 2023)

TABLE 1: New Tires Sold, Fees Collected, Processing Costs for Scrap Tires Projections for Fiscal Year 2023-2027							
YEAR	FY23	FY24	FY25	FY26	FY27		
(1) Projected new tires sold by retailers	4,268,211	4,310,880	4,354,000	4,397,520	4,441,520		
(2) Projected revenue @ \$2 per new tire	\$8,536,423	\$8,621,787	\$8,708,005	\$8,795,085	\$8,883,036		
(3) Projected new tires sold by retailers by ton @ 80 tires per ton	53,352	53,886	54,425	54,969	55,519		
(4) Projected processing costs per ton	\$189	\$208	\$229	\$252	\$277		
(5) Projected processing costs for 100 percent of the estimated new tires sold by retailers	\$10,083,649	\$11,208,323	\$12,463,332	\$13,852,259	\$15,378,756		
(6) Projected processing costs at recovery average of 40,188 tons for FYs 2023-2027	\$7,595,532	\$8,359,104	\$9,203,052	\$10,127,376	\$11,132,076		
(7) Projected revenue received by DHEC and counties @ 72 percent	\$6,146,225	\$6,207,687	\$6,269,764	\$6,332,461	\$6,395,786		
(8) Projected shortfall funding to manage scrap tires	\$1,449,307	\$2,151,417	\$2,933,288	\$3,794,915	\$4,736,290		
(9) Projected shortfall funding to manage scrap tires FYs 2023-2027					\$15,065,217		

NOTES:

- (1) In fiscal year (FY) 2022 (July 1, 2021 to June 30, 2022), 4,225,952 new tires were sold based on S.C. Department of Revenue (DOR) data reported by new tire retailers. The DOR data which does not include tires sold with new vehicles is used as the baseline of the FY 2023-2027 projections. This table reflects a 1 percent annual increase on tires sold based on South Carolina's 1 percent average annual population growth.
- (2) South Carolina's advance recycling fee of \$2 per new tire set in the S.C Solid Waste Policy and Management Act of 1991 applies to new tires for light passenger cars and trucks, motorcycles, and tractor trailers. Again, it does not apply to tires on new car sales.
- (3) In May 2021, the Tire Industry Association (TIA) updated the average weight for passenger and light truck tires from 20 to 25 pounds resulting in a new industry standard that 1 ton of scrap tires equals 80 tires down from 89.
- (4) Processing costs have grown an average 10 percent a year for the past 10 FYs.
- (5) These numbers assume that every tire sold generates a scrap tire.
- (6) The number of scrap tires recovered year to year as reported by counties can fluctuate significantly, but South Carolina's average recovery the past five FYs (2018-2022) is 40,188 tons (3,214,040 tires). Projected processing costs are calculated by using the average annual recovery multiplied by the projected annual processing cost.
- (7) New tire retailers can claim a \$1 credit for each tire provided to a tire recycler and not taken to a county to be recycled at no charge. These claims average 28 percent of the advanced recycling fees collected by DOR while the remaining 72 percent is allocated to DHEC and county governments.
- (8) These numbers reflect: (A) the current \$2 fee per new tire; (B) a 10 percent increase on processing costs each FY; (C) recovery based on 40,188 tons each FY; (D) revenue allocated to DHEC and county governments after retailer credits each FY; and (E) a 1 percent increase in the number of new tires sold each FY.
- (9) See Note 8 above.

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TABLE 2: Projected Scrap Tire Revenue FYs 2023-2027						
YEAR	2022	2023	2024	2025	2026	2027
Projected fees @ \$2 per tire	\$8,451,904	\$8,536,423	\$8,621,787	\$8,708,005	\$8,795,085	\$8,883,036
Projected fees received by DHEC/county programs @ 72 percent	\$6,109,917	\$6,146,225	\$6,207,687	\$6,269,764	\$6,332,461	\$6,395,786
Projected fees @ \$3 per tire		\$8,536,423	\$12,932,681	\$13,062,008	\$13,192,628	\$13,324,554
Projected fees received by DHEC/county programs @ 72 percent		\$6,146,225	\$9,311,530	\$9,404,646	\$9,498,692	\$9,593,679
Projected fees @ \$4 per tire		\$8,536,423	\$17,243,575	\$17,416,010	\$17,590,170	\$17,766,072
Projected fees received by DHEC/county programs @ 72 percent		\$6,146,225	\$12,415,374	\$12,539,527	\$12,664,923	\$12,791,572

NOTES:

- Projected fees for FYs 2023-2027 are calculated using FY 2022 as a baseline and a 1 percent increase each FY based on South Carolina's 1 percent average annual population growth.
- Funding received by DHEC and county programs averages 72 percent of the fees collected. This includes funding (based on county population) sent directly to the counties by the S.C. Treasurer's Office. The remaining 28 percent is used for retailer credits.

TABLE 3: Projected New Vehicles Sales and Potential New Tire Fees Collected for 2024-2027							
YEAR	2022	2023	2024	2025	2026	2027	TOTALS 2024-2027
(1) Vehicles sold	227,795	230,073	232,374	234,698	237,045	239,145	1,401,130
(2) Tires on new vehicles @ 4 per vehicle	911,180	920,292	929,496	938,792	948,180	957,660	5,604,520
Projected fee @ \$2 per tire			\$1,858,992	\$1,877,584	\$1,896,360	\$1,915,320	\$7,548,256
Projected fee @ \$3 per tire			\$2,788,488	\$2,816,376	\$2,844,540	\$2,872,980	\$11,322,384
Projected fee @\$4 per tire			\$3,717,984	\$3,755,168	\$3,792,720	\$3,830,640	\$15,096,512

NOTES:

- (1) In calendar year 2021, there were 252 light automobile dealerships in South Carolina that each sold an average of 895 vehicles or 225,540 vehicles overall according to the National Automobile Dealers Association (NADA). This data is used as the baseline beginning in 2022 to estimate new vehicle sales and accompanying new tire generation adding a 1 percent annual increase based on South Carolina's 1 percent annual population growth.
- (2) There is no tire fee on new vehicle sales. Given that, 902,160 tires (four per vehicle) entered South Carolina's end-of-life scrap management system in calendar year 2021.

How It Works: Advance Recycling Fee to Waste Tire Recovery

- South Carolina has an advance recycling fee of \$2 per tire placed on the purchase of specific new tires (i.e., bus, car, light truck, motorcycle, tractor trailer).
- 2. The fee is paid by the consumer to the new tire retailer.
- The fee is submitted by the new tire retailer to the S.C. Department of Revenue (DOR) minus any credits lawfully claimed by the retailer for the recycling of waste tires.
- DOR is required to administer, collect, and enforce the tire recycling fee in the same manner that the sales and use taxes are collected pursuant to S.C. Code of Laws, Title 12, Chapter 36.
- DOR through the S.C. Treasurer's Office distributes revenue to county governments and DHEC.
- New tire retailers may retain 3 percent (6 cents per tire) of the total fees collected as an administrative collection allowance;
- 7. New tire retailers receive a \$1 per waste tire credit if the waste tires are sent to a DHEC-approved recycler or processor. The credit for the number of tires recycled cannot be greater than the number of tires sold.

- New tire retailers may not claim a \$1 credit if the tires are taken to a county collection center.
- Counties receive DOR funding of \$1.50 per tire less new tire retailer credits outlined above - based on their population (percent of South Carolina's population). Each county must use this revenue for the collection and processing of waste tires.
- 10. DHEC receives DOR funding of 50 cents per tire to be used in the administration of the overall waste tire program (i.e., permitting, compliance, enforcement, technical assistance and public outreach) as well as grants to county governments.
- Counties are eligible for additional funding from DHEC's waste tire grant program if the DOR allocations do not cover their overall costs. This shortfall is determined by subtracting DOR funds, tipping fees and other county tire revenues from contractor costs. Grants are available annually.
- 12. In FY22, DHEC provided more than \$2.2 million in grant funding and DOR allocated more than \$2.8 million to counties. Overall, more than \$110 million has been provided to South Carolina's waste tire recovery program since FY94.

Tire Fee Credits Explained

- The S.C. Solid Waste Policy and Management Act of 1991 (Section 44-60-170 (N)) places a \$2 fee called the Solid Waste Excise Tax by DOR on the purchase of specific new tires (i.e., passenger car/truck, bus, motorcycle, tractor trailer).
- New tire wholesalers or retailers may claim a \$1 credit on the ST-390 for every tire recycled through a DHEC-approved facility and not delivered to a county collection site. The credit for the number of tires recycled cannot be more than the number of tires sold.
- New tire wholesalers or retailers may not claim a \$1 credit if the tires are taken to a county collection center for free disposal.

