RUBBER manufacturers association

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2013 U.S. Scrap Tire Management Summary

November 2014

U.S. Scrap Tire Disposition 2013

Market or Disposition	Thousands of Tons	Millions of Tires	% change 2011-2013
Tire-Derived Fuel	2120.29	129.37	48.6%
Cement Kilns	726.04	44.30	137.7%
Pulp & Paper	716.25	43.70	20.8%
Electric Utilities	576.25	35.16	260.2%
Industrial Boilers	0.00	0.00	-100.0%
Dedicated Tires-to-Energy	101.75	6.21	-50.0%
Ground Rubber	975.00	59.49	-10.8%
Civil Engineering	172.00	10.49	-41.7%
Exported	245.84	15.00	-18.7%
Electric Arc Furnace	65.56	4.00	0.0%
Reclamation Projects	49.17	3.00	-9.4%
Agricultural	7.10	0.43	0.0%
Baled Tires/market	30.00	1.83	1462.2%
Punched/ Stamped	1.90	0.12	0.0%
Total to Market	3666.85	223.74	12.9%
Generated	3824.26	233.34	1.1%
% to Market/Utilized	95.9%	95.9%	11.6%
Land Disposed	327.78	20.00	-33.3%
Baled/no market		0.00	-100.0%
% Managed (includes Markets, Baled and Landfill)	**104.5%**	**104.5%**	**4.7%**

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U.S. Scrap Tire Market Summary (2005 – 2013)

(in Thousands of Tons)

Market or Disposition	2005	2007	2009	2011	2013
Tire-Derived Fuel	2144.64	2484.36	2084.75	1427.03	2120.29
Ground Rubber	552.51	789.09	1354.17	1093.50	975.00
Land Disposed	590.81	593.98	653.38	491.65	327.78
Exported	111.99	102.08	102.10	302.48	245.84
Civil Engineering	639.99	561.56	284.92	294.99	172.00
Reclamation Projects	UNK	132.58	130.00	54.29	49.17
Electric Arc Furnace	18.88	27.14	27.10	65.55	65.56
Baled Tires/market	UNK	UNK	27.76	1.92	30.00
Agricultural	47.59	7.13	7.10	7.10	7.10
Punched/ Stamped	100.51	1.85	1.90	1.90	1.90
Baled/no market	42.22	9.31	15.57	32.78	No data
Used Tires[1]	n/a	n/a	371.25	n/a	n/a
Total to Market	3616.11	4105.79	4391.05	3083.76	3666.85
Generated[2]	4410.73	4595.72	5170.50	3781.00	3824.26
% to Market/Utilized	82.0%	89.3%	84.9%	81.6%	95.9%
% Managed	96.3%	102.5%	97.9%	95.4%	104.5%

(including baled and landfilled tires)

[1] RMA began tracking tires culled from scrap tire collection entering domestic used passenger and light truck used tire markets in 2009. RMA changed the way it incorporated estimates of tires entering used tire markets between 2009 and 2011. In 2009, RMA included used tires as a market for scrap tires. In 2011 and 2013, RMA subtracted used tires from the total tires hauled to calculate total net scrap tire generation.

[2] RMA changed the basis for reporting scrap tire generated annually from state-provided data in 2005-2007 to a calculation of replacement market tires sold and vehicles scrapped in 2009, 2011 and 2013.

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U.S. Scrap Tire Generation 2013

Tire Class	Millions of Tires	Market %	Average Weight (lbs)	Weight (thousands of tons)
Light Duty Tires	240.5	89.5%	22.5	2705.5
Passenger tire replacements[1]	199.3	74.1%		
Light truck tire replacements[1]	28.0	10.4%		
Tires from scrapped cars[2]	13.2	4.9%		
Commercial Tires	28.3	10.5%	120.0	1700.4
Medium, wide base, heavy truck replacement tires[1]	15.7	5.8%		
Tires from scrapped trucks and buses[2]	12.6	4.7%		
Total tires hauled	268.8	100.0%	32.8	4405.8
Used tires culled	35.5	13.2%	32.8	581.6
Net scrap tires	233.3			3824.3

[1] Factbook 2014: U.S. Tire Shipment/Activity Report for Statistical Year 2013, Rubber Manufacturers Association.

[2] Ward's Motor Vehicle Facts and Figures, 2014. Includes the total number of vehicles removed from service in 2013. In 2013, Ward's did not publish vehicles retired from service separated for the car and truck/bus category. Instead, it only published total vehicles scrapped from service. RMA estimated the split between cars and trucks/buses based on the average of the split from 2002 - 2012. Assumes two tires scrapped from light duty vehicles and 2.5 tires scrapped from trucks and buses.

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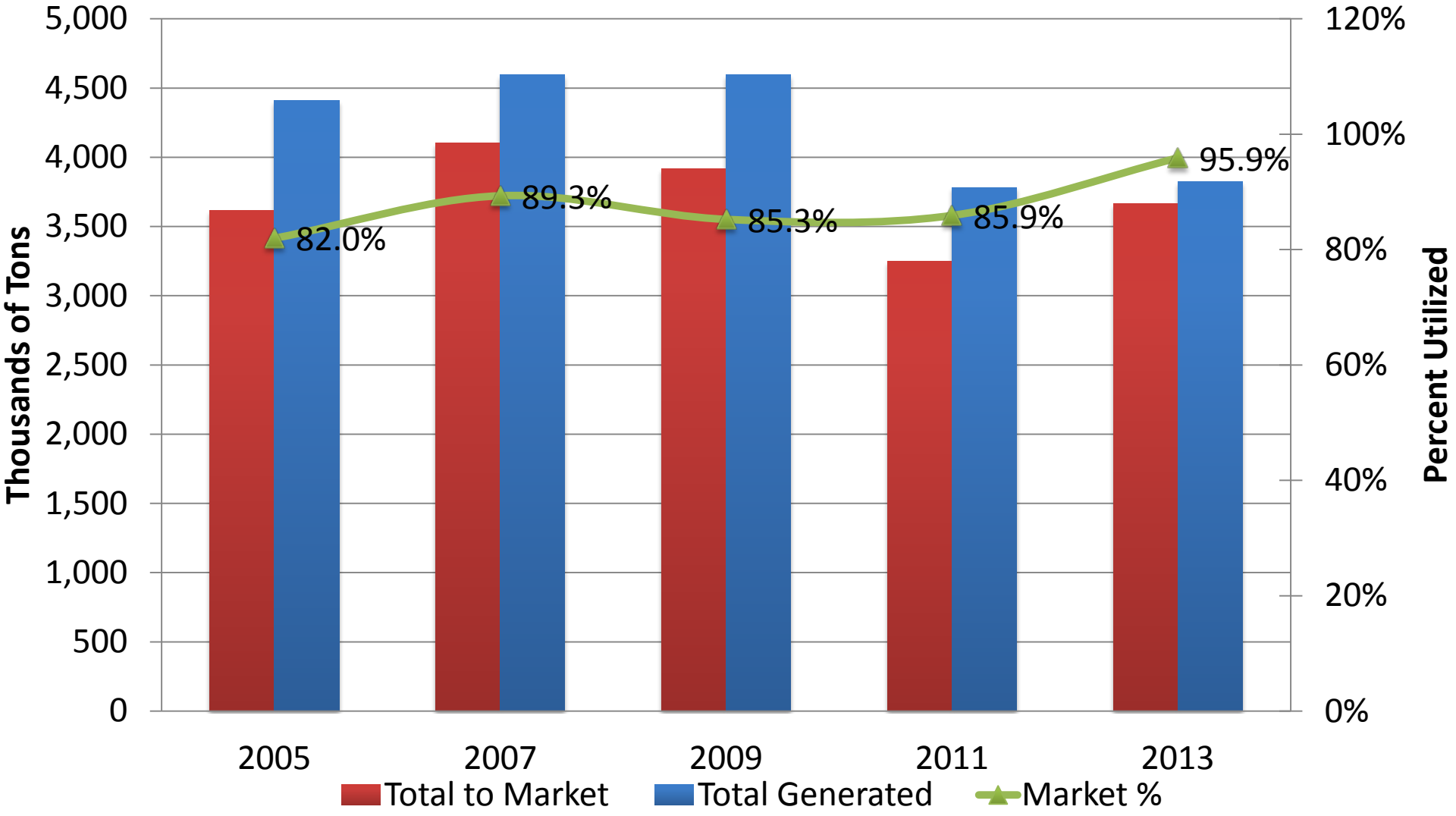
U.S. Scrap Tire Trends 2005 - 2013



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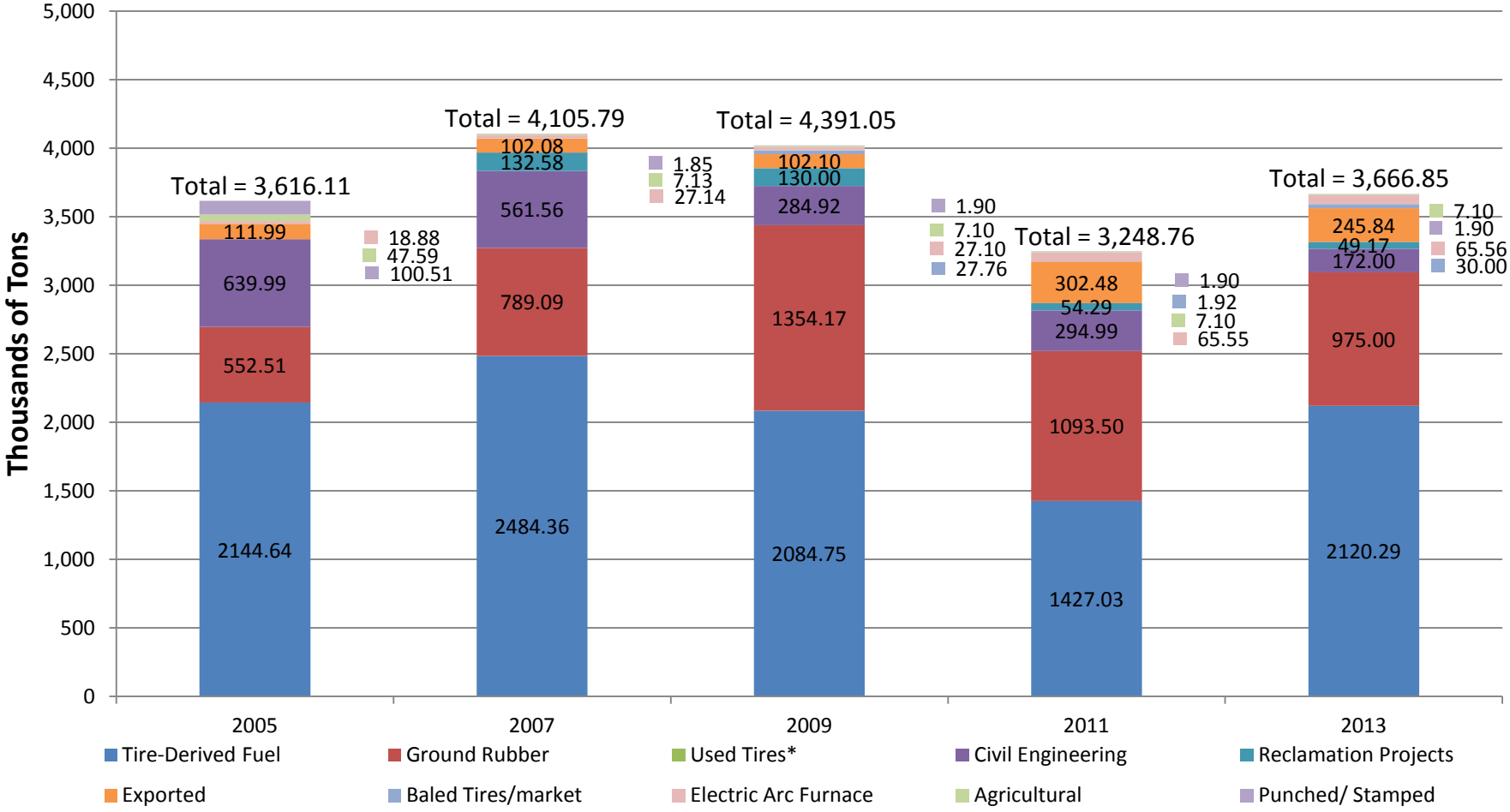
U.S. Scrap Tire Market Trends 2005 – 2013



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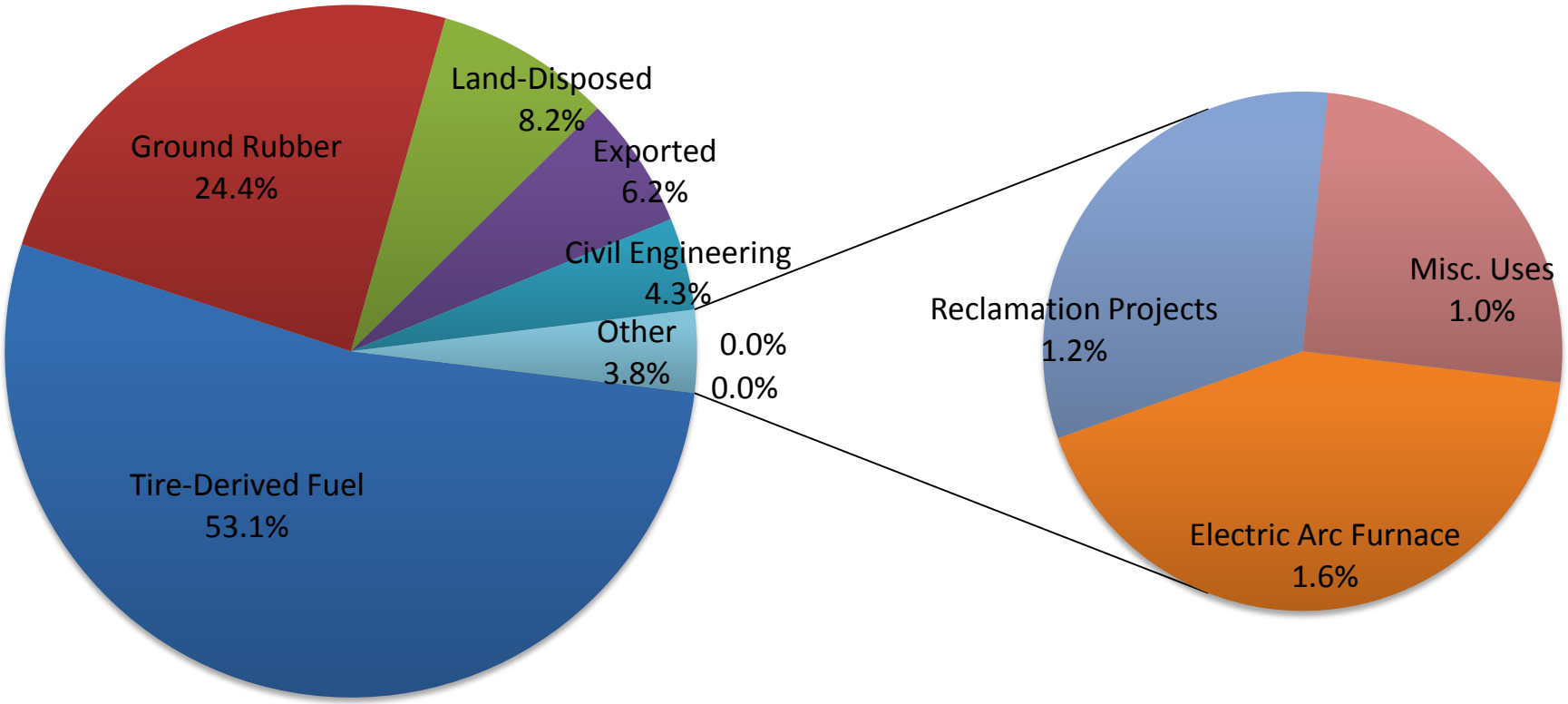
U.S. Scrap Tire Disposition 2013

(percent of total tons generated annually)



Numbers may not add due to rounding.

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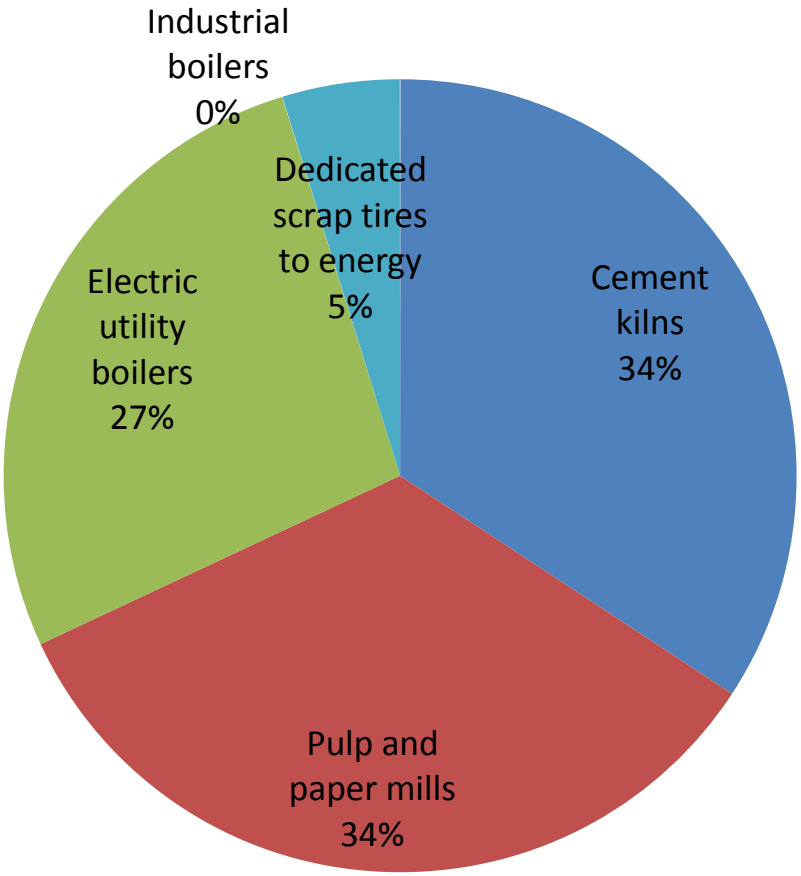
U.S. Tire-Derived Fuel Markets 2013



Did you know?

Total scrap tires diverted to TDF market: 2,120,300 tons or almost 130 million tires

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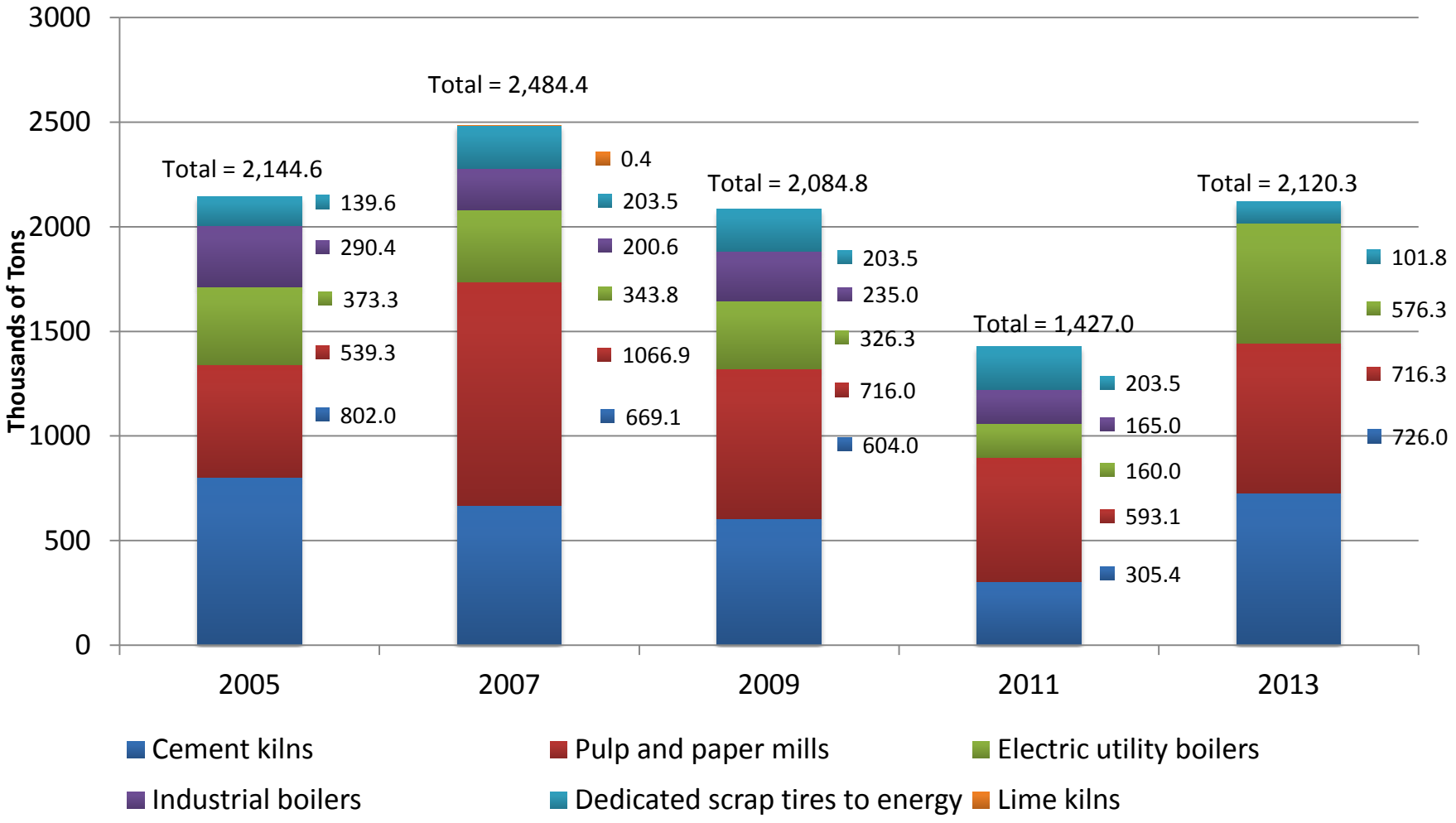
U.S. Tire-Derived Fuel Market Trends 2005 – 2013



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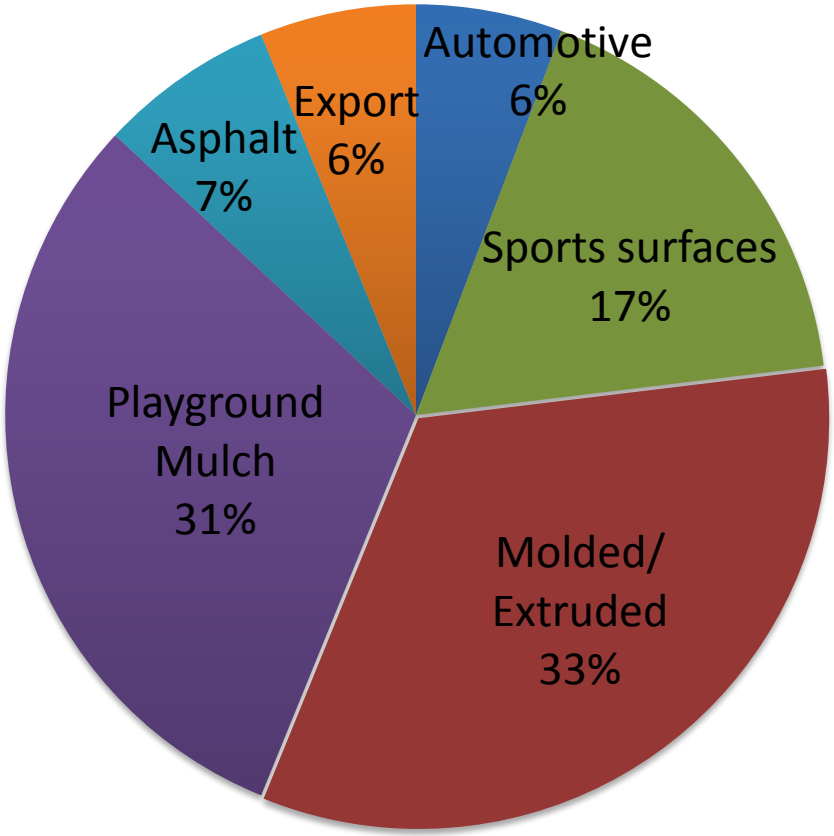
U.S. Ground Rubber Markets 2013

(percent of total pounds of ground rubber consumed in market)



Did you know?

Total tire rubber consumed in ground rubber markets:
about 1,300,000,000 pounds

Total scrap tires diverted to these markets:
About 975,000 tons or almost 60 million tires

Please note: Ground rubber market distribution data are based on ground rubber consumed in end-use markets, not whole tires entering these market streams. The data represented in RMA U.S. scrap tire market summaries refer to the weight of whole tires diverted to all scrap tire markets, including ground rubber, whereas this chart refers to the weight of processed ground rubber, with wire, fluff and agglomerated rubber removed that is consumed in ground rubber end-use markets.

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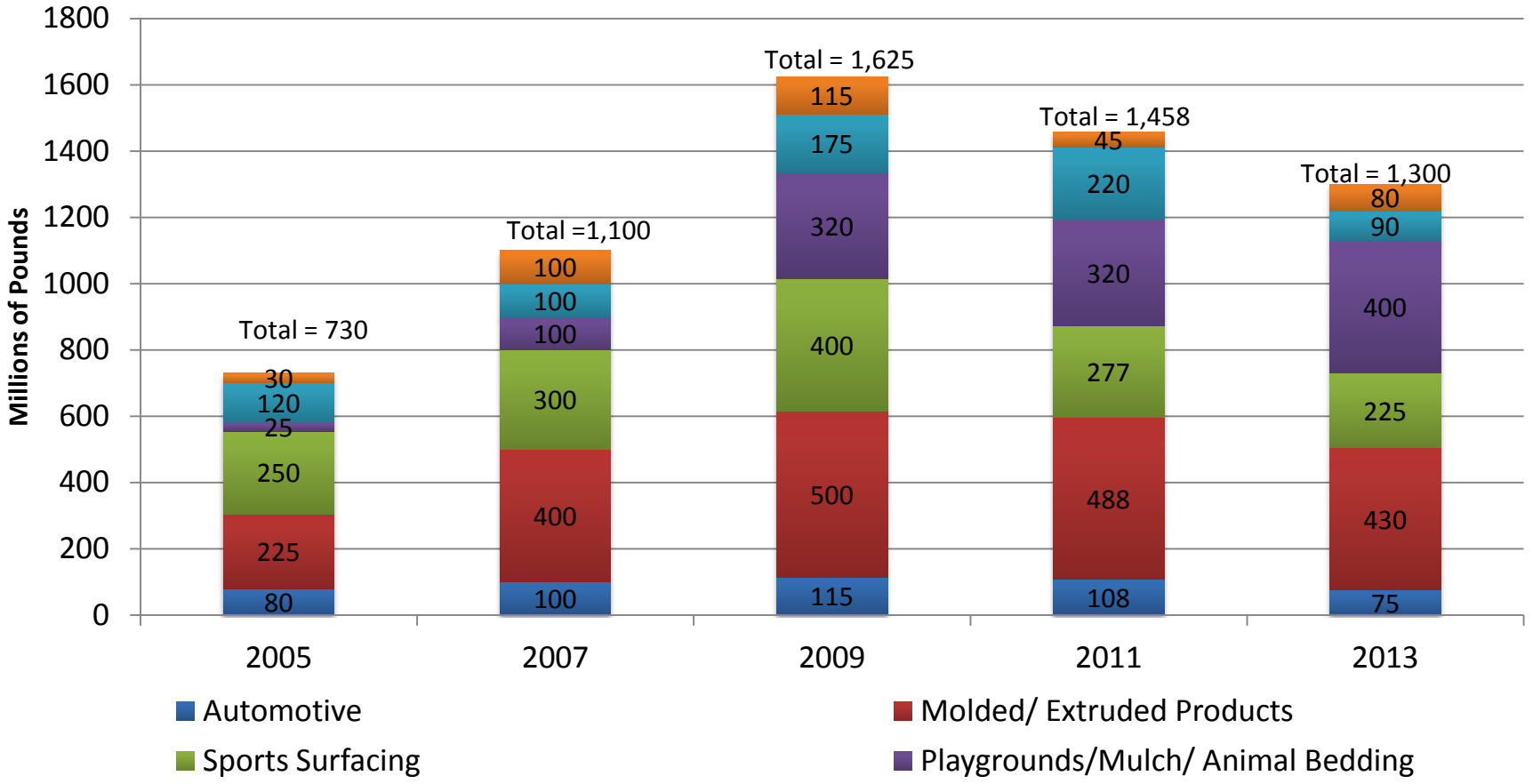
U.S. Ground Rubber Market Distribution 2005 - 2013



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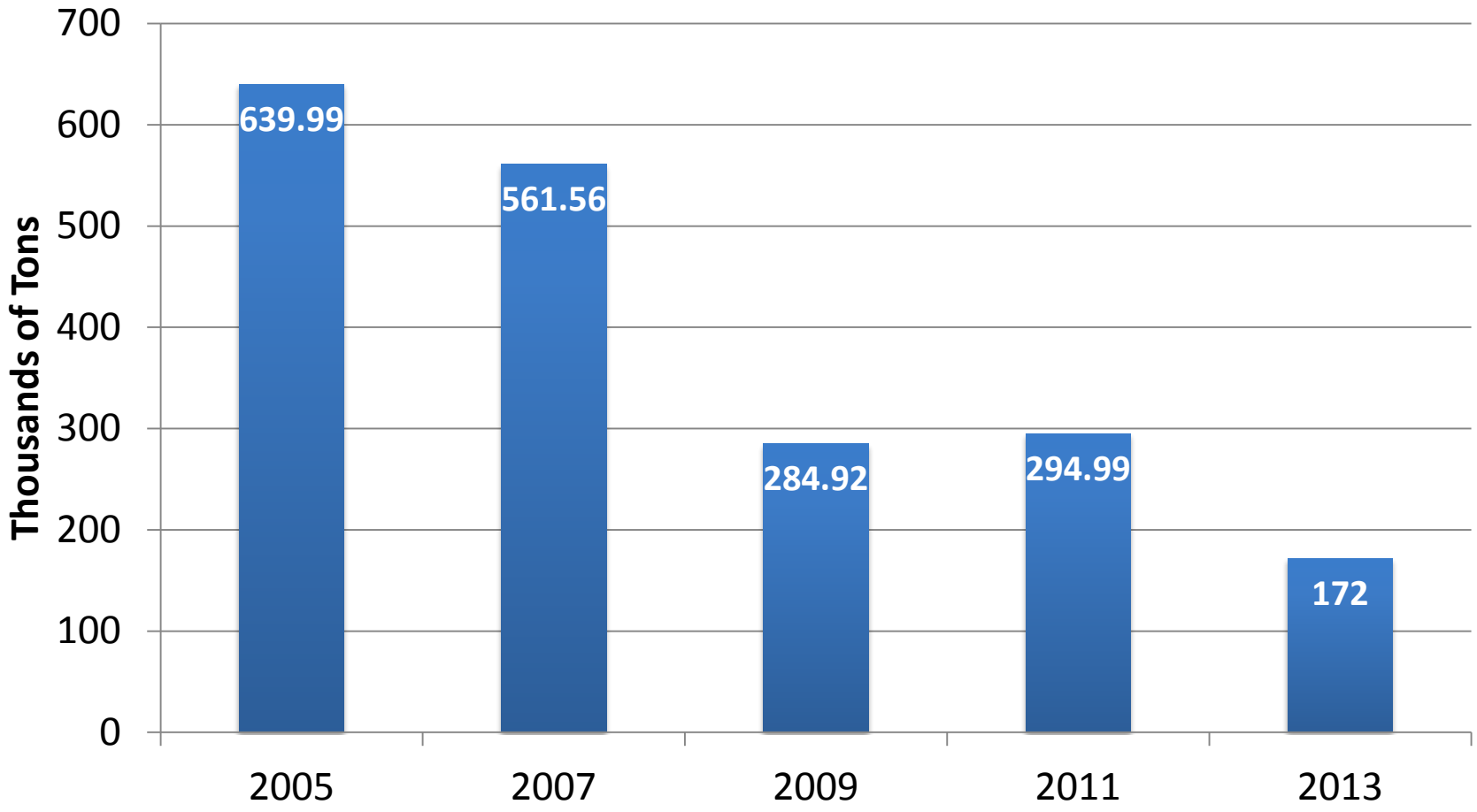
U.S. Civil Engineering Markets 2005 - 2013



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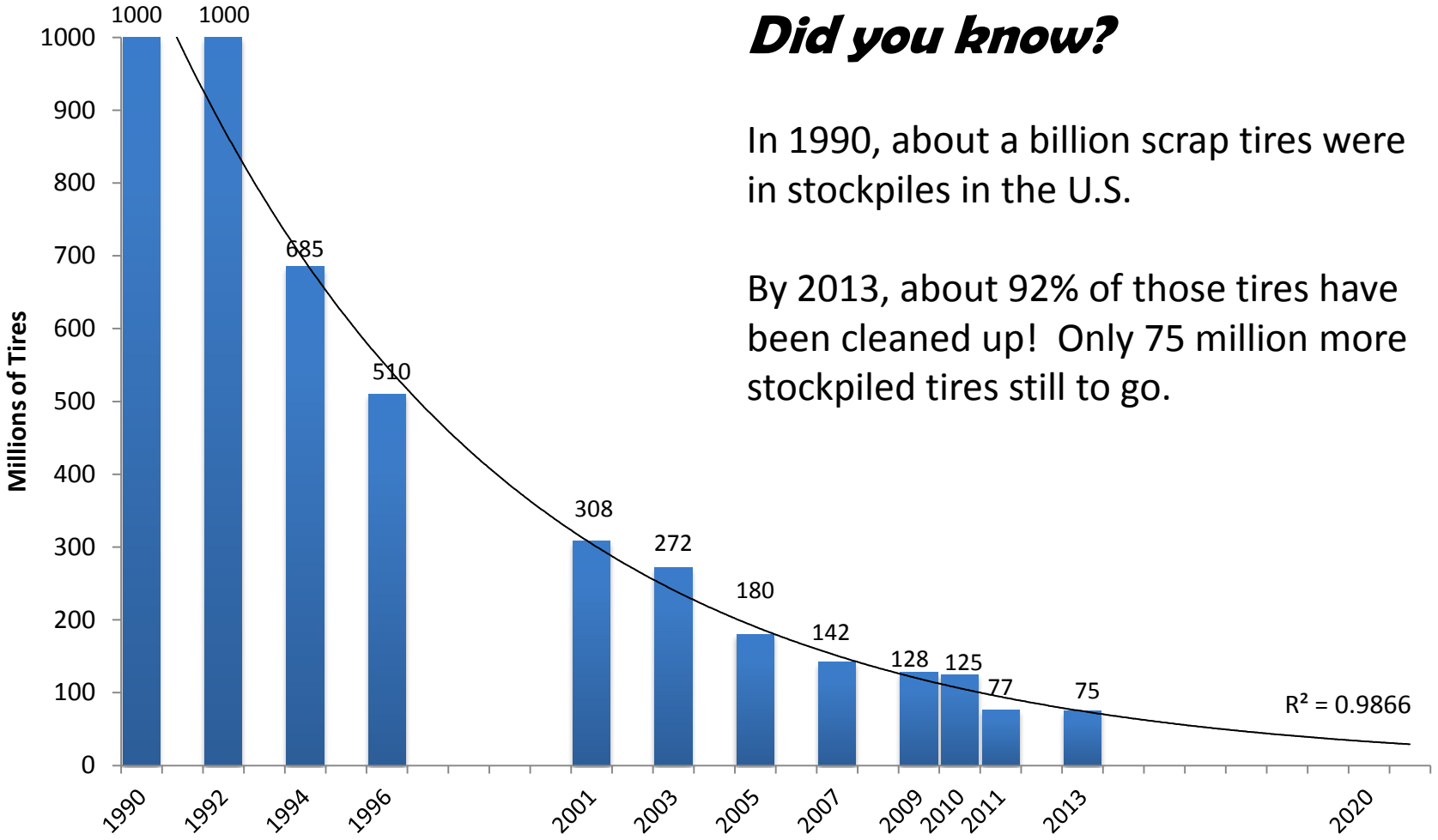
U.S. Stockpiled Scrap Tires 1990 - 2013



Did you know?

In 1990, about a billion scrap tires were in stockpiles in the U.S.

By 2013, about 92% of those tires have been cleaned up! Only 75 million more stockpiled tires still to go.

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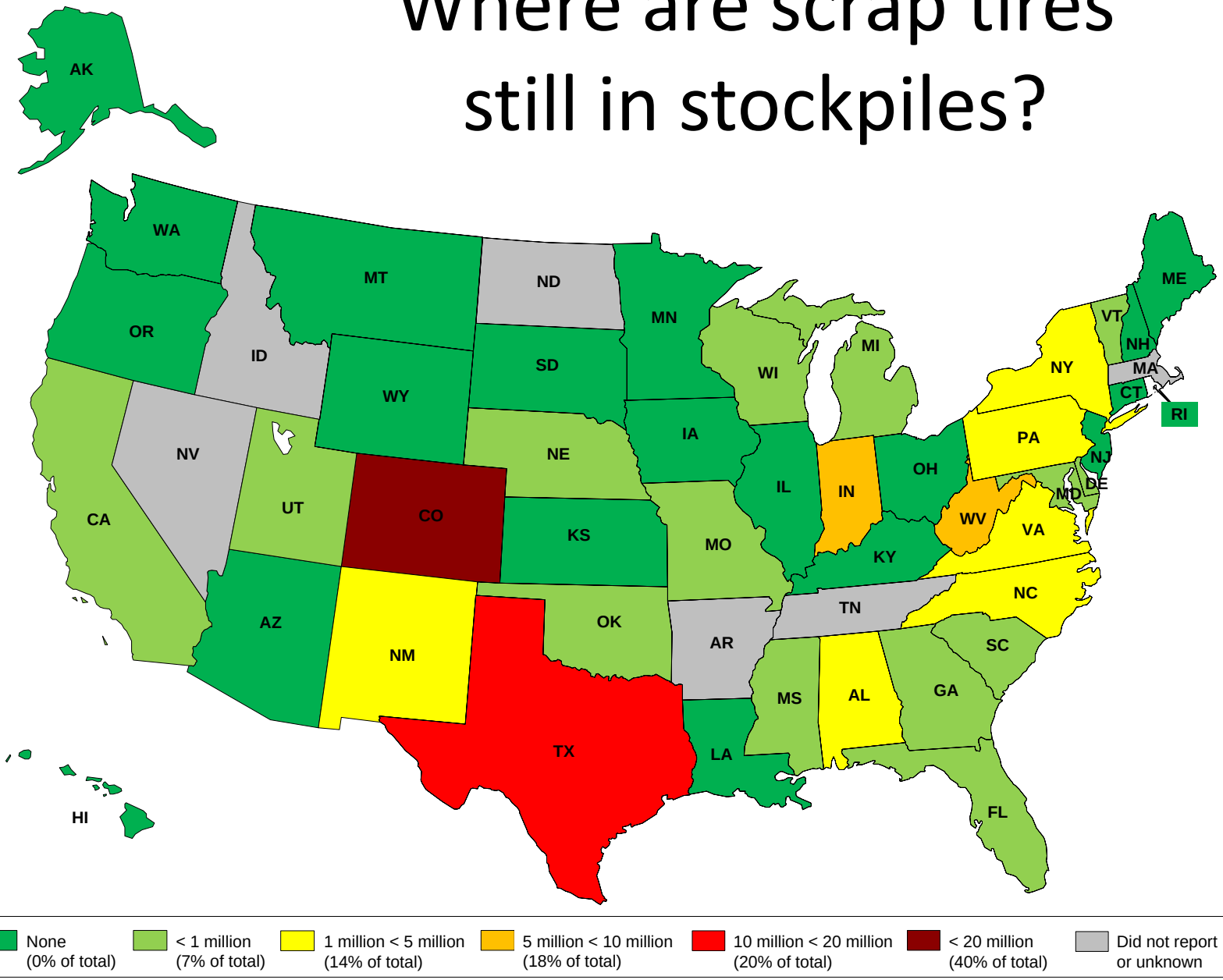
Where are scrap tires still in stockpiles?



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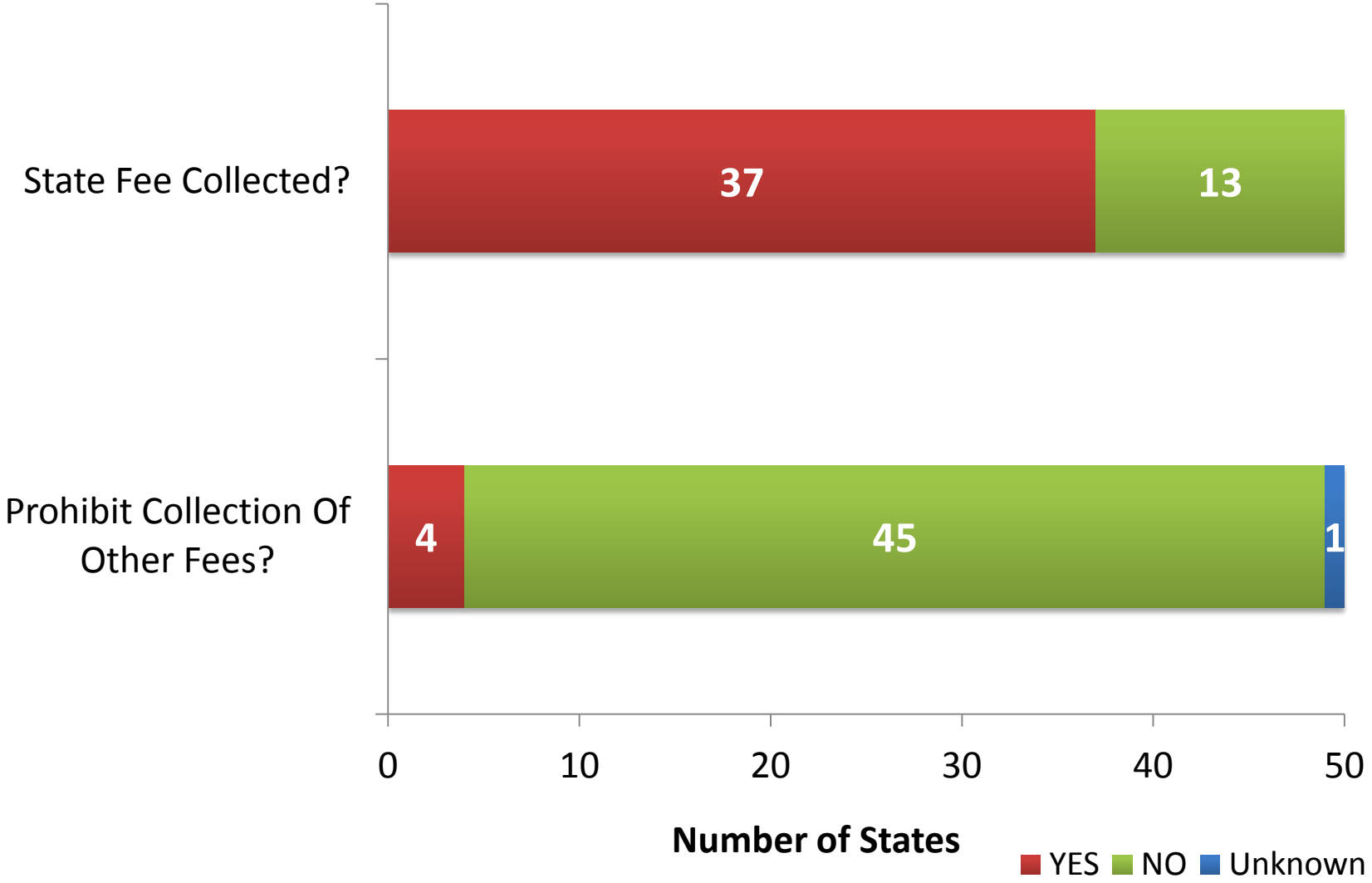
Overview of Current State Programs



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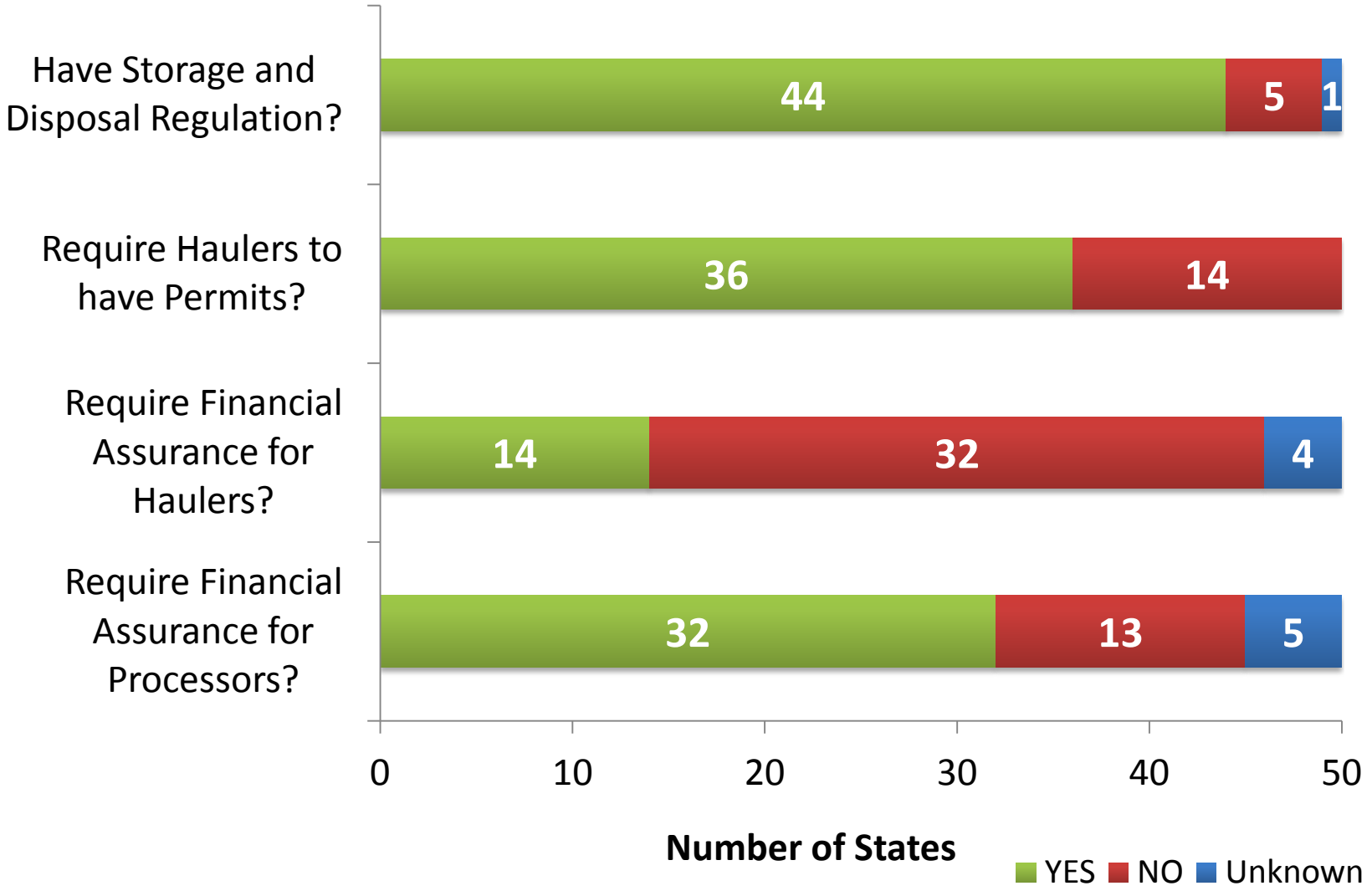

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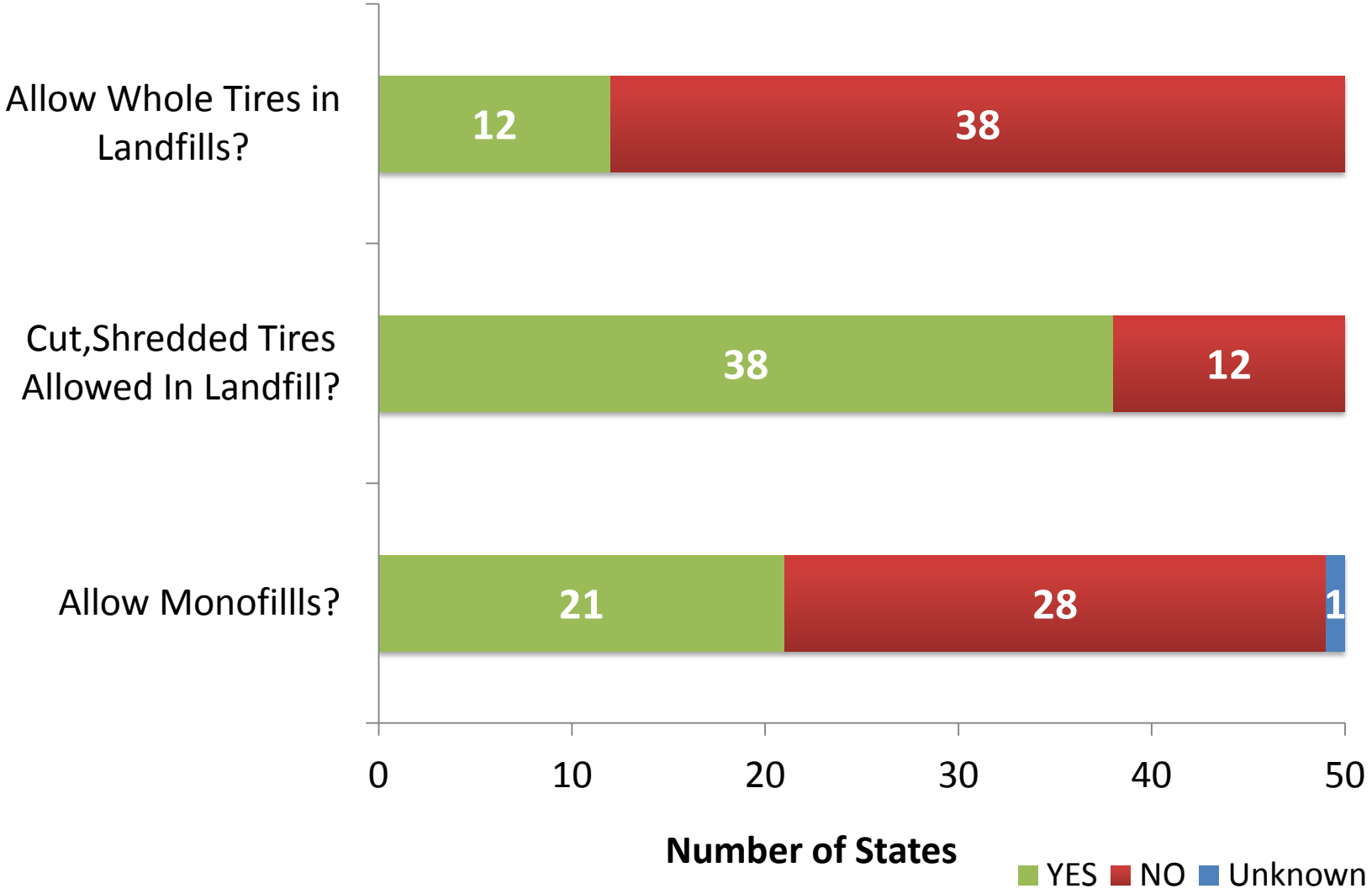

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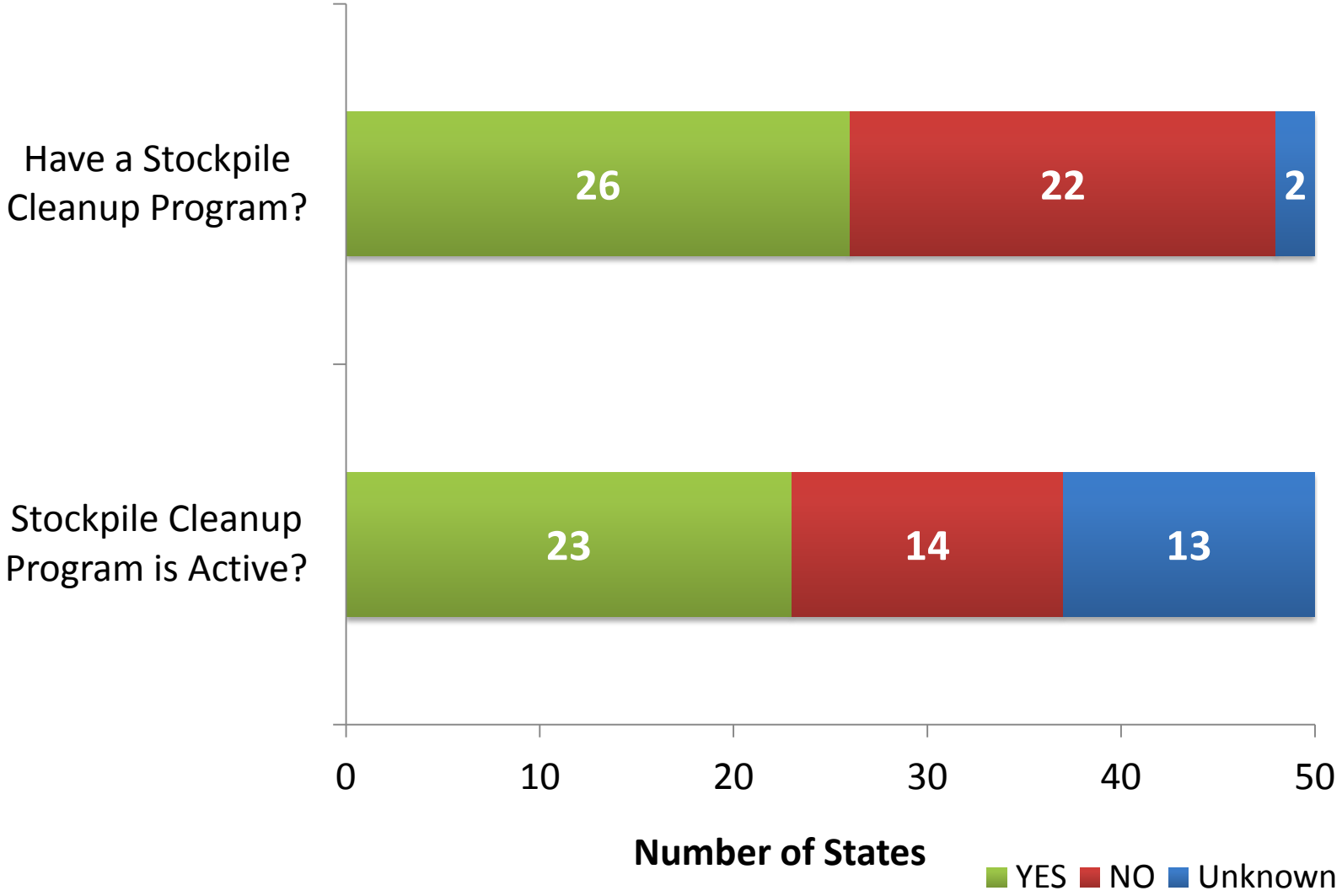

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About the Rubber Manufacturers Association

RMA is the national trade association representing tire manufacturers that make tires in the United States. RMA's scrap tire management efforts are a reflection of the tire industry's commitment to the concept of shared responsibility for its products when not suitable for use on vehicles.

RMA began its scrap tire program in 1990 under the auspices of the Scrap Tire Management Council. RMA works with all stakeholders, including states, U.S. EPA and the industry to develop markets, reduce scrap tire stockpiles and implement state regulations that that foster sustainable scrap tire markets. RMA supports all scrap tire markets that are environmentally sound and economically feasible.

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