USTMA's 14th Scrap Tire Management Report highlights the need for continued investment in end-use markets

From: Sean R. Moore <smoore@ustires.org>
Sent: Tuesday, October 27, 2020 1:08 PM
To: Governor Lamont <Governor.Lamont@ct.gov>
Cc: Mounds, Paul <Paul.Mounds@ct.gov>
Subject: USTMA's 14th Scrap Tire Management Report highlights the need for continued investment in end-use markets

Dear Governor Lamont,

I am writing to share the [14th Scrap Tire Management Report](https://www.ntra.com/USTMA), which was recently released by the U.S. Tire Manufacturers Association (USTMA). The report highlights the fact that while tires remain one of the most recycled products in the United States, end-use markets are not keeping pace with the annual generation of scrap tires. The report also underscores the critical role that state scrap tire programs play in advancing scrap tire recycling. I hope you will take a moment to read the important findings on [USTMA's new sustainability information hub](https://www.ntra.com/USTMA) that highlight the tire industry’s progress and commitment to sustainability, including tire safety, environmental stewardship, and the industry’s economic impact.

**Report highlights**

Reaching the goal of recycling 100% of scrap tires will require immediate action and strategic investments to grow new and existing end-use markets. Key takeaways include:

- The number of scrap tires generated in 2019 grew by almost 7% compared to 2017, while the total number of scrap tires recycled or reclaimed has not significantly changed since 2015.
- In 2013, when scrap tire recycling peaked, 96% of scrap tires entered end-use markets. In 2019, however, only 76% of scrap tires were recycled.
- 56 million scrap tires remain in stockpiles — existing mostly in eight states. However, with one exception, each of these states has taken the crucial step of developing active stockpile cleanup programs.

**Growing new and existing markets for scrap tires**

We urge state and federal officials, recyclers, and environmental groups to assist in promoting and advancing sustainable and circular markets for scrap tires:

- State and federal policies should encourage the growth of end-use markets, including investments in sustainable, circular markets for scrap tires such as use in civil engineering and infrastructure technologies including rubber-modified asphalt and stormwater infiltration galleries.
- New public and private sector investments are needed to research the lifecycle impacts of new and existing scrap tire markets, create innovation challenges to develop new markets, and establish a national portal for states to share data.

**The critical role of state scrap tire programs and funding**
The report findings underscore the **critical role of state scrap tire programs** and the need to ensure that funds collected to manage scrap tires are used for their intended purpose: to grow scrap tire end-use markets, clean up piles and enforce state laws to prevent human health and environmental concerns associated with illegal or abandoned scrap tire piles.

**Illegal dumping and unmanaged stockpiles pose significant risks. Scrap tires that have been illegally dumped or are contained in abandoned piles pose fire and disease hazards.** Fires that ignite from scrap tire piles can be devastating, are difficult to extinguish and pose air pollution concerns. Additionally, scrap tire piles collect water when it rains, creating breeding grounds for mosquitos that can spread diseases such as Lyme disease and the Zika virus. A reduction in funding for state scrap tire programs has the potential to turn back thirty years of waste management success, creating the opportunity for new scrap tire piles and preventable risk to public health and the environment.

Given robust markets for scrap tires are an essential component of effective state scrap tire programs, we respectfully request your help in protecting the progress made so far by ensuring that scrap tire funds are devoted to scrap tire management and are not reduced or eliminated.

It took three decades to successfully eliminate 94% of the 1 billion scrap tires stockpiled around the country, and we are committed to getting to 100%. Thank you for your support. Please feel free to contact me with any questions.

Sincerely,

**Sean R. Moore**  
Director, Government Relations  
**O:** +1.202.682.4861  
**M:** +1.301.922.5163  
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@USTires • USTires.org
2019 U.S. Scrap Tire Management Summary
About the U.S. Tire Manufacturers Association

The U.S. Tire Manufacturers Association (USTMA) is the national trade association for tire manufacturers that produce tires in the U.S. USTMA members operate manufacturing facilities in 17 states, employ nearly 100,000 workers and generate annual sales of over $27 billion. USTMA members are committed to sustainability throughout the lifecycle of a tire, from development through end of life.

USTMA began its scrap tire program in 1990 under the auspices of the Scrap Tire Management Council. USTMA 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. USTMA supports sustainable and circular scrap tire markets.
USTMA Sustainability Vision

- USTMA members share a common vision on sustainability which includes: Promoting tire safety; advancing worker safety; reducing greenhouse gas emissions throughout a tire’s useful life; improving environmental footprints over time; minimizing the health, and environmental impacts of tire materials; and ensuring scrap tires enter sustainable markets.

- Specifically, **USTMA members have the goal that all scrap tires enter sustainable end use markets.**

- USTMA’s 2019 Scrap Tire Management Summary report measures our progress towards meeting our sustainability vision.
# U.S. Scrap Tire Generation 2019

<table>
<thead>
<tr>
<th>Tire Class</th>
<th>Millions of Tires</th>
<th>Market %</th>
<th>Average Weight (lbs)</th>
<th>Weight (thousands of tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Duty Tires</td>
<td>268.2</td>
<td>88.4%</td>
<td>22.5</td>
<td>3017.5</td>
</tr>
<tr>
<td>Passenger tire replacements&lt;sup&gt;1&lt;/sup&gt;</td>
<td>222.6</td>
<td>73.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light truck tire replacements&lt;sup&gt;1&lt;/sup&gt;</td>
<td>32.5</td>
<td>10.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tires from scrapped vehicles&lt;sup&gt;2&lt;/sup&gt;</td>
<td>13.1</td>
<td>4.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Tires</td>
<td>35.3</td>
<td>11.6%</td>
<td>120.0</td>
<td>2117.4</td>
</tr>
<tr>
<td>Medium, wide base, heavy truck replacement tires&lt;sup&gt;1&lt;/sup&gt;</td>
<td>18.9</td>
<td>6.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tires from scrapped trucks and buses&lt;sup&gt;2&lt;/sup&gt;</td>
<td>16.36</td>
<td>5.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total tires hauled</td>
<td>303.5</td>
<td>100.0%</td>
<td>33.8</td>
<td>5134.9</td>
</tr>
<tr>
<td>Used tires culled</td>
<td>40.1</td>
<td>13.2%</td>
<td>33.5</td>
<td>670.8</td>
</tr>
<tr>
<td>Net scrap tires</td>
<td>263.4</td>
<td></td>
<td></td>
<td>4464.0</td>
</tr>
</tbody>
</table>


<sup>2</sup> Earlier USTMA Scrap Tire Management Summary reports used Ward’s Motor Vehicle Facts and Figures, scrapped vehicle data to calculate the number of scrapped vehicles. Ward’s discontinued publishing this data in 2014 creating the need for a new approach. For the 2019 Scrap Tire Management Summary report, USTMA utilized the ratio of vehicles scrapped to vehicles sold for years 2000-2014 and applied that ratio to 2019 vehicle sales to produce the number of scrapped vehicles. USTMA estimated the split between cars and trucks/buses based on the average of split from Wards for 2002-2012. This data assumes 2 tires scrapped from light duty vehicles and 2.5 tires scrapped from trucks and buses. Source of vehicle scrapped data, US DOT Bureau to Automotive Statistics, Table 4-58: Motor Vehicles Scrapped (May 21, 2017) https://www.bts.gov/archive/publications/national_transportation_statistics/table_04_58. Source of vehicle retail sales in the United States from 1978 to 2019 data, Wards Motor Vehicle Facts and Figures.
# U.S. Scrap Tire Disposition 2019

<table>
<thead>
<tr>
<th>Market or Disposition</th>
<th>Thousands of Tons</th>
<th>Millions of Tires</th>
<th>% change 2017-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tire-Derived Fuel</td>
<td>1646.83</td>
<td>100.48</td>
<td>-5.2%</td>
</tr>
<tr>
<td>Cement Kilns</td>
<td>816.47</td>
<td>49.82</td>
<td>1.3%</td>
</tr>
<tr>
<td>Pulp &amp; Paper</td>
<td>481.68</td>
<td>29.39</td>
<td>-4.3%</td>
</tr>
<tr>
<td>Industrial Boilers</td>
<td>348.68</td>
<td>21.27</td>
<td>-18.4%</td>
</tr>
<tr>
<td>Ground Rubber</td>
<td>1089.00</td>
<td>66.45</td>
<td>7.5%</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>226.00</td>
<td>13.79</td>
<td>-28.5%</td>
</tr>
<tr>
<td>Exported</td>
<td>138.00</td>
<td>8.42</td>
<td>25.6%</td>
</tr>
<tr>
<td>Electric Arc Furnace</td>
<td>40.00</td>
<td>2.44</td>
<td>2.2%</td>
</tr>
<tr>
<td>Reclamation Projects</td>
<td>61.30</td>
<td>3.74</td>
<td>39.3%</td>
</tr>
<tr>
<td>Agricultural</td>
<td>10.00</td>
<td>0.61</td>
<td>40.8%</td>
</tr>
<tr>
<td>Baled Tires/market</td>
<td>10.00</td>
<td>0.61</td>
<td>-31.5%</td>
</tr>
<tr>
<td>Punched/ Stamped</td>
<td>20.00</td>
<td>1.22</td>
<td>-11.1%</td>
</tr>
<tr>
<td>Other</td>
<td>131.88</td>
<td>6.62</td>
<td>14.3%</td>
</tr>
<tr>
<td>Total to Market</td>
<td>3373.01</td>
<td>205.81</td>
<td>-1.1%</td>
</tr>
<tr>
<td>Generated</td>
<td>4464.00</td>
<td>272.37</td>
<td>6.6%</td>
</tr>
<tr>
<td>% to Market/Utilized</td>
<td>75.6%</td>
<td>75.6%</td>
<td>N/A</td>
</tr>
<tr>
<td>Land Disposed</td>
<td>680.00</td>
<td>41.49</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

% Managed (includes Markets, Baled and Landfill) 90.8% 90.8% N/A

<table>
<thead>
<tr>
<th>Market or Disposition (1000s of tons)</th>
<th>2011</th>
<th>2013</th>
<th>2015</th>
<th>2017</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tire Derived Fuel</td>
<td>1427.03</td>
<td>2120.29</td>
<td>1922.67</td>
<td>1736.34</td>
<td>1646.83</td>
</tr>
<tr>
<td>Ground Rubber</td>
<td>1093.50</td>
<td>975.00</td>
<td>1020.75</td>
<td>1013.332</td>
<td>1089</td>
</tr>
<tr>
<td>Land Disposed</td>
<td>491.65</td>
<td>327.78</td>
<td>451.40</td>
<td>646.78</td>
<td>680</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>294.99</td>
<td>172.00</td>
<td>274.92</td>
<td>315.98</td>
<td>226.00</td>
</tr>
<tr>
<td>Exported</td>
<td>302.48</td>
<td>245.84</td>
<td>102.07</td>
<td>109.83</td>
<td>138.00</td>
</tr>
<tr>
<td>Reclamation Projects</td>
<td>54.29</td>
<td>49.17</td>
<td>52.54</td>
<td>44</td>
<td>40.00</td>
</tr>
<tr>
<td>Electric Arc Furnace</td>
<td>65.55</td>
<td>65.56</td>
<td>26.00</td>
<td>39.15</td>
<td>61.30</td>
</tr>
<tr>
<td>Baled Tires/market</td>
<td>1.92</td>
<td>30.00</td>
<td>9.19</td>
<td>14.59</td>
<td>10.00</td>
</tr>
<tr>
<td>Punched/ Stamped</td>
<td>1.90</td>
<td>1.90</td>
<td>41.20</td>
<td>22.50</td>
<td>10</td>
</tr>
<tr>
<td>Agricultural</td>
<td>7.10</td>
<td>7.10</td>
<td>7.10</td>
<td>7.10</td>
<td>20</td>
</tr>
<tr>
<td>Baled/no market</td>
<td>32.78</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Used Tires¹</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td>94.86</td>
<td>108.45</td>
</tr>
<tr>
<td>Total to Market</td>
<td>3083.76</td>
<td>3666.85</td>
<td>3551.30</td>
<td>3411.26</td>
<td>3373.01</td>
</tr>
<tr>
<td>Generated²</td>
<td>3781.00</td>
<td>3824.26</td>
<td>4038.80</td>
<td>4189.19</td>
<td>4464.00</td>
</tr>
<tr>
<td>% to Market/Utilized</td>
<td>81.6%</td>
<td>95.9%</td>
<td>87.9%</td>
<td>81.4%</td>
<td>75.6%</td>
</tr>
<tr>
<td>% Managed (incl. baled and landfilled tires)</td>
<td>95.4%</td>
<td>104.5%</td>
<td>99.1%</td>
<td>96.9%</td>
<td>90.8%</td>
</tr>
</tbody>
</table>

¹The U.S. Scrap Tire Management Summary began tracking tires culled from scrap tire collection entering domestic passenger and light truck used tire markets in 2009 by including used tires as a market for scrap tires. The U.S. Scrap Tire Management Summary now subtracts used tires from the total tires hauled to calculate total net scrap tire generation, a practice that began with the 2011 edition.

²In 2005 and 2007, annual scrap tire generation estimates were based on state-provided data. Now, these estimates are based on a calculation of replacement market tires sold and vehicles scrapped, a practice that began with the 2009 edition.
U.S. Scrap Tire Market Trends 2011 - 2019

- **2011**: 32,000.0 Thousands of Tons, 81.6% Utilized, Market %
- **2013**: 37,000.0 Thousands of Tons, 95.9% Utilized, Market %
- **2015**: 35,000.0 Thousands of Tons, 87.9% Utilized, Market %
- **2017**: 35,000.0 Thousands of Tons, 81.4% Utilized, Market %
- **2019**: 39,000.0 Thousands of Tons, 75.8% Utilized, Market %

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U.S. Scrap Tire Disposition 2019

Total annual generation = 4,464 thousand tons

- Tire-Derived Fuel: 36.8%
- Ground Rubber: 24.4%
- Civil Engineering: 5.1%
- Land Disposed: 14.3%
- Reclamation Projects: 1%
- Other: 9.7%
- Electric Arc Furnace: 1.4%
- Exported: 3.1%
- Misc. uses: 4.2%
- Land Disposed: 14.3%

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U.S. Scrap Tire Market Trends 2011 – 2019

*The USTMA Scrap Tire Management Summary report began tracking tires culled from scrap tire collection entering domestic passenger and light truck used tire markets in 2009 by including used tires as a market for scrap tires. The USTMA Scrap Tire Management Summary report now subtracts used tires from the total tires hauled to calculate total net scrap tire generation, a practice that began with the 2011 edition.
U.S. Tire Derived Fuel Markets 2019

**Did you know?**

Total scrap tires diverted to TDF market:

1,646,830 tons or over 100 million tires

![Graph showing market trends for various industries using tire-derived fuel from 2011 to 2019.](image)

- **Total = 2085** in 2011
- **Total = 1922** in 2013
- **Total = 1736** in 2015
- **Total = 1647** in 2017
- **Total = 1736** in 2019

- **Cement kilns**
- **Pulp and paper mills**
- **Electric utility boilers**
- **Industrial boilers**
- **Dedicated scrap tires to energy**
- **Lime kilns**
U.S. Ground Rubber Markets 2019
(percent of total pounds of scrap tires consumed in market)

*Did you know?*

Total scrap tires diverted to ground rubber markets:
*About 1,089,000 tons or over 66 million tires*

- **Mulch** 23%
- **Molded & Extruded** 35%
- **Sports surfaces** 21%
- **Asphalt** 17%
- **Automotive** 4%

Sports surfaces ▪ Playgrounds/ Mulch/ Animal Bedding ▪ Molded/Extruded Products ▪ Automotive ▪ Asphalt

This value represents the weight of processed ground rubber (with wire, fluff and agglomerated rubber removed) that is consumed in ground rubber end-use markets. In contrast, the data represented in other areas of this report refer to the weight of whole tires diverted to all scrap tire markets, including ground rubber.
U.S. Ground Rubber Market Distribution 2011 - 2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Sports Surfacing</th>
<th>Playgrounds/Mulch</th>
<th>Molded/Extruded Products</th>
<th>Export</th>
<th>Automotive</th>
<th>Asphalt</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>208</td>
<td>169</td>
<td>240</td>
<td>81</td>
<td>34</td>
<td>165</td>
</tr>
<tr>
<td>2013</td>
<td>300</td>
<td>153</td>
<td>325</td>
<td>68</td>
<td>56</td>
<td>68</td>
</tr>
<tr>
<td>2015</td>
<td>255</td>
<td>225</td>
<td>357</td>
<td>20</td>
<td>20</td>
<td>153</td>
</tr>
<tr>
<td>2017</td>
<td>234</td>
<td>243</td>
<td>386</td>
<td>32</td>
<td>32</td>
<td>119</td>
</tr>
<tr>
<td>2019</td>
<td>230</td>
<td>253</td>
<td>386</td>
<td>40</td>
<td>40</td>
<td>180</td>
</tr>
</tbody>
</table>

Total 2011 = 1093  Total 2013 = 975  Total 2015 = 1021  Total 2017 = 1013  Total 2019 = 1089
U.S. Civil Engineering Markets 2011 - 2019

Scrap Tires Diverted (thousands of tons)

- 2011: 295
- 2013: 172
- 2015: 275
- 2017: 316
- 2019: 226
U.S. Stockpiled Scrap Tires 1990 - 2019

Did you know?

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

By 2019, over 94% of those tires have been cleaned up! Only 56 million more stockpiled tires still to go.
Stockpiled Tires Remaining in the U.S.

CO: Includes 50% of its monofill inventory
Overview of Current State Programs

State Fee Collected? [35 YES, 15 NO]

Prohibit Collection of Other Fees? [4 YES, 46 NO]
Overview of Current State Programs

- Have Storage and Disposal Regulation?
  - Yes: 44
  - No: 6

- Require Financial Assurance for Processors?
  - Yes: 36
  - No: 14

- Require Financial Assurance for Haulers?
  - Yes: 16
  - No: 34

- Require Haulers to have Permits?
  - Yes: 36
  - No: 14
Overview of Current State Programs

- **Allow Whole Tires in Landfills?**
  - Yes: 11
  - No: 39

- **Allow Cut/Shredded Tires in Landfill?**
  - Yes: 37
  - No: 13

- **Allow Monofills?**
  - Yes: 24
  - No: 26
Overview of Current State Programs

Have a Stockpile Cleanup Program?
- YES: 30
- NO: 20

Stockpile Cleanup Program is Active?
- YES: 22
- NO: 28