## L'Anse Waste Diversion and Cost Savings Initiative

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#### The Challenge

CN partnered with an alternative energy group to utilize the scrap ties as fuel for the manufacturing of cement wallboard. Scrap ties are transported by rail to L'Anse, MI where they are shredded and blended into a fuel. When loading and unloading scrap railroad ties from rail cars for use as alternative energy, a waste debris is generated. This debris consists of broken ties, dirt, metals, and other materials that cannot be utilized in the alternative energy program. CN was sending 10,854 tons of debris to landfill. These materials represented 25% of the total landfill waste for a company seeking to reduce its carbon footprint.

### **Better Visibility**

Utilizing data from IS2, Heritage discovered the large volume of landfill debris. Upon further investigation, it was realized that not only was the customer landfilling large volumes of material, they were also doing it in a very inefficient manner. CN's current method for transportation of the debris was 20yd roll-offs that could only average 7 tons of material per load. This resulted in very high aggregate transportation costs.

#### **Better Resources**

Heritage Program Managers visited with the site as well as new and existing suppliers to devise a plan to not only reduce landfill but also to reduce costs. They achieved this by changing the mode of transportation of the material and partnering with the existing alternative energy company to introduce additional technology to recover more of the landfilled materials

#### **Proven Impact**

Heritage efforts resulted in an estimated 1800 tons (20%) diverted from the landfill debris through material screening. By increasing efficiency of load weights through bigger containers, CN realized an 18% cost savings.

# PROJECT IMPACT

In 2015 we helped CANADIAN NATIONAL RAILROAD

reduce their waste to landfill by...

1,800

Tons diverted through material screening

20%

Reduction in total landfill volume

18%

Savings through transportation efficiencies

11 6

- Reid Bodley, Manager – Waste and Resource Conservation, CN