ArcelorMittal: Biodiesel

by Mike Andriopoulos, Zach Zebula, Rob Gowisnock, Dave Hendrix
Customer Needs

- Recycle the waste products of ArcelorMittal
- Reduce the waste footprint of the company
- Create an environmentally friendly solution that will benefit the company
- Wastecare Corporation Dump feed shredder
- Shreds plastics and woods
KDV System

- Smallest system creates about 28,500 gallons/yr
  - Largest about 856,700 gallons/year
- About 25 euro/cents per liter = $1.01 per gallon
  - Compared to average diesel = $3.08 per gallon

*US Energy Information Administration data 4/13/15
Cost Analysis

- Saving $2.07/gallon
- 100 trucks ~ 40 gallons per day
  - $8,280 saved per day
- Avg. train
  - 436 ton-miles/gallon
  - Can move 500 miles/gallon per ton of cargo
  - Typical train hauls 3000 tons
    → 3200 gallons of diesel
  - Savings of $6,624 on diesel per train