

# Energy Management & Conservation Solution



## Features and Benefits



### Save Millions on Fuel Expenditures

- Use data and analytics to reduce fuel consumption
- Evaluate effectiveness of fuel saving technologies such as rail lubrication
- Evaluate effectiveness of locomotive energy management systems such as TO
- Quantify the efficiency of specific locomotive models
- Optimize horsepower per trailing ton and distributed power
- Determine the impact of different train builds
- Determine when, where and how much to refuel (minimize fuel cost)
- Inform train handling strategies
- Design and assess locomotive engineer incentive programs
- Achieve ESG goals and Science Based Targets
- Work effectively with testing organizations such as TTC and SwRI
- Leverage experts who have run fuel management and conservation efforts at a Class I railroad



## Solution Components



### Data Curated for Fuel Analysis

- Integrated data from varied data sources
- An “energy management data repository” supporting:
  - Reporting, dashboards and visualization
  - Ad hoc analyses
  - Advanced analytics and modeling



### Advisory Services

- Data collection and integration strategy
- Controlled testing design and evaluation methodology
- Subject matter expertise to advise on issues
- Application development
- Advanced analytics and machine learning