

2011 TEEA Winner Technical / Technology, Union Pacific Railroad

Narrator:

Innovation comes in many forms. And under the hood of these normal looking locomotives is a technology that's changed the way railroads think about short trips in urban areas.

Mike E. Iden, General Director of Car and Locomotive Engineering, Union Pacific Railroad:

We have three engines available so that we can run one engine up to about 600 horsepower, two engines up to about 1,300 horse power and then the third engine available if we need anywhere from 1,400 to 2,000 horse power.

Narrator:

The technology is called Genset. Union Pacific invested more than a million dollars to build the prototype in 2004. Now there are 98 of these customized locomotives in Houston and in the Dallas-Fort Worth metroplex.

Greg Workman, Vice-President Southern Region, Union Pacific Railroad:

We use them to deliver and pull cars to and from customer's industries. But we also use them in some of our smaller yard operations that handle a little bit less volumes.

Narrator:

Because mobile sources remain a large source of the emissions in these populated areas, the partnership between government and industry to cut where it can, is critical.

Mike Eastland, Executive Director, North Central Texas Council of Governments:

Technology is really the key to us finally getting to where we need to be. A good piece of diesel equipment will last 40 years, so to come back in and retrofit it and put a new engine in is critical.

Narrator:

Genset locomotives run on diesel but are only used to full power two percent of the time. That's resulted in emissions reductions of nearly 90 percent.

Mike E. Iden:

The benefits do start to stack up.

Greg Workman:

We're always looking for opportunities to be better neighbors and greener as one of those ways.