

## Re: World's First Fuel Cell–Powered Train Locomotive Slated for 2008

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**From:** Ian St. John ([istjohn\\_at\\_noemail.ca](mailto:istjohn_at_noemail.ca))

**Date:** 08/12/04

Date: Thu, 12 Aug 2004 05:08:11 -0400

Stephen Sprunk wrote:

> "Ian St. John" <[istjohn@noemail.ca](mailto:istjohn@noemail.ca)> wrote in message  
> news:y7nSc.21123\$Mq1.1082275@news20.bellglobal.com...  
>> Stephen Sprunk wrote:  
>>> Europe could use diesel today, but they don't because it costs more.  
>>  
>> Well the electicity prices are comparible to the U.S. while the cost  
>> of diesel and other fuels are highly taxed and cost much more (  
>> \$5/gallon or more). You have admitted that electricity is more  
>> expensive than diesel in the U.S. What makes you think that the  
>> costs favor electicity in Europe???  
>  
> European railroads pay taxes on diesel just like consumers do, so  
> that is part of the cost of the fuel. Over there, electricity costs  
> less to use per unit energy than diesel, no matter what speed. This  
> is very simple math.

Oops. You got me there. Must have been asleep. Yes. Diesel and liquid fuels are MORE expensive so electricity would be favored. A second drviign force for electrification that is not in the U.S.

>  
>> The main driving force behind electificaiton of the rails in Europe  
>> was the power to weight rations for high speed passenger traffic.  
>  
> The freight lines in Europe were electrified long before TGVs arrived  
> in 1981; it was motivated out of the economics of fuels, not out of  
> the power/weight ratio.

Possibly, but I can find no evidence that freight lines were electrified prior to the TGV program in the 1960s.

> Also, since TGVs *\_don't use freight tracks\_*,  
> why would they be electrified if it were only for TGV's benefit?

Now YOU must have dropped asleep. Go over that sentence. The TGV lines would

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be electified because it was the only way to get the power to weigth ratio necessary for high speed.

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