

## General approach

A relatively simple scenario analysis approach has been adopted in this analysis. This is appropriate given the nature of the assumptions made and the uncertainty over the final form that the ETS will take.

One simplification is that agriculture has not been explicitly incorporated into the analysis. The current ETS will include agricultural emissions from 2013. The profitability of agriculture is likely to be reduced as farmers are required to purchase carbon units to cover their emissions. Consequently, the cost of land for afforestation would likely be lower than that indicated by Figure 3. More comprehensive modelling is warranted once the ETS review is completed and it is confirmed that agriculture will remain in the ETS.

## References

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## Letters

# Thoughts on biofuel from a biofool

Sir

Since I own a truck that is fueled, in part, by wood, I enjoyed reading the February issue on "biofuels." Although my 1987 Dodge Dakota truck gets about 5.3 km per kg of dry wood, the engine has about 30% less power when running on woodgas. Surprisingly, the km per joule ratio for woodgas is roughly the same as with petrol. I purchased the truck from Wayne Keith who, in my opinion, is a leader in the development of wood-fueled trucks. Wayne recently used woodgas to drive across the USA (over 9,000 km round trip) and his 1991 Dodge truck came in second in a race of non-petrol vehicles ([www.ag.auburn.edu/agrn/bio-truck](http://www.ag.auburn.edu/agrn/bio-truck)). Photos of Wayne and one of his earlier trucks are at ([www.farmfoundation.org/news/articlefiles/950-waynekeithforweb.pdf](http://www.farmfoundation.org/news/articlefiles/950-waynekeithforweb.pdf)).

Currently, I can buy petrol for \$0.90 per litre compared to about \$1.6 per litre in NZ. I would think the higher price in NZ (and perhaps an even higher price in the future) would encourage some owners of old truck (ones that have a distributor) to install a wood gasifier. However, due mainly to inconvenience, many would rather buy blended petrol than save money by collecting and burning a renewable energy source. On the other hand, I have used firewood to heat my house for the past 3 decades and therefore I do not mind spending a little time each week processing wood into small blocks for the gasifier. Due to my interest in using wood as a transportation fuel, some now call me a "biofool."

Is woodgas a viable biofuel for NZ? To answer this

question, I applied David Painter's criteria to see if vehicles that run on woodgas might have promise in NZ. Wood is available, renewable and sustainable; the biogas can be used either alone or in combination with petrol; and the cost per km is less expensive than petrol. Unfortunately, chunks of wood cannot be blended with petrol and transported to Auckland in pipes. Therefore, woodgas fails the test for immediate use in the current vehicle fleet. I think it was Clarence Darrow who said "It is not the strongest of the species that survives, nor the most intelligent, but rather the one most adaptable to change." I will think about that the next time I drive my 1987 truck past someone pumping \$1.6 per litre blend into a flex-fuel vehicle.

David South

## A new look for the *New Zealand Journal of Forestry Science*

The *New Zealand Journal of Forestry Science* has had a makeover. This Journal (which is published by Scion) is now freely accessible on the Journal's website at <http://nzjfs.scionresearch.com>. The website also includes instructions for authors and on-line article-tracking for authors. Editor, Dr Ruth Falshaw, is hoping to receive lots of submissions to the new-look Journal and is also on the look out for possible referees. Please contact Ruth at [nzjfs@scionresearch.com](mailto:nzjfs@scionresearch.com). Hard copies of all the papers published in 2009 will be available for purchase as a complete volume (No. 39) at the end of this year (see the website for details).