

**USING ALCOHOL AS FUEL** 

his book has so far made the case for what must be, to some of you, some pretty startling points and proposals, and has included much information that will be eye-opening to many curious about alcohol fuel and its potential. We talked about how producing alcohol can reverse the greenhouse effect, how we have more than enough land (and sea) to grow starch, sugar, and cellulose crops for ethanol, and how we can clean up our waterways by harvesting treated sewage through cattails. Not to mention, we stated that we can replace all petroleum fuel use with ethanol!

In the next part of the book, which is about how to use alcohol in vehicles and machinery, I will go over a lot of stufffor motorheads. Many of you reading this book aren't mechanics and will be relying on those who are to help you with engine conversion. However, if you've ever been curious about how your car works, you'll be pleased to note that, for the most part, this section has been written at a level that will permit you to learn about and understand what's going on under the hood. You may not get all of it, but you will pick up quite a bit. Anyone who has experience

working on vehicles should understand everything I discuss.

There is some exciting stuff about using alcohol as fuel that everyone should appreciate, so I've put some of these things right up front so you nonmechanics don't have to wade through all the technical discussions just to get to these gems. These are the items in Chapter 13. They merit special attention because they are as startling as some of my earlier arguments. For instance, we'll show how using alcohol for cooking can stop much of the deforestation in the world. We'll show how properly designed alcohol engines get better mileage than gasoline engines.

Later in this section, I'll spend a chapter discussing myths and facts about alcohol's fuel properties, and then devote several chapters to the nuts and bolts of conversion. To accommodate the differences between alcohol and gasoline, several basic changes need to be made in an engine's carburetion, fuel delivery, air supply, ignition timing, and starting on cold mornings. Most of these changes can be