

THE ADVANTAGES OF ETHANOL

Information in the following fact sheet by Dr Ray Kearney, Department of Infectious Diseases and Immunology, University of Sydney.

Ethanol: the benefits

Health

- A 10 percent ethanol blend, known as E10, is known to be able to reduce fine particles by a qualified 50 percent. It's these fine particles that carry chemicals, which are known to cause cancer.
- According to a publication in the *Journal of American Medicine* in 2002, one in five lung cancer deaths can be attributed to an association with fine particles.
- According to *The Bureau of Transport and Regional Economics*, more deaths in capital cities in Australia are caused by an exposure to pollution than road accidents, which has an associated cost of over \$3.5 billion.
- Ethanol is the only additive to petrol that can reduce the greenhouse effect because it burns cleanly into carbon dioxide and water.
- Ethanol reduces carbon monoxide levels by at least 20 percent, depending on the vehicle.
- Ethanol can be used instead of the highly toxic, Benzene, which is a known leukemia-causing chemical.

Economic

- Ethanol is a product of fermentation of carbohydrate, which can be produced from starch, cereal grain, cereal crop or sugarcane.
- The use of sugar in the production of ethanol can potentially have an enormous impact on the dwindling sugarcane industry and the rural industry in general.
- Ethanol is a renewable fuel.
- Ethanol provides energy security. Brazil is looking to cooperate and collaborate in the production of ethanol with Australia.
- Car manufacturers are already designing vehicles designed to be able to use 85 percent ethanol.

ETHANOL: THE ANSWER TO DEADLY POLLUTION?

Reporter: Ray Martin

Twice as many people are dying as a result of exposure to fumes and exhaust from motor vehicles than are dying on our roads, according to a recent study. Some experts claim ethanol in petrol may be one of the answers to the deadly pollution — but they say politics and the power of multinationals are putting the brakes on its use. *ACA* reports.

Dr Ray Kearney, from the University of Sydney's medical school, says you don't have to be an oncologist to see how car emissions affect your lungs and your life.

"If the cigarette smoke doesn't kill you, this will," he says.

Currently, ethanol (or E10) is being trialed in North Queensland petrol bowsers. It's a by-product of sugar and locals say it's also a way to save a dying industry. For years, Queensland senator Ron Boswell has been beating the government's drum on ethanol. He's been beating so loudly he's been dubbed the Minister for Ethanol.

Scientists estimate that a 10 percent ethanol amount in our petrol could mean a 30 to 40 percent reduction in the carcinogens that end up on our streets.

"I'd have to agree with that; that bears out my research," says Ron. "We came up with exactly the same answers and for that reason alone, the health reason alone, it should be a winner."

Like Ron, Queensland Premier Peter Beattie is a convert. Just back from Brazil, where cars run with a 25 percent ethanol mix in their petrol, Premier Beattie says ethanol makes for smarter politics and cleaner petrol.

In Canberra, however, the politics of petrol are considered by advocates as a joke. But now, Alan Finlay, an engineer with the NRMA, is a new and powerful voice for ethanol and is quick to dismiss concern that it may cause damage to car engines.

"No, there is no evidence that in blends up to 10 percent that it does cause any damage to engines," he says. "Certainly 10 percent ethanol blends can reduce some of the toxic emissions, carbon monoxide and some other toxic emissions from motor vehicle combustion."

Despite persuasive arguments for the use of ethanol as an alternative fuel, Dr Ray Kearney remains convinced it's "purely politics" at the moment and the power of the multinationals is also playing a part.