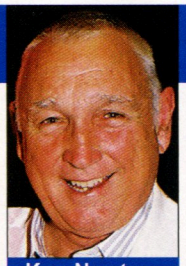

Ken Newton,
CEO, VASA

Start counting – 1234

Thank heaven the decision has been made. Perhaps now we can stop speculating about refrigerants and get down to the business of making sure the transition is neat and clean from R-134a to HFO-1234yf.

Not too sure about the name though. It could get confused with H1N1 (one of the swine flu varieties). At least some smart marketer chose to leave the chemical formula on the blackboard, otherwise we'd have to learn CH2=CFCF3. An Australian automotive magazine has coined the phrase "1234 – 134 is out the door." Catchy?

I obviously don't have to repeat the news, since it came from your part of the world, that DuPont and Honeywell will build a world scale plant to make the new stuff and this announcement presumably means the end of the global search and the ultimate adoption of the new low global warming refrigerant by the world's car makers.

According to our DuPont man in Australia, the EU deadline of 2011 will be met through the DuPont China Joint Venture. This initial production facility will supply both DuPont and Honeywell and is expected to produce enough HFO-1234yf to meet the auto OEM's demand required by the EU regulation until the new super plant is built.

The news that the new refrigerant has passed all its tests with flying colours, was a hot topic at the VASA board meeting soon after the announcement.

We are really global thinkers down here in Oz and NZ, but there are times when we feel a bit like the country cousin, running around the paddocks in bare feet chasing wombats. It takes time for some things to get to our part of the world.

"Great announcement," said the directors, "but do we need to worry for a few years?"

The big question our technicians are asking is "when do we see this new refrigerant?"

While Australia still has a couple of car makers, more than half of all vehicles sold in Australia come from elsewhere, mainly Europe. Any all-new vehicles made in Europe after next year must be charged with the new refrigerant.

Does that mean that the new cars made after that date and exported to Australia and New Zealand will contain 1234? The answer is no, because the restriction on the use of R-134a only applies to vehicles sold in Europe.

That means that until stocks of HFO-1234yf are able to meet world demand, European vehicles imported into Australia will continue to contain R-134a for some time. One of the VASA directors, Mark Padwick, who should know because he's also the Chair of the Australian Refrigeration Council which administers the government's licensing regime, reckons the service industry in Australia may not face the new refrigerant until 2015 or 2016.

The big question our technicians are asking is "when do we see this new refrigerant?"

By all accounts, technicians won't need to bone up on too much new technology in order to service vehicles charged with HFO-1234yf. It's been called a 'drop-in' replacement, with no need for component retrofits.

But you can't tell a refrigerant story without those pesky hydrocarbon people putting their spoke in. A couple of the vocal minority down here have already started boasting "Guess what – 1234yf is a flammable refrigerant, so you might as well use ours 'cause it's cheaper."

Honeywell has already rushed into print in several magazines to set the record straight about 1234's flammability potential. DuPont says the refrigerant has less potential to threaten occupants with an open flame than something as obscure as brake failure.

In one of the earlier tests VASA reviewed, an oxy welding torch played in front of a hose squirting 1234 failed to produce combustion. These hydrocarbon guys will grasp at any straw, won't they? There's a big difference between a benign charge of 1234 in your car aircon and a half a kilo of butane barbecue gas. But then these people have never let facts get in the way of a good story.

So we will just bask in the sunshine and wait for the new baby to arrive. It's low aircon season here in Australia, with mid-winter approaching fast. Why, my thermometer hit a freezing 18 degrees Celsius this morning (64.4 degrees F).