Mission to transition

Is there room for improvement in Australia’s HFC phase-down? Refrigerants Australia executive director Greg Picker shares his perspective with Mark Vender.

Ecolibrium: AIRAH members have expressed their concerns about the “stubborn” presence of R404A in Australia’s refrigerant bank. Do you see this as a problem?

Greg Picker: I broadly agree that the industry isn’t moving the way we hoped. We should do what we can to help encourage people to sensibly move away from R404A.

Eco: Contractors are frustrated at not being able to convince end-users to opt for alternative solutions — and disappointed that government is not providing more leadership. Should government be stepping in?

GP: Government absolutely has a role to play, and it’s great that industry and AIRAH members are pushing for change.

Within the ozone protection legislation, when it was last amended in 2017, there was a provision added to allow government to implement a GWP limit on particular equipment types. So certainly, one of the things the government could do is say that no new refrigeration equipment that relies on R404A should come in. That would be a quite sensible thing for government to do.

Banning the introduction of new equipment, certainly for R404A, would send a signal. And the broader industry — the people who buy the equipment — would clearly see it’s a technology on the way out.

Eco: Europe and the US are moving ahead with refrigerant limits by equipment class. Should we look to their example?

GP: We’ve gone for an approach in Australia that looks at the total quantity in terms of carbon dioxide equivalent of refrigerant entering the system first, then fine-tunes that with specific bans. The approach taken in Europe and the US tends to flip those around — they start with individual bans, then put whole caps in place. They deliver very much the same thing.

We have to be careful when we talk about Europe as an example because they are not only banning R404A in new equipment, they’re also banning it to service existing equipment. That’s a different issue. There are people who didn’t buy their equipment today, but bought it a decade ago and still use R404A, and they want to use it until the end of its reasonable financial life.

Europe and the US provide solutions, we just want to be careful what we choose from those examples.

Eco: In which other areas would GWP limits be worthy of consideration?

GP: There are two. The first is for smaller residential air conditioners. The market’s moved over to 80 per cent R32, so why do we still have R410A systems coming into the country? Mostly it’s transitioned and it’s a reduction of 75 per cent in GWP to switch to R32. In fact, the government has already proposed a limit to effectively stop the import of small air conditioners that use R410A.

The other area is mobile air conditioning. In Europe, the ban on new models with R134A went in in 2015. That’s six years ago. They’ve moved to R1234yf and CO2, with R1234yf having by far the lion’s share. R134A has a GWP of 1,430 compared to a GWP of less than one for R1234yf in similar systems. Yes, you have to do a few things differently, and you have to manage the risk from an A2L refrigerant, but it’s manageable. Europe has clearly demonstrated that.

We have very few cars coming in with R1234yf, and while there’s some indications that market may start changing, in the US and Europe it has changed, and we’re well behind. That’s 30 per cent of our bulk imports there, that go to service mobile air conditioning.

This is an area where we’ve absolutely needed a government signal, even more than R404A, because it’s simpler. It’s one equipment type: car air conditioners. There are only two or three manufacturers in the world. And it’s already happened around the world in many places. The sooner we can change what’s coming in in new vehicles, the sooner we start to transition our fleet.

Eco: Anything else we need to be careful of?

GP: There may be exceptions where outgoing refrigerants are still required for some specific reason. I don’t know what those are, I’m just saying there’s a possibility. The one thing you want to take care of is that in your hurry to do good you don’t make a mistake that leads to bad outcomes in some smaller area.

So let’s do the due diligence, let’s make sure it’s all well designed, and let’s get it done. I think we’re going to see that happen, hopefully over the course of this year.