

ECONOMIC DEVELOPMENT AND INFRASTRUCTURE COMMITTEE

Inquiry into Manufacturing in Victoria

Canberra — 28 October 2009

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Mr P. Binns, Chair, and
Mr P. Boland, Future Manufacturing Industry Innovation Council.

The CHAIR — Welcome Mr Philip Binns and Mr Pat Boland to the all-party parliamentary committee inquiring into manufacturing in Victoria. All evidence taken today is protected by parliamentary privilege; any comments you make outside the hearings are not afforded such privilege. I ask you to state your name and your business address.

Mr BINNS — My name is Philip Binns of Varian Australia, 679 Springvale Road, Mulgrave, Victoria.

Mr BOLAND — My name is Patrick Boland of ANCA, 25 Gatwick Road, Bayswater North.

The CHAIR — Evidence will be taken which will become public evidence. You will be provided with copies of transcripts in about a fortnight. I will hand over to you to make your presentation. I should say at the outset, thank you very much for your submission.

Mr BINNS — Thank you, and thanks for the opportunity to present on behalf of the Future Manufacturing Industry Innovation Council. It is quite a mouthful. My comments today will be on behalf of the Council, of which Pat is a member also. My part-time job is as Managing Director of Varian Australia; we are a significant scientific instrument exporter based in Melbourne. Pat also runs a very large engineering exporting company based in Melbourne as well. If you want to ask us questions about our businesses, then we will answer on their behalf. But these comments are made on behalf of the Council.

The CHAIR — Thank you.

Mr BINNS — We wanted to give you an idea of what the Council is doing. It was established last year and reports to the Minister for Innovation, Industry, Science and Research, Kim Carr. Our principal role is to provide advice to the Minister on what we see as a direction for manufacturing in the country, how to address the fundamental issues that manufacturing is facing, which are growing and are significant at the moment in this country, and advise on the areas that government can assist with in terms of helping the future growth of industries, industry in general and manufacturing in the country.

Most of the work that we have done has been on a national framework basis. A lot of that work is also transferable to the state level as well and what we have been doing as a council. The members of the Council are very varied. They are people who run businesses in high-tech industries; they are people who are from the unions, government and from academia and research. There is quite an eclectic mix of people on the Council, so we get a broad range of views on most of the issues we tackle.

What have we been focused on for the past 12 months? We have been focused on several themes, probably the most important of which would include the investment environment: investment coming into manufacturing, whether it is through private investment through the company all the way through to government investment and up the chain into research and development et cetera. We have been targeting funding sources for innovation, I guess you might call it, and what government and the private sector can do to facilitate that. Skills and education are becoming a more important issue as we are moving forward with some of the programs we are looking at: skills transfer, training in new industries and skills within the workplace. Acceleration of commercialisation is something I will come to in terms of Victoria specifically. There is also research and development transfer and the pathways in which research is transferred into product or service in the country.

Another large one we have been working on is regulatory barriers — that is, regulatory barriers for companies and organisations domiciled in Australia and having an export or international focus. You could loosely say it is about how you commercialise a product and then why you would commercialise it here in Australia. We have been looking at the regulatory issues surrounding that as well, which vary around the world. In regulatory we have been focused largely

on two industries: one is water and the other one is medical devices. Those have been the two that we have started with from there.

Another theme we have been following is image. The image of manufacturing is still a rusty image, and if you get back to the issues I talked about, which were skills and education and commercialisation acceleration, which is as a result of research, you still come down to how you attract people to the industry or the associated areas around the industry. Image is a big part of that, especially for young people trying to get into some of these industries, or at least consider them as an exciting place to work and not a dull, boring, repetitive place to work, which is something that we have to tackle.

Government support is another one that we are looking at, particularly in the area of commercialisation. We have put in a submission at the commonwealth level to the commonwealth commercialisation institute, which I think is now called Commercialisation Australia in its newest form. We put in a submission there which is really about getting start-up companies — small to medium enterprises — funded in Australia on the research side. And the last theme that we are working on is productivity, which is how we tackle and increase the rate of productivity growth in Australian manufacturing, which is lagging behind in terms of where the speed of growth needs to be in the country in general. Those are really the major themes we are working on.

What is the outcome? What we are really looking for is more companies established — or companies that are already established in the country — that develop global leadership positions in the industry. Really the net effect of what we are trying to do is to work back from there, and we all use all of the usual examples of companies that have global leadership positions in the country. How do we establish more of those and clusters of them in various parts of the country? That is really where we have started, and it goes back over the last 12 months.

The broad issues that we are trying to tackle here is in terms of — and I am sure you will have heard this — 12 per cent of private sector jobs being in manufacturing. The interesting thing there is it is about 12 per cent of GDP in the country, but the really interesting fact for us is that it generates 40 per cent of exports in the country. A third of the entire business expenditure on R and D in the country is directed at manufacturing-based organisations, so it has enormous leverage. Manufacturing, if you get it right, has a huge leverage on your GDP, and certainly in the local area in which it is domiciled there are enormous upstream and downstream benefits from manufacturing as well. So it is a very high leveraged sector, which is not growing in the area of value-add at the moment.

Competition, obviously, is global. We all see that. Whether you are an importer or an exporter, you are now exposed to global competition. In Australia, with our wage environment and our standard of living, we cannot compete on price, so in terms of future industries, the ones we are looking at, we are looking at knowledge-based manufacturing, which is something I will talk a little bit about as the key theme. We cannot just compete on low cost or low price as a country or as a company, certainly. Other countries are part of the framework, and other countries offer significant incentives to locate within those countries. Whether it is states of the United States or whether it is countries such as Singapore, Ireland and all the usual ones, they offer very high incentives to companies to domicile themselves there. The competition for foreign direct investment is extremely intense around the world, and the capital moves very quickly around the world as well.

The main themes we are looking at within the Council are in energy, health and water, and we will probably be moving on to food next year as a downstream activity. The key ones we are looking at the moment are energy security, water supply and quality, and health — looking principally at the issue of medical device manufacturing and how we can generate more medical device manufacturing in the country. We are looking at the issues that are a challenge globally but also a challenge to Australia. There is a lot of money pouring into the solving of those problems today

and how we can leverage manufacturing in Australia to develop on the back of solving those problems. That is what has been framing our thinking in the Council.

Where is Victoria at the moment from our perspective? Historically, obviously, there is a heavy reliance on manufacturing as a state. It continues to be the major manufacturing state in the country. There is a highly skilled workforce in Victoria. There is a lot of engineering built-up knowledge and skills in the state, which is gradually being shifted away. There are some skill bases that are gradually being lost in the state at the moment but, compared to other states, Victoria has a high level of skills in engineering and certainly in the vocational sector as well in the support for those industries that have historically driven the state. There is excellent research in the state through publicly funded research organisations — you have the biggest CSIRO division in Victoria, and we have got world-class universities; I think Melbourne is one of the top five bioprecincts in the world, which is all well-known. Having said that, it is there, and it is a key advantage in the state that there is that research there.

A high percentage that invest in R and D are domiciled in Victoria, so a lot of technology-based companies, or those that would spend in excess of 10 per cent of their sales on R and D, are located in the state in various different areas, and they are significant industries in terms of food, biotech and engineering. They are all industries that have a long-term future, both globally and in Australia. Victoria as a state is very well positioned to be at the forefront in Australia of what you might call knowledge-based manufacturing, focusing on the national issues and problems and then focusing on how you solve them and generate manufacturing as a downstream activity in Victoria.

What can government do to assist, which is probably where I guess the inquiry is headed? I will use the term in inverted commas: provide ‘incentives’ to business to locate obviously in Victoria. I will come to the financial ones at the end because I did not want to focus on those. The key things are in the skills base. The skills base in the state is what is going to drive productivity improvements. We see tremendous productivity improvements that are available right now to a lot of Victorian and Australian-based business. Productivity has lagged in the country as a whole, and skills are what will drive that productivity and lift the skills base. And that is about management. You might think normally it is just the skills base of people who are assembling things or providing a service, but management skills as well will lift productivity dramatically.

In the science and engineering skills base Victoria is well positioned as well. Science and engineering is not the no. 1 preferred area for young people to enter into these days. We have to make that more attractive again and get it back to where it was probably 30 or 40 years ago as a desirable place to be. That will drive innovation in companies in the next 20 years.

On IP transfer, in terms of what governments can do, this is where we get back to the research capability in Victoria. The desire to take intellectual property and commercialise it is very high, where two of those companies will do that individually. There are some difficulties in getting IP and transferring it from publicly funded research organisations into business. We are working on how we can align those better. Both at state and federal government levels that would be an area of focus that we would recommend. Knowledge is going to be everything in the next century in terms of manufacturing. It is not so much where you make, it is where you hold the knowledge to make it; that is going to be the key in the future.

On regulatory reform, I will just use the example of the water industry. Regulations go all the way down to council level. There are examples of companies that have, both in the energy sector and in water, commercialised technology in this country; they have developed the technology, but they have commercialised it and manufacture in other countries, especially in Europe, because the regulatory environment is far less onerous in those countries and there is a bigger single market for them to commercialise.

The CHAIR — Do you have an example?

Mr BINNS — In water it would be — I will give you a couple of company examples offline, if you would like. I do not want to use their names unless they would like me to, but I can give you at least two examples offline, if you would like.

The CHAIR — Yes, that would be good.

Mr BINNS — Those issues in terms of regulatory reform are probably one of the biggest barriers to companies commercialising products and services in this country. That is one of the areas that I think needs to be tackled rather swiftly. There are over 700 regulatory authorities for water in the country, if you include councils in those. So you can imagine how difficult it is to get a new technology accepted, or at least to establish a large enough single market to get that technology into the market here.

In terms of procurement, ensuring that industry in Australia has at least a fair shot at going for business and a fair shot to compete, there is work in the Industry Capability Network. I think in Victoria the IPP as well is doing some work in those areas to make sure that local companies can compete with international companies, or at least have the chance to compete for government business. That is becoming more important, and I think the previous speakers might have spoken to that as well. It is becoming more endemic in all countries overseas.

The last one that government can work on is the image of manufacturing. Within the Council we have commissioned a DVD on 25 companies. Those 25 companies are being profiled. They are export-orientated, international-type companies, trying to build the image of manufacturing as not involving the rust-belt companies but as a very high-tech place to be — nanotechnology, high-end optics, high-end engineering and the like. Government can play a role in there. It is also a very important way to get younger people excited about the industry and getting into these industries, either from the research end or the engineering end, the practical end.

They would be the key ones. I have not talked about direct financial incentives. We have been more focused on the infrastructure and getting the playing field right for manufacturing. You cannot ignore the financial incentives because they exist. If you are talking about foreign direct investment in the country — they exist in other countries: tax-free holidays, direct financial incentives. All sorts of incentives do exist, but we have some basic competitive advantage in this country in terms of our knowledge and our education. Actually for a foreign company they are very important things. When you have been given incentives to go to Singapore, you have to bring the knowledge in with you, so it is not automatically domiciled; you can come to Australia and actually look for the knowledge and see it is here. The intellectual property and the capabilities are here. We have some comparative advantage in the country.

In terms of our knowledge-based manufacturing, I guess they are the key themes that we have been looking at on a national basis. I think manufacturing in Victoria could even put at a level above some of the other states where they have comparative advantages which are different to Victoria, in manufacturing certainly, as we are looking at it for future or emerging industries. Victoria is certainly well positioned there to take advantage of that.

Mr ATKINSON — The Commercialisation Australia submission that you did, could I have a copy of that, please?

Mr BINNS — Sure.

Mr ATKINSON — Because that could save us going over a whole range of areas. I think that is quite important.

The CHAIR — Could I just say thank you, because in terms of your evidence you have addressed a number of the key issues and therefore you have also in many ways hinted at what could be constructive recommendations. It has been an extremely useful submission; thank you.

I want to go to an item that you have not touched on in much detail, and I am not sure if it falls within the Council's responsibility, but we have received a great deal of evidence from manufacturers regarding challenges in securing finance to expand their manufacturing operations. Is this something you have touched upon in the Council? If it is, I will pursue the question; if it is not, I will leave it.

Mr BINNS — No, it is not something that we have directly touched on.

Mr BOLAND — I could possibly make a comment.

The CHAIR — Could I ask you the question then, Pat? My question goes to evidence we have received from a number of people, including AMTIL on 6 August, where they said that the two biggest problems they have in innovation and technology are SMEs' access to finance and that in terms of just having access to finance, this is a huge issue. We have received evidence from a particular industry that is able to do biofuels by transferring waste plastic into biodiesel. They have got 90 orders in place, but they just cannot get the finance to do the manufacturing they want and manufacture in Victoria. So that was behind my comment and now question to Pat.

Mr BOLAND — My answer really goes back almost on my personal history. We are a start-up company that started in Melbourne in 1977, and we have reached a reasonable size — around a \$100 million turnover now. And what was one of the key factors which helped us go from a start-up company to a niche global player was that during our growth period — and this is getting some years ago now — there was a lot of government assistance available at that time. Key programs which in our history I believe kicked us along in terms of growth included the commonwealth project, the R and D grant scheme, which was at the time a very generous scheme in terms of funding research and development programs. The other one which was particularly important for us was the VEDC, which was the Victorian Economic Development Corporation; it really had a significant impact on us in terms of getting our first factories and equipment and so on. There was also another commonwealth program called the machine tool bounty.

My point is really that there is nothing like that available today on any of those three schemes, and thinking back I just do not know whether the same people would have been involved, the same ideas and so on, and whether we would have been able to crack the barrier to jump into becoming a viable international company.

The CHAIR — A number of companies are not even talking about government assistance; they are talking about getting access to banks and venture capital.

Ms THOMSON — It kind of explains the format, though, of the VEDC and why it was established, because it was actually established during the time of a credit crunch in which businesses could not access finances, and so the VEDC was established to actually assist companies to do that.

I have got a number of questions, and I thank you, too, for your presentation; it was fantastic. My question will lead a little to the fact that there are so many small SMEs doing some really innovative and clever things in expenditure on R and D. One of my questions will be whether or not you are collecting data and information on expenditure on R and D and whether or not companies are increasing their spend on R and D. The second is around reaching critical mass for commercialisation and export opportunity from that. And the third component, just to put it in there, is the notion and option of potential partnering and bringing together companies to enable that to occur. I guess I am asking what considerations there are around that or how you see that developing.

Mr BINNS — The first part of the question around small companies or small-to-medium enterprises getting up off the ground was quite a focus area for our submission to what is now Commercialisation Australia, where they were looking at what they say is the valley of death between the idea and actually getting a product into the market. So you can do the research but

you cannot really commercialise the product. We made a strong submission there that the funding should be significant for small companies and that it should be not contingent funding. I do not know where that will go, but that was largely our submission. So, yes, we have been working in that area for small companies — non-denominational, too; whether they are biocompanies or someone with an idea for a new razor blade — to be able to get access to that sort of funding. So it is seed funding.

In terms of clusters we have not been working there directly, but some of the industry groups that we have had contact with have.

Ms THOMSON — Clustering is not quite what I meant, but yes, go on.

Mr BINNS — They work in that space of not so much geographic but industry sector cooperation. Where we have been very focused is looking at the partner in between commercial organisations and publicly funded research organisations, to try to lift the level of knowledge that gets moved from the research sector into commercial outcomes. That has been a real focus for us. That is what drives small-to-medium start-up companies; it is usually that.

Mr ATKINSON — I have one that follows that. You mentioned the IP transfer from public to private companies, where it can be used and developed. Obviously one of the sources of quite a bit of information is the universities and the research that they and similar institutes do. I wonder if your council has given any consideration to a regime in which that can be enhanced and also whether or not you have had any observations of the trends in terms of that transfer of information in recent times, with universities going through their own challenges with government policy, funding issues and heavy reliance on international students — sort of education services rather than perhaps some of the research models that are perhaps a bit more of a luxury today. Have you had observations in terms of the role they are playing and whether or not there is a regime that you have contemplated as an organisation that might actually enhance this transfer?

Mr BINNS — Yes, we have looked at that. In fact we have proposed the establishment of what we have called the Australian knowledge network. Where that has come from is largely a university base, where universities tend to have commercialisation arms to the universities. We have looked at or discussed several of those. The ones that seem to be the benchmarks are the University of Queensland, which has a very good one, and UTS in Sydney, which also has a very good one. We are proposing to try to link those somehow together so that companies and the government can get access to a broader knowledge base without actually having to have relationships with each and every one of those universities. We are proposing to take that up on one level so that it makes it easier for companies to get access to the ideas. Mostly you have to have a relationship with the university to get access to it.

Mr ATKINSON — So research and development and so forth is alive and kicking in universities? You are happy with the level of activity in universities; it is just a transfer issue?

Mr BINNS — Yes, for companies.

Mr ATKINSON — In terms of the concept that you have just advanced, is there some more detail that we can access on that?

Mr BINNS — It is pretty early days yet, but as we work that detail up then I would be happy to share that.

Ms THOMSON — The other question I have, just on that point, is: internationally how are those links being made so that we have a bit of a comparator, not just the obvious US comparator, but into other countries as well?

Mr ATKINSON — There are a lot in Europe.

Mr BINNS — For companies, you are talking about?

Ms THOMSON — Yes, the way that they link to that raw research that is coming out of universities.

Mr BINNS — If I switch over and speak on behalf of my company for a moment, we are part of a US multinational, so for us it has been relatively easy to get access to overseas institutions, especially in the US. But normally most companies are involved in networks around the world — say, trade associations — or they go to special research weeks where papers are presented. You generally hook up with who are the key research groups around the world for your industry. You know who they are. Generally speaking it is pretty easy to then get access to the technology in those countries.

Mr ATKINSON — This is a different one. You mentioned in your list of areas that you had a particular interest in the supply chain. I wonder how important it is to advanced manufacturing, to the sort of manufacturing that you are envisaging, and whether the supply chain is an issue, and the availability of component parts and so forth as part of that, or whether this more advanced manufacturing is perhaps less reliant on some of the supply chain imperatives that lower order manufacturing requires.

Mr BINNS — Sure. I will comment, and Pat might like to add his 10 cents as well. It is becoming more important, is the answer to that. Historically in the higher value add — in what we would call low-volume high-mix manufacturing, where a yearly quantity for us might be 500 units or 1000 units, which is not even an off-tool sample for an auto industry-type application — we have been very vertically integrated, and a lot of companies in our space have been exactly the same. You will see a machine shop; you will see all sorts of support infrastructure around the assembly of product. That is now changing. What we are seeing happening is that the global multinational companies who specialise in manufacturing — and they are large; European, Japanese or US organisations are the main organisations there — have come out of high-volume, low-mix operations: semi-conductor manufacturers, auto suppliers and those sorts of things. They are seeing more value now in moving into the low-volume space, so they are now attractive as a supply chain opportunity for low-volume manufacturers. The effect of that is that the holder of the intellectual property — say, for instance, our company — is gradually moving more towards the high-end assembly as an operation. We keep the secret about how it goes together and how you test it, we assemble it, but the modules are more and more coming from these larger organisations, who then have very big purchasing power in their supply chain, which we do not, as an individual.

The CHAIR — Do we have an example of a Victorian manufacturer who has swapped from the high volume to the very market you have described?

Mr BINNS — As a supplier to us? As a supplier?

The CHAIR — Yes, to you or someone else.

Mr BINNS — We are an example of the high end who has actually used those suppliers and is now not doing things we used to and is now outsourcing it.

Ms THOMSON — And you are outsourcing it globally?

Mr BINNS — Yes, both locally and internationally. I cannot think of an example of a supplier. There are very few high-volume suppliers in Australia, outside of perhaps the auto industry, which I guess on a global scale you may argue is not high volume anyway. But there are not that many. And there are none of the global manufacturers that just manufacture anything you want domiciled in Australia, to my knowledge.

The CHAIR — We have heard reference made to some of the car manufacturers who are thinking of manufacturing beyond cars. I just wondered if there was an example you could give.

Mr BOLAND — Could I just make a couple of comments? Going back to the one point about IP in universities, the Council actually does have quite a close link with the CRC for advanced manufacturing, because almost all the board members of that are on this council. I think one of the big issues is that if you can actually involve companies with the universities in the generation of the intellectual property, that transfer problem really does not exist. I think there is a big issue at times, because a smart idea completely separated from market really — —

Ms THOMSON — Just stays a smart idea.

Mr BOLAND — That is right, because it requires a company to almost make a huge change to try to take up that level of intellectual property. At times that is a very difficult step.

Ms THOMSON — Can I just extend that point a little bit, because I am really interested in this? It is why I asked for examples. You talked about conferences and those sorts of things, which I assume our researchers are participating in on an international platform, but I would be interested to see what in-country work and connections are being made, both formal and informal, to create those environments in other markets — and preferably not the US market, because that is a very big market. If you have any that you can forward to the Committee, that would be really useful information to have — how those forums are brought together.

Mr BOLAND — We have some issues in that. We probably get taken by our customers; we have got the relationships. We have a French customer who has a relationship with a French R and D provider and so on, and so we end up being brought into that as a third party.

Mr ATKINSON — How do we make manufacturing more attractive to young people? Are there programs that you have given consideration to in terms of talent attraction to the industry and then also, to some extent, talent retention, given that those people who do actually come in have highly marketable skills overseas as well? Are we actually making optimum use of people and giving them the opportunities here?

Mr BINNS — We have started along that road. We are starting to profile the advanced manufacturers in the country. That is a Federal Government initiative that will be targeted at schools et cetera, but we have to work on targeting the high school level students who are in there. That is really where you have to get them — before they get into university and higher education or before they pick their vocation. We have not done much concrete in that area. We have a number of themes that we would like to pursue to lift the image of manufacturing. It is all around getting younger people to realise that manufacturing is not about putting a nut on a bolt. It can be about advanced robotics; it can be about nanotechnology; it can be about advanced food processing. All sorts of different vocations can lead to a career in manufacturing.

The CHAIR — Has there been any Australian research that you are aware of that has done qualitative research on the parents of secondary school students? I am very interested in the student aspect, but I think it is all very well for us to get the students excited, but then they go home and their parents — —

Mr BINNS — Tell them to go into finance.

The CHAIR — They squash whatever enthusiasm they have had.

Mr ATKINSON — I do not think they get home. I think the career guidance teachers squash them before they ever get home.

The CHAIR — I have got a particular interest in making sure the parents are supportive. I have not heard of any qualitative research.

Mr BINNS — It is a very good question. I do not know of any, no.

Ms THOMSON — Some years ago I think there was some, which led to a program being conducted, which is my next question. There have been a number of programs attempting to change the image of manufacturing in Victoria. One has been the teachers-to-industry program so that career teachers and others actually do not close off this option to kids as an opportunity for career advancement. The other is the visitation of schoolchildren to industry to have a look at what is actually happening now with industry. Both of those programs ran in Victoria. I cannot answer whether they still are running.

Mr ATKINSON — The teacher one is. The problem is that they do not go back to teaching. They stay in industry; they love it.

Ms THOMSON — There is more money in it. I noticed you have talked about the production of a DVD and the image of manufacturing. Of course we have got the Manufacturing Hall of Fame and other things running out of Victoria. A couple of years back we did that kind of ‘heroes’ campaign on TV around our industry leaders. It was quite a few years ago now, and most people probably do not remember it, but I thought it was a fairly effective campaign at the time. I was just wondering what shape that DVD is intended to take. Given what has already been trialled in Victoria with obviously not as much success as people would have liked, where do you go to from here to build that consistency that does change opinions? I am going to grab another question, which is the skills shortages one.

The CHAIR — No, let us leave it at that.

Mr BINNS — When we get a copy I am happy to disseminate a copy for your review. We will organise that. As many places as we can get it showing, the better. The Commonwealth will be using it as advertising for trying to attract foreign direct investment — Australia is a good place to be, with high technology et cetera. The more places we can get it circulated, the better — all the way through schools.

The CHAIR — So it is not a TV ad?

Mr BINNS — No, it is not a TV ad. It will be on the Department’s website.

Ms THOMSON — Are you going to do a YouTube production for kids?

Mr BINNS — We might even consider that. That is a good idea.

The CHAIR — If you are suggesting YouTube for kids, let me make a plea for an approach to engage and sustain the interest of parents to support their kids.

Mr ATKINSON — Just very quickly, the VEDC makes nuclear waste look pretty good.

Mr BINNS — I am aware of that.

The CHAIR — In terms of the political correctness.

Mr ATKINSON — In terms of the political environment; that is right. But I think this is an interesting concept, and I think it is one that we should revisit. We have had a bit of a discussion here about revisiting this concept.

The CHAIR — Excuse me for interrupting, but that is why I stressed that when you made the comment about nuclear waste, it was not necessarily what was the intention of the question, because I was familiar with the conversations that had taken place beforehand.

Mr ATKINSON — I am usually able to explain myself. But yes, we have noted some models that are still operating in Canada. Marsha has indicated that there are some models in Germany. Certainly in the UK there is Enterprise UK. There are a number of models around the world. What I would be interested in — if you were able to do it, Mr Boland — is for you to give us, not today,

an expanded version of some of your experience and perceptions of VEDC. If there are any other members of the manufacturing council — companies that have come up in the same era that perhaps have been exposed to that — is it possible to access their similar experiences? I think and a couple of us in discussions have thought that it is unlikely to be something that we could get up on the political agenda at this time, because I think it is still nuclear waste politically, but it is a concept that some of us think ought to be re-debated and ought to back on the public agenda as an opportunity. You are the first witness that has led with that sort of information. I think it would be really interesting if it were possible to expand a bit on that in writing subsequently.

Mr BOLAND — I can do that, yes. I would be very keen to.

The CHAIR — Thank you very much. That was very interesting. Also to Mr Binns, it was extremely well structured in terms of assisting us with the terms of reference and the recommendations. Normally we ask people, ‘What are the key recommendations you make?’, and you have basically outlined a lot of them. Thank you very much for your method of presentation and the quality of it. Hansard will be providing you with copies of transcript within a fortnight. You are free to make any typographical corrections required but obviously not to change the substance of your submission. Thank you in advance to both of you for anything further you provide to the Committee. We appreciate your time and your effort.

Ms THOMSON — If you have anything on the areas of skill shortage, too, that would be good. You said we have good levels of skills, but if you could add to specific areas, that would be great.

Mr BINNS — Yes, we will forward them on.

Witnesses withdrew.