ECONOMIC DEVELOPMENT AND INFRASTRUCTURE COMMITTEE

Inquiry into Manufacturing in Victoria

Melbourne — 22 January 2010

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Mr L. Joseph, Managing Director, IP Plastics.

The CHAIR — Welcome to our inquiry, Mr Lloyd Joseph, Managing Director of IP Plastics. This is an all-party parliamentary committee hearing into evidence on manufacturing in Victoria. Evidence taken at the inquiry will be protected by parliamentary privilege. Comments made outside the hearings will not be afforded that privilege.

Could I ask you, please, to state your name, your business address, the capacity within the business and the business name. Thank you.

Mr JOSEPH — Lloyd Joseph, Managing Director of IP Plastics Pty Ltd of 79 Killara Road, Campbellfield, Victoria.

The CHAIR — Over to you to say whatever you wish by way of introductory comments, and we will ask some questions afterwards.

Mr JOSEPH — Are you suggesting that you do not want me to read the full detail here; you want me to try to summarise?

The CHAIR — I think it would be better to summarise, because otherwise what we could read later we will have had you read to us and we will not have asked the questions that we really want to know the answers to.

Mr ATKINSON — Can we just establish that you are happy for us to incorporate this document as a public document in our records?

Mr JOSEPH — Yes, certainly.

Mr ATKINSON — Yes, a summary is fine, but we will have this as a public document.

The CHAIR — Thank you very much.

Mr JOSEPH — I tried to read a few of the submissions that you have already had that were available on the website before we did the submission. One that came to mind was the submission TXM Pty Ltd did. Effectively, we endorse what is there. We have tried to write this a little differently because, really, the detail that they have, we very much believe in each point. We have tried to slant this more towards our specific experiences and specific case. I can go through that. For example, I will touch on industry clusters. We set up in Campbellfield partly because it is really like an industry cluster for automotive manufacturing. It meant that we had the infrastructure in place. We have got toolmakers down the road, we have got PLC programmers and people who already work in this type of industry in the area. One of your questions is obviously: why would you set up in Victoria? The core strengths are there for us. That is the reason that we have selected this particular place.

Another thing I should explain is that in our case we are a start-up company. We started from where a person came to us with a product. The original idea was that it was going to be made overseas. When we understood what the requirements of the product were we found the current technology did not allow it to be manufactured as per the design intent, so we basically developed a method of manufacture to meet that product, to enable the product to go to the market with all the design intent and all the features that were required rather than saying that to manufacture it we will have to take these points off. That was really the business case that made us feel that we could set up in Victoria.

Now we need to protect our intellectual property. It is new. We need the resources of people like good tradespeople and good technicians. We need that support structure. We cannot afford to do it within our small start-up company itself. It is a good place to start in that regard.

The CHAIR — Excuse me. You just raised a point in relation to IP. We might come back to that because it is a critical area for our inquiry. I am glad you mentioned it. Sorry, IP being intellectual property, not IP Plastics.

Mr JOSEPH — My background is that I am materials engineer. I was trained at Monash. I started work at Ford Motor Company in the plastics plant in the 1980s. Obviously the tertiary education is a nice start, but the experience I received at Ford Motor Company — at that point they had all the latest technologies in their manufacturing facility — has given me a core knowledge to take forward. Likewise, two other directors in our company are both tertiary qualified, and they both also have had a lot of experience with large multinational companies. That gives you that core background.

Now, if you like, it is a chance for us to put some of that back into the area. We aim to work with the tertiary institutions as far as training. Effectively by our making something that is a little complex and higher tech compared with the typical moulding, we are actually adding a little bit of value into the area and giving some more flexibility for the other manufacturers locally. In the same way we see we get that from other organisations that supply us that raise from the high tech. That is the cluster mentality that we feel the government needs to foster and develop more. In fact one of our suggestions from our perspective is that we feel it would be good if the government could come up with a strategy and say 'The Victorian industry is going to have an automotive focus' — it may be aftermarket, it may be four-wheel drive, it may hybrid vehicles — and actually say, 'We're going to encourage clusters in specific areas'. It may be automotive; it could be the food industry; it could be a range of areas. I am not saying it needs to be focused in one area or in our area, for that matter. That would give businesses more confidence when they go to set up. If they are going to be doing dairy and the government says, 'Dairy is one of the areas that we promote', then they will have some confidence that, 'Yes, if we come to Victoria, we are going to have those resources and there is going to be specific support for that area'. I think that would be of benefit in attracting industry into the state and also giving confidence to the people there, because if you are in one of those areas and you want to expand and go further, you would know that there is going to be some support available.

I talked about industry skills; maybe I should just add a little bit to that. I go back to the 1980s when I was at Ford and they had robot-controlled waterjets, that type of technology. Ford were the first people to use that in Victoria and probably in Australia, to my knowledge. Now it is commonplace in the industry, and there are a number of companies around the Campbellfield area that offer wateriet cutting facilities, offer the robots, offer that technology; it is commonplace. But the automotive industry is an area that demands the best and the latest. I think it is one of those industries that Victoria should really look to maintain and keep within our boundaries, because you get the spin-off from that area, in our case. Certainly we are making automotive components now. We do not have to — we can manufacture for all types of industry — but all the equipment of the toolmakers that we use is paid for by work they have done for the automotive industry. Likewise, the engineering companies we use do work for Toyota, they do work for Ford and for Holden's engine plant. That enables them to put the technology in place that we use on a small scale. If you fund the automotive industry and the big guys, indirectly you are supporting companies like us, because that means that we get that support locally at a level that could not be justified just to support our company and other little splinter companies like ourselves. We see that as an area that is important.

We formed our company in 2006. We established our facility in 2008. We tried to get various types of funding. I have detailed more information here in general terms, but the best thing to say is that when we tried to go for funding it was very difficult for us to explain what our technology is. We make a car component that is already made that goes on cars, but we make it in a different way with lower energy and we can make a much more complex shape. But when we tried to explain we were going to make something the same but just more complex, the response was like, 'You're not really innovative'. However, if you go into our industry and talk to people and show the shape that we want to make, we have had a number of people say, 'You can't make it'. In fact

the prototype was sent to the US, and people who make competitive products said, 'We've tried that; you can't do it. You won't be able to make those'. We feel we are very innovative, but we were not able to get that point across.

From what we can see — and this is from a number of other smaller companies that we deal with — some of them say, 'Look, we're not interested in going for government grants because we get tied up in the paperwork and presentations. We spend a lot of money, and we don't get anything at all. We're better off just keeping our money'. It is almost like some money does not go into innovation because it is put into preparing your documentation to try to get a grant, which you may or may not get.

One suggestion we have along those lines is that,- for example, in our area Toyota, Ford and Holden understand exactly the type of product we are making and the type of innovation that is there, so if the government were to say, 'We're going to allocate \$10 million per annum to the OEM automotive companies' — but likewise it could be a large food company; it could apply in other areas — 'to go to start-up companies in the automotive area, and we want the end users, if you like, or the experts in that area, as in the local car companies, to critique the submissions and say, "Okay, we believe the funding should go to these people", in that way the funding would be directed in a way that should benefit the larger organisations that are really the core industries we need here, and it would also give a chance for the start-ups to be able to present their technical information. A lot of start-ups might be quite good at the technical side but not so good at the marketing and presenting side, and input from those larger organisations may actually be of benefit, because they may say, 'Look, really you shouldn't go down this path. We're already working on something. It's not such a good idea'. They will be able to say, 'That's great. Some backing should be done'. If they were not giving their money but they were giving the government's money, they would probably have a reasonable chance. That was one of the suggestions that we thought would help with allocation of funds to companies that would make the best use of that money for our local state.

The thing that, really, a start-up company needs if you have got your IP in place and you understand what you have to physically do, is money. That is plain and simple: it is cash. It is fine to have a consultant say that you should have a production flow like A, B or C — that can be useful to some people — but ultimately you should be working that out before you take that next step and you need cash. For us, one of the areas that was guite difficult was to fund, basically, \$1 million of machinery up front. We were able to get some money from investors to assist us, but what we would like to suggest there again is that the government could take an interest in some bits of high-tech equipment. When I say that, it could be, with the recommendation of the Fords or the Toyotas, saying, 'Look, this is an area that is worth being in', but the thing I get disappointed at seeing is where people have got grants and bought equipment — I have worked with companies that have done this: they have bought equipment with government grants and then they have closed their factory and taken that equipment overseas. That is where we would suggest the idea of a degree of ownership where, yes, you give money to purchase that capital equipment ---sometimes companies will not succeed, and, to me, you cannot afford to just back certain winners because they are the ones that are on the edge, they are the ones that are probably going to give the biggest benefit, but if the infrastructure is kept within the state and one company folds, it is a great opportunity for a second company to pick up that and take it further than the first company. If there were some degree of ownership where it had to stay in the state or the government share of funding had to be repaid before it could be shifted out of the state, it might give a better opportunity to get good value for the money that is spent. That was another area.

I know you mentioned IP before. When we started up we had a good idea of what we wanted to do but we wanted to see about developing some of that technology further. So we spoke with a number of research organisations, but the typical response we got was: if you give us the money, we can get someone onto that, onto research and that. But really we already had the core information and we needed very specific things done. We cannot afford to just say, 'Here is \$30 000 for a year' for someone to study stuff that may or may not eventuate. We try to make the

distinction between two types of research. I should stress that they are both necessary, and we have highlighted that in here. One is the research for the public good, you could say. That is where you do not have a specific aim in mind but you go down a certain path and from that a great idea comes about. To take that great idea and commercialise it is a whole new step of R and D and IP. To us it seems like there is basically a gap in there.

There are a lot of suggestions that industry should work with the research establishments. We would like to turn that around a little bit. If you look at our company and how we started, we had a customer who had a product and said, 'I want this made', and the general answer was, 'You cannot have it; we cannot make it'. We asked, 'How can we make it? How can we create a process so we can make exactly what you want?'. It is the outcome that we are after. The research establishments — it is really that you need to put that some idea to them. There are two pigeonholes, but we still need that original research. We use in situ polymerised thermoplastic materials. I can rattle that off but that started in a laboratory, and they would have made that material in a test tube to start off with — that is CSIRO-Monash-RMIT research. They would have created a test tube with that material and said, 'Great, but now you have to take that test tube material and convert that it into a real part', and the technology to do that — the commercialisation phase — is the thing that we need assistance with. That is the difference we are trying to show. They write their paper and say, 'Yes, we can do it', but we in industry trying to get the part out the door say, 'That is great, I've got a test tube but how do I convert that into a machine; how do I get all these other steps so I can repeatedly produce the part?'.

The CHAIR — I am going to interrupt you briefly. You are giving evidence that is very helpful. I do not know how much longer you want to speak, but if you want to keep speaking, I had probably better interrupt you because we could start asking questions on IP or that last example as you go.

Mr JOSEPH — If you want to ask questions, I am happy for you to do that. As I said in regard to that TXM submission, generically we think that is an excellent submission, so in some ways I would be happy to put my name to the bottom of that one.

I have tried to give a bit of an example of our company in the niche area we are in, and really the end, the customer outcome, is what we have focused on totally. That gives us the niche, the ability to make a part that no-one else can make with a process that no-one else has effectively.

The CHAIR — Can we take that last example you gave us? I will not attempt to repeat the name of the plastic — you might have to write it down for Hansard afterwards. Do you have faith that a major car manufacturer such as Ford would be able to assist in making decisions on whether such an item should receive government funding, or is this too specialised for even an organisation like a big car manufacturer?

Mr JOSEPH — Actually I think they are the right people. I say that because we have this new process and we can make these parts. We are actually supplying the after-market export market; that is where we are going at this point in time. But where I come from with that is if we showed the part to Ford and said, 'Look, this is what we can make', the first thing would probably be that at the start they would say, 'You cannot do it'. That would probably be the first thing. There would need to be a degree of technical exchange to get the confidence that we really could do it or that it was worth a go — the example I am giving is that maybe we could not do it, maybe we would go two years down the track and say, 'Heck, we cannot do it'. We can, by the way, and we are. But I mean at some points six months ago we were looking at it and saying, 'Can we really do this in volume?' It was fine in the test tube and at the research level but we found ourselves asking, 'Are we going to be able continually and repeatedly make good quality parts?'.

The CHAIR — Okay. So the answer is yes, that Ford could.

Mr JOSEPH - I would say yes. They have the right technical people within their organisation and they could actually look at that and compare it with another start-up technology and say, 'We need this, and this one not so much. Even though it is exciting, this one will give us a result, this one maybe not'.

The CHAIR — So if you were writing our report, you would probably put in something in the way of a recommendation that approval for funding grants be increasingly moved to the industry sector for which a particular product is being developed? Would you have it a majority — —

Mr JOSEPH — My suggestion there would be in those clusters, and you would still have some money obviously for unique things from out of left field. But if you consider that cluster idea — that you have an automotive cluster of some sort, a food cluster and a biomedical cluster — the key players that you have in that industry should have input into how the money for their area is going to be spent. That would be the suggestion.

The CHAIR — Would there be any exceptions, or would you pretty much have that as the model for the future?

Mr JOSEPH — I think you would still have a pool for ideas from out of left field, for things that do not fit into that cluster; that is where you still need to have something. I do not think you want to be totally restricted to your clusters. There might be a really great idea from somewhere: if you have another Bill Gates turn up, you do not want to say no because the idea does not fit into the clusters.

Mr ATKINSON — Does that not already exist for that industry with the CRCs?

Mr JOSEPH — I have not experienced that myself.

Mr ATKINSON — Did you go through the CRC process, or have you had exposure to that?

Mr JOSEPH — We have had discussions with the CRC and we did not actually proceed. Basically all our development has been done in house with very specific external research, interaction with the raw material supplier and other industry experts in niche areas of our specialty, but we have done all of that basically ourselves. We found that when we started talking with the CRC they seemed to be more focused on the larger companies — that was one of the things — and they basically suggested that they wanted the intellectual property that we believe we already have. Certainly we are happy to share any extension, but we want to protect what we have already.

Mr ATKINSON — Is that not exactly the same problem that you would have if you went to a panel of potential customers — that there is a competitive dynamic there and the intellectual property is an issue again? My understanding is that that is partly what the CRCs are there for: to encourage the research, identify opportunities and help inform governments where they might provide some funding, because they could put an industry viewpoint of where they can go. I wonder if your panel idea in fact creates exactly the same problem that you have expressed the CRC presented.

Mr JOSEPH — The thing with the CRC is that they wanted us to pay them money; there was not actually the ability to get assistance to get going. It was like, 'You give us \$30 000', or, 'You give us \$60 000, and we can put someone on something if you get something going'. That was not necessarily the way we needed to go. We needed more focused information. What I was suggesting with regard to going to, say, a Ford or a Toyota and saying, 'This is what we are doing', was the ability to also say, 'With this we need \$50 000 to further that'. Maybe part of that, say \$20 000, may be for working with the CRC and \$20 000 for working with Monash University et cetera. Then they could say, 'You have the funding. Go and do that'. That is the picture that I have.

That is in contrast to where we were when we went to the CRC. From the discussions that we had we were not confident that we would get an outcome.

The CHAIR — With the CRC?

Mr JOSEPH — Yes.

Mr ATKINSON — For a start, who owned the idea? I mean, a customer came to you with the idea and said, 'This is what I want'. Do they have any ownership of the IP? Or, because you said 'Okay, we will go away and develop it', did you have all the IP? And how have you protected it?

Mr JOSEPH — It can be split into two. First of all there is the design of the part. In fact our customer has not protected that too strongly because what he has recognised is that everyone has said that he cannot make it, so it is not a very easy part to copy as such. So that is his. What we are basically protecting and what we consider ours is the intellectual property required to manufacture that part and the techniques we use to be able to produce it. That extends far beyond just that one component. That is the first product that we get out to the marketplace. Then we can go on and make all sorts of other items. We can make composite products that could go into the aeronautical industry or defence.

Mr ATKINSON — So your IP is the process?

Mr JOSEPH — It is the process.

Mr ATKINSON — And his IP is acknowledged as the design?

Mr JOSEPH — The specific design of that product.

Mr ATKINSON — And in terms of your process, have you looked to patent that? Have you looked to protect it in some other way? In terms of going overseas, are you looking at exporting finished product or, particularly because you see your IP as a process, are you looking rather at licensing of that process?

Mr JOSEPH — We are exploring. At this point we are really focusing on getting products out the door. I would say that is our immediate thing. So far as the longer term is concerned, we are looking at all options. It needs a lot more cash to scale up, and that is one of the things we actually mention in our submission. That is another stepping stone that is quite difficult for Australian companies. Some type of joint venture or some other operation like that with a large company with synergistic facilities or resources is the type of thing that we may require if we want to expand at a great rate.

With regard to protection of our IP, the first and we believe the best thing at this point in time is really to keep it as a trade secret — we just don't tell anyone what we do. We have a small group of people who work with us. When we manufactured the tooling to make our first products some of the tooling was made in one place and some was made in another place so no-one had the full picture of what we were doing. When it came to our machinery, we purchased some machinery from overseas and we spent six to eight months modifying it to do what we wanted it to do. So you cannot just buy a machine off the shelf to manufacture or do our process. A lot of it is protected in that way. We have a couple of provisional patents now. And as we are going, because we are overcoming different obstacles, we are actually adding to that IP.

There is more information that we are basically putting under provisional patent. We have about 18 months before we have to publish that patent information, and we will decide at that point whether it is best to put it out in the open or to withdraw that and have it purely as a trade secret. I say that because of the process and because you cannot tell by looking at the final part what process has been used. The difficulty we have here is that if we patent it and that is out there,

published and we do not have very strong support to protect our intellectual property, we are basically just telling our competitors what they need to do to make a part like ours.

It is one of those things that we have to be very careful about, as to how we do it. We would need a large partner to make it worthwhile patenting. The interesting thing is that to get a larger partner, they like the patents. So they almost go hand in hand, one way or the other.

Mr ATKINSON — I understand that entirely. In fact I think that anecdotally most companies, particularly small operators, go exactly your way. I think that the patenting system is now in some degree of disarray or its integrity is not accepted by most people who are developing products because they are concerned that as soon as they publish somebody else comes along and makes a very modest modification and they are away with your idea. That is what I am proffering. You are obviously involved with other companies and professionals who are involved in product development and so forth. Do you have a view along those lines that I have suggested or do you think that the patent system is still meeting people's needs in terms of protection of their ideas?

Mr JOSEPH — I think that, like you say, it is pretty well agreed that there are problems with the patent system. From our side we see we have to work with what is there, because it is probably not going to change in the time that will give us any benefit. We have to work with what is there, so I guess we accept it in that way, but certainly it could be much better. There is no doubt it could be much better.

Mr ATKINSON — In the old days Mitsubishi used to have people employed to sit in patent offices in certain places around the world just monitoring the new paperwork that came in, and I am sure that the Chinese are doing exactly the same.

Mr JOSEPH — Yes.

The CHAIR — I picked up in your initial comments that part of the reason to be based in Victoria or Australia was because of protecting intellectual property, which does not necessarily mean going down the regulated path, about which Bruce has just explained the dangers — and you have also. I am wondering if there is any product that you have manufactured that you have put patents on and, if so, why was there an exception to what I sense I am picking up is pretty much a business rule for you, that you do not patent?

Mr JOSEPH — We do not have any active patents within the company at the moment. I can give examples of other companies where people have told me the same thing: 'We've patented one or two items, but now we don't bother'. That is a fairly general comment but it really depends, because of what we saw when we were looking at the potential for grants. Our original thing was that we were not going to go for patents at all but when we were looking for funding we found that the first thing that came up was the patent, because a patent has a value. So there is some commercial value for a patent in that way, if you are looking to raise cash, compared with — —

The CHAIR — It would have to be big cash, though, would it not?

Mr JOSEPH — That is right, yes.

The CHAIR — I want to quote from evidence that we received on 7 December from Mr Marcos Anastassiou. He told the Committee his view of the kinds of government support necessary to keep small-to-medium enterprises alive. I will quote:

A lot of the start-up companies need assistance, not with consulting necessarily. Some of these small companies have very well-developed and articulated business plans. They need assistance with some basic start-up finance for either purchase of equipment or IP ...

Where do you think people such as yourself and other SMEs can get the best opportunity, outside the traditional bank you might have been using if it decides not to fund you? Where do you think

you might be able to get financial support — capital, investment funds, credit — to expand your business or grow a particular aspect of your business or start a particular aspect of your business?

Mr JOSEPH — For us to raise large capital amounts — to go to the next stage in our company, we actually need to do that — at this point the focus is really on overseas companies. They are the companies that have an interest in what we are doing. I have to say that that is the situation at this point in time, that overseas companies have more interest. We have been very, very selective.

The CHAIR — If you were writing our report, what recommendation would you put in it to encourage Australian companies or Australian governments to start thinking about financing the kinds of expansion that you are talking about? Have you given any thought to that? In the ideal world, what would you like?

Mr JOSEPH — I think in the ideal world we would be basically — I believe there have been some suggestions of trying to do this — using some of the super funds in a venture capital-type process. To us, a government strategy is fine — and, as I said, if we do not fit into that, we accept that as well — the idea of a government strategy, saying, 'This is the way we're going. If you're in these areas, then there will be opportunities because this is the way that the Victorian Government sees industry developing in Victoria'.

The CHAIR — To summarise, there could be legislation requiring a portion, however large or small, of super funds to be engaged?

Mr JOSEPH — Yes, that is right — of Victorian people's super being kept in Victoria.

The CHAIR — That is clear. Thank you very much. I have no more questions; your evidence was very, very clear. Why don't we just say to you: if you were writing the report and the recommendations, what would be your top five recommendations? What would you love to do?

Mr JOSEPH — I think the ability to get cash to the start-ups, with a peer group critique, being the auto companies or food specialists or whatever, as being one, being able to get in that cash. One of the things that I know has already started — and I have the names — is that you have the Victorian science agenda funding. From what we can understand that is focusing on saying, 'Okay, here's money for industry' and basically the tertiary institutions need to work with industry to get that funding. I think that is a great start. A continuation of that will help bring some of the focus to achieving the outcome for industry, so that would be another one that I would like to see — and really trying to push that cluster idea.

I was saying that we have shifted to Campbellfield and we have picked Campbellfield because of the support, but in the time that we have been there industry has been dropping off. Someone at one of the companies that we deal with at the moment is saying, 'I'm not sure that I can buy a new machine because I haven't got enough business now to support \$250 000 for a new machine. My old one's wearing out'. We have another company that does toolmaking work and he says, 'I get tools overseas because we can't buy the steel for the price that you'll get a tool from China, so buy your tools overseas'. They are great at maintaining tools but the apprentices that they have now do not make tools any more. They make one a year; they used to make 20 or 30, something of that order — they are not a large toolmaking company.

So we worry about where the skills are going to go in the future. I am not quite sure exactly how to rectify that. I think part of that to me would be some sort of encouragement, if money is going into car companies, that their tooling, or a portion of the tooling, is made locally because it seems to have drifted off over the past five years. Basically, recognising the support for industries in those different clusters and making sure that they are all still there.

As an extension of that, one of the things in the TXM report — which I found quite interesting because my background is mostly automotive — was that the automotive tier 1 and 2 suppliers

typically have excellent manufacturing practices, good quality systems and so on, but he was saying that there is a shortfall in other industries. I find that hard to picture because the quality system has been driven into me for so long that the idea of not having that and not having lean manufacturing systems is hard to comprehend. If that is the case, what he was saying there was that some people are sending stuff overseas when if they had good, lean manufacturing practices in place, they could probably be competitive. He had an appendix with a calculation showing an example of that.

I think some of that is important, but I would like to suggest something there. I am a member of the Society of Plastics Engineers, which is basically a not-for-profit organisation. People organise tours through different manufacturing facilities and exchange of information. In that group there are professionals, tradespeople, academics — people from all works of life. It is a great opportunity to interact and it is very low cost. Perhaps some of those organisations could do with a little bit of funding. What I see is that there are opportunities to do plant visits with larger groups but they are all independent consultants, and there seem to be an awful lot of them to me, from where I sit. Maybe we need to be a bit selective with those and target some of the specialist industry groups that have passionate people in them.

The CHAIR — Who are the consultants you are talking about? Are these consultants for the major businesses or consultants for government?

Mr JOSEPH — I think they sit between the two. I cannot give you a specific example, I have to say, because I am not so familiar with that area. All I can say is that we have an awful lot of people who try to tell us that they can help us out with systems and so on — help us write applications for grants. There seem to be more of those people than the people who say, 'We know how to fix your machine'. From where I sit in a company, I get approached more of the time by the consultants who are going to help me and tell me what to do than the people who will actually do it. So I guess that is where I am coming from with that.

The CHAIR — That makes sense. Thank you. You have probably been our consultant, so I hope you have enjoyed your cup of tea, because that is all you got as your fee for attendance!

Mr ATKINSON — I am interested in the man who could not afford a \$250 000 machine. Up until December of last year he could have got that machine for \$125 000.

Mr JOSEPH — Yes. That is when I was talking to him, in December, and he was looking at it and saying, 'I can get it for half price, but I've still got to pay out the money and I don't know that I can get the return'. His business has dropped off over the last year. There is a number of companies that were his customers that have relocated overseas and he is saying, 'I was sure I was going to do it and now I'm not sure I can' — even with that.

Mr ATKINSON — Whilst you have set yourself up in a cluster, from a supply chain point of view, you have always been dependent from the start on some parts of your process depending on overseas suppliers?

Mr JOSEPH — Yes.

Mr ATKINSON — What is the dynamic there? Is your supply chain increasingly becoming reliant on overseas supply now, because of what you have just suggested, or are you now in a position where you are looking to find Australian companies that are willing or able to provide what you are currently having to source overseas, because you now have the time to perhaps cast around and describe accurately what you need and so on and so forth?

Mr JOSEPH — Great question, because that is not something I have mentioned to date. I mentioned in situ polymerisation. In simplistic terms what that means is that we take two components, we mix them together and we make a part. We are the only people in Australia, to our knowledge, that make a recyclable plastic part. You can granulate it up and you can put it into

a normal injection-moulding machine and make another piece. What we actually do is bring in individual chemicals. We had to get licences to bring in some of those. A lot of them are not available in Australia. They are not made in Australia, so we have no choice.

One of the things we saw as being a key advantage in our situation is that we bring in those chemicals in the raw form and then we can make whatever formulation we like based on our own experience. We take the individual components and in our own machine we mix those individual components, so we can make a part that is good for minus-40-degree temperatures today and tomorrow we can change that formulation and make a part that is good for under an engine, 140 degrees. We can do that from one day to the next. So we are a very flexible manufacturer with a relatively small stockpile of material, because we have it until the last minute in its separate constituents and then we put it together at the last minute. We do have to import those pieces. Some of those materials we hope that we can source locally as we get going. Certainly at the moment is not the time, but in some areas we will look at doing that.

If you compare that with normal injection moulding that people are doing, GE Plastics compounded in Australia. They closed down about 18 months ago. It is done in Singapore now, so if you want a compounded rear viewer from them, you have to wait for it to be shipped from Singapore. There are some small people still left in Australia, but that is an example of another one that is gone. It means that if you are an injection moulder and say, 'I want a part that colour pink' and you have to compound that material and use GE, you have to ring them and say, 'Can you get that from Singapore for me?', whereas in the old days you would just say, 'Can you make it in Dandenong?' and you might have it in a couple of days. For injection moulders now it means that if I really want the pink part desperately, I get a Singapore moulder to make it and he can make the material and post the parts over to me. That is just an example.

Mr ATKINSON — One final question. Who are your investors now?

Mr JOSEPH — At this point we have just — —

Mr ATKINSON — I do not need to know who they are, but the description.

Mr JOSEPH — They are angel investors. We went to them right at the start. We have some bank financing, a small amount of financing, and we have some angel investors that basically believed in us and got us off the ground.

Mr ATKINSON — How easy was it to recruit those angel investors?

Mr JOSEPH — They are people we know quite well. It is never easy to get people to dig their hands in their pockets, but it was not terrible. I should say that the time we got the bank finance was just before things went bad. We were not sure that we needed finance at that time but we could see things were not going too well and we thought, 'If we don't get it now, we may not get it', so we took out a loan relatively early in our business. I do not know how easy it would have been to get a loan if we went for it last year.

The CHAIR — From the evidence we have received, I am glad you did it when you did. Mr Joseph, thank you very much. It has been extremely helpful. Hansard will provide you a copy of the transcript within about a fortnight.

Witness withdrew.