THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS MET IN COMMITTEE ROOM 2, PARLIAMENT HOUSE, HOBART, ON WEDNESDAY 2 MARCH 2011.

HUON VALLEY TRADE TRAINING CENTRE

Mr TIM PENNY, DIRECTOR, TIM PENNY ARCHITECTURE & INTERIORS PTY LTD; Ms MAREE GERKE, DIRECTOR REGIONAL AND COMMUNITY ENGAGEMENT, TASMANIAN POLYTECHNIC; Mr SIMON NUSS, PROJECT MANAGER, TRADE TRAINING CENTRES, TASMANIAN POLYTECHNIC; AND Mr MIKE VAN DER VEEN, PRINCIPAL PROJECT MANAGER CAPITAL WORKS, TASMANIAN POLYTECHNIC, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

- **CHAIR** (Mr Harriss) I note that the message from His Excellency the Governor cites \$6.1 million as the project figure, whereas the document before us cites \$6.47 million. Is there any particular explanation for that slight difference?
- **Mr VAN DER VEEN** The \$6.479 million gives the overall budget allocation made by the Commonwealth under the Trade Training Centres in Schools program.
- **CHAIR** It's not of great consequence, there's nothing of great significance about it, but it is different from the document before us. We will be considering the document before us; we are not constrained by the message from the Governor.
- **Mr VAN DER VEEN** I am sorry. I don't have anything before me that would help to account for that discrepancy.
- **CHAIR** We are eagerly awaiting your presentation.
- Mr VAN DER VEEN The proposed Huon Valley trade training centre development is funded by a budget allocation of \$6.479 million from the Australian Government's national Trade Training Centres in Schools program. The objectives of the program are to increase the proportion of the students achieving year 12 qualifications, address regional skills shortages in traditional trade areas and emerging industries, improve student access to trade training facilities to meet industry standards, to improve the quality of education offered to secondary students undertaking trade-related pathways and to assist young people in making a successful transition from school to work or to other education and training.

Subject to the committee's approval, the Huon Valley trade training centre will be the sixth trade training centre to be developed in Tasmania. The Tasmanian Polytechnic has completed centres in Scottsdale, George Town and Bridgewater during 2010. Construction of the Circular Head trade training centre at Smithton commenced earlier this month and the contract for construction of the Break O'Day trade training centre at St Helens was on order as of late last week. The Huon Valley trade training centre project is a collaborative partnership between the Tasmanian Polytechnic, as the lead

school, and the following partner schools: Dover District High School, Geeveston District High School, Woodbridge District High School and Huonville High School.

- **CHAIR** It would be appropriate, wouldn't it, to acknowledge that St James would be part of that capture group because, even though it is a Catholic school, they have a high school component there and they would be looking to integrate students at this new facility, if it is approved?
- **Ms GERKE** The Catholic school has some trade training centres as well so they wouldn't have been part of this group. Because they are a Catholic independent school that wouldn't stop their students accessing the centre not being a partner school wouldn't stop them accessing the centre.
- **CHAIR** Certainly not, but when I read the submission I just thought that it was appropriate to acknowledge St James as part of the cluster of schools in that region. I am sorry to interrupt.
- Mr VAN DER VEEN The centre will be managed by the Tasmanian Polytechnic in conjunction with partner schools in line with the terms of the Commonwealth's funding agreement. Eighteen local employees, including the Huon Valley Council, have each signed a memorandum of understanding pledging their ongoing support for the centre. The employees are an integral part of the Huon Valley trade training consortium in terms of their commitment to provide support over a 20-year project program time frame and safe on-the-job training opportunities for up to 48 students per year, work placement opportunities through mentoring support for students, through the donation of materials for trade training purposes and also through the promotion of the trade training centre through industry networks and by their confirmation of industry relevance in the training offered in the centre.

The Huon Valley trade training centre is to be located on the Department of Education site directly opposite the Huonville District High School in Wilmot Road. The site was formerly utilised as a school farm. The new centre will occupy approximately half of the 2.7 hectare site. The Education department plans to divest itself of the remainder of the land and planning of the new centre has taken into account provision for access to that balance of the land area.

The Huon Valley trade training centre building has been sited to provide separation from established residential areas, to optimise the potential for passive environmental design and to achieve good access to existing building services. The design incorporates best practice in environmentally sustainable design, including maximum use of solar orientation, natural ventilation and passive solar principles. It will utilise controlled lighting with motion controls to maintain safe lux levels in working areas, it will utilise gas heating, it is planned to capture and reuse stormwater for aquaculture, horticulture, general site irrigation and wastewater flushing. The building will feature 5-star-rated fixtures, solar hot water with a gas boost and the construction is designed for end-of-life reclamation and the reduction of carbon consumption.

The single-level building has been designed to provide for universal access. It will incorporate a general purpose workshop and separate workshops for metal and automotive trades and carpentry and cabinetry trades. The building will feature

aquaculture and horticulture training facilities, a hospitality training kitchen and servery and associated equipment and dry stores, three multipurpose and general learning areas, a horticulture learning area, a student lounge with kitchenette, staff offices, first-aid room and associated storage spaces, together with an outdoor covered work area with a sandpit which is used for trenching and setting out underground services, a brick-cutting room, material storage space and the required offstreet parking facilities.

Subject to the committee's approval, it is intended to offer the public tender in late March and it is envisaged that construction will commence in late April and that the centre will be completed in January of 2012.

- **Mr HALL** I note that this one is a bit more than \$2 million more in capital cost than the next most expensive one; I think it might have been Bridgewater or Break O'Day. Why is this one at least a couple of million dollars more? Are there additional design features or construction costs involved or is simply bigger in scale?
- **Mr VAN DER VEEN** The training to be delivered at Huonville that is, commercial cooking training, horticulture and aquaculture is not delivered at the other centres.
- Mr HALL So they are three additional ones that the others don't have?
- Mr VAN DER VEEN Yes.
- **Ms GERKE** The reason the others don't have that is that in round 1 of the trade training centres only traditional trades were offered. In round 2 it was expanded to include commercial cookery and those other trades which are obviously trades that are significant to the Huon Valley region.
- **Mr HALL** So there are simply those three facets that increased the cost. Building costs would only be going up by inflation anyway at this stage.
- **Mr VAN DER VEEN** Those areas are relatively highly serviced too so that the cost of providing those as opposed to our general purpose learning area is significantly higher.
- Mr PENNY If I could elaborate a little, if you look at the plans, the thing that you will see differently in this building is that it has an extra classroom, which we call our GLA. It has a large commercial kitchen and it has that series of outbuildings which are where some of those other teaching programs such as the horticulture and the aquaculture components take place. They are the parts of the plan that are different. It is significantly bigger in terms of area.
- Mr HALL Thank you. Are the Commonwealth going to do any more of these?
- **Ms GERKE -** Yes. The intention is to do more and the Commonwealth allocated a notional amount to each State. Tasmania has been allocated \$40 million over the 10-year period. At this point in time we have used up just over \$20 million. So a lot of the future trade training centres may well be refurbishments of existing areas to expand the options for young people.
- **Mr HALL** Thank you for that.

CHAIR - Are there any particular matters of architecture, Tim?

Mr PENNY - I am happy to elaborate, Mr Chairman, in relation to what you are seeing on the plan. There is a bit of background in relation to how the functional brief has been developed and that is reflected in the planning. What has been touched on in the document is that this is a building prototype that has been established in other areas and they have rolled them out. The Polytechnic have understood very well as to the sorts of spaces and relationships they require for a functioning centre to teach these programs.

Mr BROOKS - Is that nationally or State only?

Mr PENNY - Within Tasmania. The plan you are seeing is very much a prototype that is very similar to Bridgewater or Low Head, for instance, and so I will just walk you through some of those spaces. The big areas are the multipurpose workshops that are large, functional spaces where a lot of activity can happen concurrently. The classrooms, which we euphemistically called GLAs - general learning areas - again are designed to operate in close proximity to the workshop areas, so you can in fact have breakout teaching, but also in close proximity to the floor, so that relationship between a formal teaching environment and hands-on working and learning environment is pretty well developed.

Some of the other adjunct areas include a large covered external space, so the things that might be touched on, such as practical experience in laying pipes or foundations, can happen within the sandpit. Equally, there is an adjunct external space which doesn't have any building works on it, but, again, from a functioning area that is required to do setout. Again, those whole building trade activities in relation to setting out profiles, understanding how you set out a house footing and those sorts of things, can be done on this site.

As to the buildings at the back, I will talk about the general planning philosophy. Its design is a single front door and then you come into a common student lounge area and then effectively circulation enables you to go into the workshops, into the classrooms or alternatively, through the building and out to the aquaculture and the propagation of horticulture areas.

We have had the advantage of a level site, so the building has been sited with a good northerly orientation, because obviously from a workshop planning point of view, the desire is to get good-quality, natural light into those spaces. So again, as a prototype of a building, it would be very familiar if you go to Bridgewater or Low Head in that the large workshop areas are quite tall - up to 7.5 metres - so that in some of the areas they can erect scaffold, for instance. They would also be very flexible areas for the light in the building.

In terms of construction methodology, we have designed it again using warehouse kind of technology. We have deliberately used pre-cast concrete -materials and supplies of which are available in the Huon Valley. Our theory is that it not only supports local subcontractors but also adds value to the Polytechnic. Obviously the rest of the building is largely a steel-framed building that you would see pretty much anywhere else.

Mr BROOKS - On the plan where you have your commercial kitchen, is it the plan that, as part of the curriculum, they will be holding dinners out there, or in the serving area? You mentioned that there was a servery in your initial brief -

Mr VAN DER VEEN - The design does allow for that possibility.

Mr BROOKS - But it's not on here at the moment.

Mr NUSS - I suppose we could answer that question by saying that hospitality and commercial cookery was one of the qualifications where the Federal Government saw a skills shortage but it hasn't been developed or designed to take on the serving side of the hospitality course - Kitchen Operations. We can only develop the space around the qualifications that were there but we have added serveries and things like that so that in future if things expand and we can offer these other qualifications it's already there.

Mr BROOKS - Is that where you'd have room A20 and A05?

Mr NUSS - Yes. That GLA at the end can also be used as a dining room or another learning area, but we've also got the servery there to use the front foyer as a formal area as well for assessments.

Mr BROOKS - Are there any other facilities out there that could provide that in that area?

Ms GERKE - You mean cafes?

Mr BROOKS - There are two areas I wanted to go with this. One is that if there's nothing out there, then we're teaching these kids to cook but we're not giving them real-life experience of working in a restaurant, so how do we create the environment as a learning outcome within that? If that happens, we don't want to send the corporate restaurant next-door broke in the process by putting them all through there -

Ms GERKE - I see where you're going with this.

Mr BROOKS - There isn't a right or wrong answer, it's more a consideration that we need to take into account.

Ms GERKE - Yes, and I could probably give you a broader answer. Providing food service and setting up restaurants and cafes would only be done if it was project work that the students were doing, so we're not seeking to offer a café as a business, we're seeking to provide students with opportunity. The partners in the trade training centre for the Huon Valley are local businesses and industry and some of those are obviously hospitality businesses, and part of that partnership is their providing work placements for students, so the training we give them in the centre is just that preliminary training to get them work-ready. A lot of their learning will happen on work placement. Food service would only happen if it were part of the overall learning program, so the learning would drive the food service rather than the other way round.

Mr BROOKS - Yes. I certainly didn't consider it to be an ongoing café-type thing but I suppose I was thinking more of Devonport, where they have one of the biggest commercial kitchens in the city as well as the only available floor space for major

functions, therefore there's no problem if the odd local charity wants to hold a fundraiser at that facility; they use the grade 10 catering students to help with the food preparation and service. If there's no facility like that out there, is that something you're considering as possible with these plans?

Mr PENNY - In relation to architectural functional planning, the kitchen has been located to be able to operate like that. There's a multipurpose area that has external access, so that can work as a cohort; it can be locked off but accessed independently, not through the rest of the building. Conversely, there is a servery area that Mike touched on that enables the facility to operate by management negotiation, really, more than anything, which does have the flexibility to do some front-of-house informal use. It's not part of the education curriculum at this stage, but the building design is such that if that community use or education requirement needs to happen later, it can be accommodated within the building.

CHAIR - Anything else?

- Ms GERKE I can speak about the big-picture reason for us going into trade training centres. The Polytechnic and the post-year 10 area in general is very interested in providing more post-year 10 opportunities to people in rural and remote areas and trade training centres are really part of that broader strategy. In 2009 the Polytechnic started working in partnership with quite a range of regional and district schools and the rationale behind that is providing further choices for young people in their local communities in vocational training. We're doing that largely by partnering with people in the local community so that teachers and service provision comes from that local community and makes it sustainable in the long term. Trade training centres run along those same lines in that people would be recruited from the local community wherever possible to provide training.
- **Mr HALL** Maree, what's the projected intake? You must have done some projections for those over the next few years and, as the chairman said, you've got a cluster of schools organised there, so what are the projected intakes?
- **Ms GERKE** I think the projected intake for the first year is around 50 students, and that's largely from the high schools in that cluster group in the local area. The opportunities, though, are probably far broader than that and harder to determine, because this centre will also offer training to mature-age adults in the community and those numbers are hard to determine until you actually start offering programs, but from my brief experience with the George Town and Scottsdale TTCs I can say that they are attracting some mature-age people and we do have some significant numbers there.
- **Mr HALL** And the integration's been okay between those groups? You've got quite a diverse mix of people, haven't you, with mature-age students and years 11 and 12?
- **Ms GERKE** Look, largely those classes are running at different times.
- Mr HALL Okay, so you separate them.
- **Ms GERKE** Yes. Not always, but largely they are because we have to prioritise according to the Commonwealth priorities, which are the grades 9-12 age groups, so they get first

- access to the trade training centre and then we work in access for mature-age adults around that. At the moment they are servicing that key target group.
- **Mr HALL** I suppose you have about half a dozen different disciplines here. What happens if you end up with very low numbers after a certain time? Have you experienced that at all during what you've done?
- Ms GERKE I'm sure we will experience that because one of the challenging things about working in remote communities is that there are small numbers of people wanting to do things. One of the things the centres have in them which is going to create broader opportunities is smart technology videoconferencing and virtual classrooms. What we're looking into at the moment for TTCs that are up and running is opportunities for students to link in via videoconference to specialists, even though they're in smaller groups, so there would be a person on site to provide that general learning support for students but there would be some videoconferencing flexible learning available as well. So we're looking at different ways we can offer learning apart from the traditional face-to-face opportunities.
- **Mr HALL** Just explain to me again the staffing. I think you mentioned using existing qualified people from within the community, so I presume you'll have a base or pool of people from within the Education Department there running the show. How does all that work?
- **Ms GERKE** That's right. Because we don't have people in these areas largely we've had to recruit and we've done that by putting out information into the community, providing induction, holding days to come and find out about what it would be like teaching, so I guess we've actively recruited from the local community. At the moment they're recruited by the Polytechnic but they obviously work very closely with the schools as well.
- **Mr HALL** So when this is up and running providing we approve it, of course how many Education staff would be on the ground there additional to what there are already?
- **Ms GERKE** Look, it would depend on the numbers. At Scottsdale and George Town we probably have three or four FTEs but some of them work between centres and some travel out of town at the moment, so there's a mixture. In some cases we're needing our teachers to mentor new people who are coming in because they have the industry expertise but no teaching background.
- **Mr HALL** And how many of those industry people would you expect to be engaged here roughly?
- **Ms GERKE** They wouldn't all be engaged full-time necessarily but I would think we'd engage up to five FTEs, so you might get some part-time people depending on the demand for the training.
- **CHAIR** On the back of those questions from Greg, I suppose the question arises of how you market the benefits of something like this to the broader community. It is pretty easy to market it in the schools where you have a captive audience. The other point I

- wanted to raised was the taster program that you mentioned in the submission in terms of grades 9 and 10. So, it is firstly about marketing to attract participants.
- **Ms GERKE** We have a very close working relationship within Tasmania from the Community Knowledge Network and therefore the Huon LINC, so we are looking at ways we can connect with local community groups who already have contact with local people to provide information about the services we offer. So it is very much about working with community groups and providing information about the training.
 - In George Town and Scottsdale, where we have them running, we work very closely with the job service agencies, with the local councils and with any community groups who are in contact with our target group. So we are looking at ways to access people in their local community rather than advertising in papers and things like that, which we don't think would be so effective.
- **CHAIR** And the taster programs? They have already been floated through the schools, I presume, in terms of some attraction for grades 9 and 10.
- Ms GERKE Yes. The three trade training centres that are operating in Bridgewater, Scottsdale and George Town were operational in about October last year, so we have provided one- and two-day taster programs for 19 students, and many of those have chosen to go on in the trade training centre. We have also had community open days a range of opportunities for people who are connected with students and young people to walk through the centre and see what is there. We are definitely looking at offering those tasters for this centre once it is up and running. In George Town and Scottsdale this year we have quite large groups of years 9 and 10 students accessing the centre and doing Certificate I in auto, metals, electro-technology and construction. We have about 30 at each site currently accessing that training girls and boys, which is great.
- **CHAIR** That sounds positive. Regarding the \$9.45 million for recurrent costs associated with the six facilities around the State, the submission suggests that that will mean roughly \$300 000 per year for each. Will that be sufficient as a recurrent contribution?
- Ms GERKE We have looked at that over the projected six years and it is sufficient. Most of that recurrent funding goes to operating the actual centre; it doesn't fund the teaching and learning. That is funded in the usual ways through Skills Tasmania or the Department of Education, depending on the student. So the operational funding pays to put the lights on and run the machines, and it will also pay for someone to be on site to engage with the community, coordinate training and assist teachers.
- **CHAIR** The disciplines are numerous. How were they decided upon? Here we are talking about Certificate III, and then for Certificates I and II there is another opportunity. My question is: how did you decide upon those 13 disciplines for Certificate III?
- **Ms GERKE** There are two things that helped us decide that. One is that there was a list of qualifications that we could choose from to offer as part of round 2 for trade training centres. We then liaised with the local community to determine which of those would be a priority for that local area and looked at employer/business support for those to provide work placements. So on the basis of those two things those qualifications were chosen as the most appropriate for that centre.

- **CHAIR** With regard to location of the facility, clearly the proposal is for construction on land owned by the department, which makes one step of the process fairly easy. Was any consideration ever given to coming to some sort of an arrangement with the council for vast areas of open space which they have on their recreation ground precinct, which involves a whole heap of open space adjacent to PCYC, for instance, which would then be on the back doorstep of both the primary school and the high school, without students needing to cross Wilmot Road or anything similar?
- Mr VAN DER VEEN I understand that prior to my joining the Polytechnic, there was a detailed assessment of possible potential sites within the Huonville area in the lead-up to seeking the Commonwealth funding that we have now obtained. Whether that site was part of that assessment, I cannot say. The decision to use the former school farm was seen as the best option because it was linked to the school but in a way that didn't encroach on or limit school operations. But being sited as close as it is to the centre of Huonville, it is within striking distance for community access. But beyond that, I am afraid I cannot comment on the depth or nature of the assessment that was carried out before this site was decided upon.
- **Ms GERKE** I believe that there was a look at a broad range of sites. It had to be near the school because of the grade 9-10 access. It is my understanding that the site near the PCYC was looked at, but it was decided against using it. I am not sure what the reasons for that were.
- Mr VAN DER VEEN I am aware that it was initially it was a proposal to locate the new centre within the existing school boundaries. The school is pressed for green space and for an open playing area for the kids and the location of the centre there would have limited the site for the high school as it stands now and would also have constrained the flexible development of the trade training centre and limited the possibilities for future expansion should the need arise.
- CHAIR I am familiar with and involved in the operation of the PCYC, and there is a project centre within that facility which provides opportunities for at-risk youth to come in for hands-on metal working, welding and all that sort of stuff. The PCYC building is right there on the doorstep of the high school, so when this project was first mooted I thought, 'Gee, there is an opportunity there to expand the project centre at the PCYC'. That is already kitted up with brand new, state-of-the-art machinery for some disciplines and that could have been expanded. There is another part of that facility which currently hasn't been developed it has been built; it is a big, open component of the building which hasn't yet been used. It may have provided an opportunity for some sort of colocation and extension of that building. Was that ever factored into the mix at all?
- **Mr VAN DER VEEN** I am aware that an area here was considered, and that is adjacent to the area you are discussing.
- **CHAIR** So just on this plan PCYC building would be somewhere there; there is this open field here and there is the swimming pool there. So there is a big area which roughly looks about the same area as that being proposed for this project.

- Me VAN DER VEEN I understand that some consideration was given to an area here but we are not familiar with the detail of that assessment. The issue was to maintain a close link between the trade training centre and the high school itself and my feeling is that developing the centre over here would not create as close a link between the high school and the centre as a campus, effectively as the more immediate development across the road.
- **CHAIR** Would you be able to confirm in writing for the committee at some stage just how those considerations played out and were ultimately dismissed, I suppose for want of a better description.
- Ms GERKE Simon's just pointed something out to me. That site was considered but I believe it might have been the proximity to the primary school that was one of the rationales for ruling it out because there would be mature-age adults accessing the site for learning as well. I know it was considered and ruled out.
- **Mr NUSS** There were discussions about police checks for every adult student who'd have to come into the facility and it just caused a whole range of issues.
- **CHAIR** That will be firmed up with some correspondence back to the committee, if you wouldn't mind. I'll just comment that it's very pleasing to see that you're going to capture stormwater for reuse on the site. My only question is what about recycling grey water, particularly for irrigation?
- **Mr PENNY** What we have is a biofilter, so all the stormwater is captured for use in the aquaculture; as grey water for toilet flushing in all the facilities; and the runoff in relation to waste water out of the aquaculture and soft-stand areas for the external horticulture areas is going into a biofilter. That's a natural process rather than putting it into the council sewers. So we've accounted for all the grey water, for stormwater catchment not for drinking, of course, but for all the other uses in relation to teaching.
- **CHAIR** Because you have the continuation of the little orchard there and other horticultural pursuits.
- **Mr PENNY** It's fully networked, so all the irrigation there can link into the stormwater. Of course we are limited by the volume and throughput but the aquaculture has the priority, there's a tank that's dedicated to grey water, and there's the capacity for it to be expanded, should we have an El Nino year like this year, for all that to be used as on-site irrigation as part of the school orchard and the like.
- Mr HALL La Nina, actually other way round.

Laughter.

- **CHAIR** Farmers pick you up on this. Any other questions?
- **Mr BROOKS** I presume your construction budget and building works would be based on cost per square metre.

Mr PENNY - Yes, they are. The costs that have been presented to you today have been prepared by quantity surveyors and they have looked at the detailed drawings and measured off all the quantities.

Mr BROOKS - So for a company to get a gig on this construction they would need to be on the approved government tender list at that price shown above.

Mr PENNY - Correct.

Mr BROOKS - Do you know how many are on that?

Mr VAN DER VEEN - I believe there would be upwards of a dozen prequalified at that level.

Mr BROOKS - I was talking to a tradesman in the Huon a couple of weeks ago and his business is struggling somewhat because he said there's not much going on around there. How would you be able to help local businesses?

Mr VAN DER VEEN - There may well be subcontracting opportunities for local contractors and that might be to the principal tenderer's benefit in terms of reduced preliminary costs and may help them to compile a more competitive tender.

Mr BROOKS - So the budget wouldn't have taken anything into account for that?

Mr PENNY - In terms of forming the estimate there is an allowance in there called a locality allowance that the quantity surveyors put in as a balance for the costs for metropolitan builders to build a large facility away from the city. There is nothing specifically that directs the tenderers to engage local subcontractors other than where we can, by way of design, incorporate elements such as local precasters that give them the best opportunity.

Mr BROOKS - Do you know how much that amount is?

Mr PENNY - No, not immediately.

Mr BROOKS - What is the life span of the building?

Mr PENNY - It is to the State Government requirements in that the base building has a design life of a hundred years. It has an educational design life of 40 years and obviously subsequent areas are subject to review.

Ms GERKE - It has a designated-use period of 20 years.

Mr BROOKS - Do you believe that the plans cover everything that you need in there?

Ms GERKE - Yes.

Mr VAN DER VEEN - The site has been developed following detailed consultation with the delivery teams who have outlined their functionary requirements in each of those spaces and they have been assimilated into the design.

Mr BROOKS - Would this absolutely fit the purpose of what you need it for?

Ms GERKE - We believe it will, yes, and as Mike said, we liaise very closely with the teams who provide the training and know about what they need in terms of space so that we make sure it is fit for purpose.

Mr NUSS - You will find that our trades training centres here in Tasmania are unique as far as trades training centres are concerned. We are the only State that is delivering multiple qualifications because of our diverse industries and the areas that we have that have their own trades in these areas. A lot of the mainland trades training centres are single or dual qualifications whereas we have included a lot of qualifications with multipurpose areas so that if numbers are down in one qualification, the community sees that there is a growing area and we can move that qualification to one of the higher ones.

Mr BROOKS - What about power supplies?

Mr PENNY - I am happy to elaborate on that a little for you. Going through the design process we did some energy modelling and in doing so, one of the key energy aspects is heating of the large spaces and so we looked at a whole range of options. The recommendation is that it is gas heated. The advantage in that is that there is lower carbon output for the life of the building. It is slightly higher in terms of initial capital cost but the running cost together with the carbon footprint is significantly reduced.

Mr BROOKS - Is there gas to the site already?

Mr PENNY - No. So it is bottled - it is reticulated. It is bottled which is then replaced and managed by the polytechnic.

Mr BROOKS - Did your cost modelling take that into account?

Mr PENNY - Yes, it did. Other aspects that are incorporated into this are things like heat recovery off the mechanical system; all the teaching areas, for instance, are double glazed. Heat pumps are very efficient.

Mr BROOKS - When you say 'heat pumps' is that reverse cycle?

Mr PENNY - Yes, so heating and cooling.

Mr BROOKS - I understand that it gets quite chilly in the Huon in winter; it also gets quite warm in summer. You have discussed some air flows. I suppose an example would be the commercial kitchen. Has that been taken into account?

Mr PENNY - Yes, it has. In the commercial kitchen, from a design requirement it's really important to provide tempered air because the airflow out of the exhaust hood can adversely affect the work environment and make it too chilly if that air is not tempered, so that has been accounted for.

Mr BROOKS - How?

- **Mr PENNY** There are heat banks on the air that's coming in and that provides an ambient working environment in the order of 20-21 degrees.
- **Mr VAN DER VEEN** I might return to your initial question regarding the discrepancy between the figure expressed in the Governor's message and the project budget. The difference lies in the professional fees and will be the figure in the message of \$6.1 million in the construction budget less professional fees.
- **CHAIR** All right, I appreciate that. Thank you very much for your time, both at the site and here for the formal hearing.

THE WITNESSES WITHDREW.