

## **Inquiry into the Energy Efficiency Homes Package** **December 18, 2009**

### **Background**

United Bonded Fabrics (UBF) is an Australian owned company which can trace parts of its business back to the 1870s when the David Galt Company manufactured a range of felted textiles made from natural fibres in Melbourne.

Continued investment in novel processing technologies and product development has been blended with decades of fibre processing know-how and the latest developments in fibre performance, allowing UBF to bring its customers a diverse range of high quality and high performance products crafted to meet exacting needs and deliver excellent value to its customers.

UBF enjoys relationships with many of the world's leading fibre makers which gives it access to the latest fibre innovations for incorporation into new and existing products. All of UBF's products are made from organic, recycled or virgin fibres using energy efficient manufacturing processes without the use of chemical or solvent additives.

UBF has always had a strong commitment to better living; sustainability and the environment. Every product is engineered to improve the physical environment of its customers through increased comfort and protection as well as reduce the cost and use of energy in everyday living without the need to compromise lifestyle.

Manufacturing processes in each of its 4 manufacturing sites around Australia generate little or no waste, and any production waste fibres are fully recycled.

UBF pioneered the manufacture of Polyester Insulation in Australia which it continues to sell under the Tontine Brand (under licence), and which meets all of the requirements of the current Australian Standards.

UBF has participated in the Energy Efficiency Homes Package and generally supports the objectives of the Program however we are of the view it can be improved and offer the following comments and observations in regard to the terms of reference.

### **Rebate size**

The rebate as originally announced was sufficient to allow participation from all sectors of the Australian insulation industry.

Subsequent changes announced on November 1, 2009 which reduced the maximum rebate from \$1,600 to \$1,200 have effectively excluded Polyester Insulation from the program.

Insulation prices are set by the manufacturers, and the final price is set by the installers.

Based on the Pricing Table 2 from the EEHP guidelines at <http://www.environment.gov.au/energyefficiency/insulation/homeowners/guidelines.html#table2>, there are a range of prices charged depending the materials used in the insulating media which reflect the cost of manufacture, supply and installation.

Polyester insulation is highest cost material shown in this table but remains more than competitive when life cycle and utility are taken into consideration..

Price per square metre			
Product	Straightforward Installation	Average	Complex or Remote Installation
	\$/m2	\$/m2	\$/m2
Cellulose	\$5.80	\$13.00	\$15.00
Glasswool	\$7.60	\$12.50	\$14.50
Natural Wool	\$10.00	\$16.00	\$18.40
Rock Wool	\$10.25	\$14.50	\$16.60
Polyester	\$11.70	\$16.00	\$18.40
Foil	\$10.00	\$10.00	\$11.50

- Polyester insulation is initially more expensive to buy, but has a lower cost to install, and is a lower cost option over the extended life and utility of the media;
- Polyester insulation is the only insulation media which can be re-used or recycled rather than requiring controlled disposal;
- Polyester insulation is manufactured primarily from recycled polyester fibres;
- The manufacturing process is comprised of blending these recycled fibres and uses heat to bond and stabilize the media into a hardy and resilient fabric; supplied in either batt or roll form;
- The manufacturing process does not require a high use of energy;
- There are no chemicals or resins used in manufacture and there are miniscule (at background environmental levels) VOCs released into the environment during production or from the finished product;
- Polyester is an inert and stable insulation media using heat to provide an intrinsic bond between fibres and does not rely on friction or introduced chemical adhesives or resins. Consequently it will not settle, nor is the adhesive bond prone to breakdown before the effective life of the underlying insulating media. Insulation made from Polyester is the only commercially available media which will remain effective for the very long life of the Polyester fibres used in manufacture;
- There are no toxic or harmful off gases released from polyester insulation and as such there is no requirement for respiratory PPE during installation;
- There are no carcinogenic resins used in the manufacture of Polyester Insulation and as such there is no requirement for manufacturing workers or installers to take special precautions during handling and use;
- There is no shedding of microscopic or nanofibres from the use of Polyester insulation to cause eye, skin or respiratory irritation and inflammation and as such there is no requirement for extensive PPE during installation;
- Polyester insulation is quick and easy to install which makes it both an efficient material for installation purposes, and reduces the time necessary for installers to remain in cramped, hot and confined roof spaces;
- The unique ability for polyester to remain in tact over a very long life span means that it is easy to add further insulation media should increased thermal resistance be required without the need for its removal;
- This unique ability to remain in a stable form for the entire life of the fibre makes it simple and easy to remove and negates the need for special precautions to deal with loose fibres which may be deemed to be injurious to the health of the homeowner;

*“Brookfield (formerly Multiplex) have been using Australian made polyester insulation products for many years*

*Research indicates that Australian made polyester insulation products are non irritant, non toxic, and odourless. Furthermore research indicates that there are no physical or health concerns associated with using the polyester insulation products.*

*The benefits of using the polyester insulation products on Brookfield projects include*

- *Ensures a safer and comfortable environment is provided for construction workers when using insulation products*

- *reduces manual handling issues as the product is lightweight*

- *reduces side effects such as itching after use*

*The product is re-usable which reduces the amount of waste and will not harm the environment.” Paul Breslin, OHS&E Manager, Occupational Health Safety, Brookfield Multiplex Limited.*

## **Regulation of Practices**

### **Product Performance**

The EEHP mandates performance of insulation materials in accordance with relevant Australian Standards.

There is no policing of the standard of materials being used and there is a flagrant disregard by unscrupulous installers of the requirements so long as the supplier is willing to give a statement that the goods comply whether this is substantiated or not.

Our company has been offered imported materials which purport compliance with Australian Standards. Samples have been obtained and tested in accordance with Australian Standards and found to be non-compliant in both thermal performance and labelling. See attachment 1 submitted on a confidential basis.

When results have been disclosed the general response has been to make these materials available to another buyer and offer product from subsequent shipments.

Our company has written to the ACCC urging them to take appropriate action both at the time the EEHP was announced and more recently, but with no response. A sample of correspondence is attached on a confidential basis as attachments 2 and 3.

### **Protection against Rorting**

From its outset the EEHP has been seen as a jobs creation scheme and a way to inject money into the economy first and a nation building, energy saving, and greenhouse gas emission reducing scheme second.

The scheme successfully attracted a large number of new entrants as a result of very low barriers to entry and easy access to money.

It operated, and still operates on an “honour system” with few checks and balances and limited application of sanctions other than denial of access to more funds.

It should be noted that since the maximum rebate has reduced to \$1,200 the demand for Polyester insulation has all but vanished. This indicates there is insufficient margin for installers to support this material at this level of rebate, and still offer “free insulation” which has become the overwhelming driving force in the industry.

Based on the Pricing Table 2 from the EEHP guidelines at <http://www.environment.gov.au/energyefficiency/insulation/homeowners/guidelines.html#table2>, the cost and premium paid for “average” and “complex/remote” installations seem to be disproportionate for some materials, with the premium for polyester insulation the lowest in comparison to all other forms of bulk insulation.

Product	Price per square metre						
	Straightforward Installation	Average			Complex or Remote Installation		
		\$/m2	\$/m2	Premium	\$/m2	Premium	
Cellulose	\$5.80	\$13.00	\$7.20	124%	\$15.00	\$9.20	159%
Glasswool	\$7.60	\$12.50	\$4.90	64%	\$14.50	\$6.90	91%
Natural Wool	\$10.00	\$16.00	\$6.00	60%	\$18.40	\$8.40	84%
Rock Wool	\$10.25	\$14.50	\$4.25	41%	\$16.60	\$6.35	62%
Polyester	\$11.70	\$16.00	\$4.30	37%	\$18.40	\$6.70	57%
Foil	\$10.00	\$10.00	\$0.00	0%	\$11.50	\$1.50	15%

Based on the average prices/m2 remaining in a relatively narrow band, and the use of polyester as an insulating material would seem to provide the least opportunity for rorting of the Program by installers padding their margins.

We are unaware if there has been any investigation into the disproportionate cost premium highlighted above.

The reduction in maximum rebate can be described as doing nothing to reduce the high margins of installers, and only serves to remove Polyester, a superior and the only sustainable insulating material, as a viable option for householders through the EEHP.

### **Prices**

The price of polyester insulation has remained relatively consistent from the beginning of the program and is subject to strong competition between manufacturers as well as distributors and retailers.

The price of imported Fibreglass offered to our company from China increased by some 70% over a 2 month period from August to October 2009 as a result of increased demand and unfettered access to this market. It should be noted that none of this product was compliant based on samples we tested.

### **Imported Insulation**

Australia's EEHP has stimulated demand from numerous countries around the world.

The increase in demand, even from a high source cost country such as the USA has been sufficient to have been remarked on by the President of that country.

*"Manufacturers like Owens Corning, whose CEO is here today, they win because they produce the stuff (insulation). And those are American jobs. And right now - I just heard from the CEO, because Australia put an incentive to do exactly what we're talking about, they've seen a huge increase in their volume of exports - exports to Australia." US President Obama, 15 November 2009.*

Unfettered access to the Australian market by imports dramatically reduces the impact of the stimulus for the Australian economy, dissuades long term investment in manufacturing infrastructure and denies jobs to Australian workers.

Imported materials which do not comply to Australian Standards for performance or in regard to health defeat the objectives of the EEHP, are unlawful and a dangerous waste of taxpayers' money. They are unpoliced and reflect poorly on this countries ability to protect its economic borders and system of rules and regulations.

### **Value for Money**

The EEHP represents a unique and rare national opportunity for an economic, community and environmental benefit which does not cost money to the tax payer in the long run as a result of reduced energy usage and cost.

The value that can be delivered is in inverse proportion to the money that is squandered on over priced underperforming insulation materials and poor installation practices which negate the cost and effort of insulation.

Despite the initial higher cost of Polyester insulation, this material offers a very sound purchase proposition when the overall life cycle and utility of the material are taken into consideration. The EEHP in its current form encourages lower cost short term “disposable” products rather than long term sustainable insulation solutions and practices.

*“For instance, failure to butt all ends and edges of batts to give a snug fit could result in 5% of the ceiling area not being covered, losing up to 50% of the potential insulation benefits”.*  
*Sustainability Victoria, PP19,*

<http://www.sustainability.vic.gov.au/resources/documents/eshousingmanualch07.pdf>

The Polyester Insulation Manufacturers Association of Australia (PIMAA) has advocated for a sliding scale rebate which recognizes the different value proposition offered by the different types of insulation available to the householder, as well the introduction of a co-payment to raise the interest and commitment of householders in the quality of materials and workmanship that is being installed as a result of the householder’s participation in the financial cost and benefit decision for insulation. Overall these measures should not only increase the prospect of a better outcome for the householder, it should reduce the cost to the program, and allow the available funds to be spent on a larger number of eligible houses.

### **Industry Consultation**

The EEHP was announced and implemented with minimal industry consultation.

Industry was encouraged to support the program with increases in employment and investment in manufacturing capacity in the full certainty of a program which had a designated level of funding and would run for a number of years.

Our Company and all members of PIMAA followed the government direction and increased training and employment. Millions of dollars were committed and spent on Capital Equipment programs to increase domestic manufacturing capacity which will progressively come on line early in 2010. Millions of dollars were also committed to purchase materials for production and to fill a pipeline for supply. A significant cash outlay was required to fund new employment and training, purchase of capital equipment and raw materials as credit terms are generally not available for this type of purchase. Our Company and all PIMAA members have made a strong cash commitment to EEHP in anticipation of a future return.

There were a small number of Industry Roundtable meetings held at which the government line was promoted. There was little if any effective dialogue with PIMAA or its members and the Minister has not responded to requests for a meeting to discuss the issues surround the scheme.

The changes to the EEHP which were announced on November 1, 2009 were again made without consultation, and have had a significant detrimental effect on the Polyester Insulation industry in Australia, which is now effectively excluded from the Program.

The impact of these changes needs to be seen in the context of the enormous change to the normal rational decision making processes of the consumer and the behaviour of the market as a result of the artificial economic stimulus by the government.

The EEHP has had an enormous take up because it offers “free” insulation rather than necessarily because of the utility or efficacy of the program as a nation building tool or as a mechanism to reduce energy consumption and greenhouse gas emissions.

The reduction of the rebate cap has resulted in a flight of new installer entrants away from the initially-more-expensive-to-buy Polyester Insulation; driven by short term profit imperatives, and has also impacted the competitiveness of the industry's traditional installer customer base which warrants it work, against unscrupulous operators and cheap non-compliant imports.

Consequently the demand for Polyester insulation has significantly reduced under changes to this Program. This has already resulted in heavy job losses for newly trained production employees, a significant increase in underutilized capacity with more capacity to shortly come on line, and a significant cash and cost drain on our business and others like us who complied with the government's urging to install additional capacity and ramp up for the Program.

The Polyester Insulation industry will have increased its production capacity in the order of an additional 200% by the end of the first quarter of 2010, much of which will need to be mothballed after commissioning unless there is a further change to the program.

The Polyester Insulation industry is now in a significantly worse predicament than before the Program was announced, and the additional burden from the investment to support EEHP could result in the failure of some of these businesses.

It is worth noting that as late as 17 November, 2009 there have been further significant changes to the program without any consultation or advice from PIMAA or any of its member companies, despite comments that consultation with stakeholders and the insulation industries had taken place.

### **Conclusion**

UBF remains strongly committed to the Polyester insulation industry. We believe that a properly implemented and regulated EEHP which takes into consideration the lifecycle utility and sustainability of materials rather the short term purchase cost will provide significant benefits for the economy, the community and the environment, and will deliver strong dividends on the investment in public funds.



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