**Title:** AFI Industry Data Report – a Beginning. Where To Now ??

This presentation will talk about the findings and issues from the Industry Report, discuss what next steps are in relation to the Industry Report and then a broader discussion about where to now for the AFI as an industry representative body.

***If you haven't seen the Industry Report, contact your AFI State branch Secretary and ask for a copy.***

The Australian cast metal industry has faced multiple challenges in the last decade. The closure of automotive assembly, significant increase in the importation of castings and cyclic declines in the mining, agriculture and general engineering industries has resulted in the closure of many foundries and reduction in the total tonnage of metal cast. Wide spread and long lasting drought continues to have a significant impact.

Though many challenges still exist, and many foundries are reporting a significant tightening in the market in the last 3 months, we are now in a period of relative stability. We have 3 challenges that are common across the sector – access to skilled personnel, training of personnel, and the sky-rocketing energy costs.

It continues to be difficult to attract skilled personnel into our industry, with positions for apprentices, labourers, metallurgists remaining unfilled in several foundries around the country. The State based funding model is a blocker for some as it remains a financial challenge to send apprentices to Queensland for example. The return of apprentice training in Victoria under GOTafe with a different model of training delivery, gives hope that we may have reached a turning point.

The Energy Pricing chart was presented to a joint AFI(Vic) / ADCA meeting by Tennant Reed, AIG National Energy Policy Advisor. The rapid escalation of energy prices from around 2010 is self-evident. The proposed change of Tariff in Queensland has been deferred until July 1, 2021 but is effectively a stay of execution for some of our Qld based foundries.

In this environment, there was an obvious and growing need for the AFI to engage with our political decision makers - a need to influence policy and decisions that deliver better outcomes for our industry. This has resulted in the collation of the AFI Industry Data Report – an attempt to summarise who we are in quantifiable terms and to demonstrate the collective value of our industry to Australian society.

***Importantly we all need to use the report findings – meet with our local MP's and let them know who we are, what we do, and the challenges we face.***

In compiling the report the first obstacle to deal with was that of confidentiality. In consideration of this, it was determined to limit the scope of this initial report, so that we could build confidence in the process with all our member companies that we're asking to share business sensitive data. Given my standing as a retired foundryman with no vested interest in any existing foundry, it was determined that I would be the only person to ask for and collate data. Data is reported by State with no further discrimination. All collated data is indicative, as various sources of information have been used in some cases data has been estimated based on these sources.

***Largely data is limited to AFI member companies, which raises the question of do we want AFI data or metal casting industry data ??***

The report covers Annual Tonnage of Metal Cast (Ferrous and Non-Ferrous). The Number of Employee's and Apprentices, Energy Costs, Sand Cost, and Annual Value of Castings Sold.

*Annual Tonnage of Metal Cast - Ferrous*

34 respondents, Nationally 103,000T cast, which I conservatively extrapolate to 110,000 T pa.

*Annual Tonnage of Metal Cast – Non-ferrous*

15 respondents, Nationally 8113T cast. This does not include 2 high volume diecasting operations, thus my view that the total non-ferrous would exceed 35,000T pa.

*Total Number of Employee's*

34 respondents. Nationally 1691 directly employed in the cast metal industry. This does not include Nissan and Mett or any of the Supplier company personnel, so a conservative estimate would give 2000+ employee's.

*Total Number of Apprentices*

34 respondents. Nationally 33 apprentices, which includes moulders, patternmakers and other trades. Notably no apprentices reported for WA and NSW – potentially a reflection of State based funding for training.

*Electricity Costs – cents per KwH*

32 respondents. Not such a simple thing to ask with responses covering Peak rates, Off-Peak Rates, Furnace Tariffs, General Tariffs, Total Annual Cost, Total Annual KwH's used and more. I've attempted to convert this confusing array of data into the one simple metric of cents per KwH. Stresses that the data reported is indicative, the interest is in the State to State variance and within State variance.

*New Sand Cost per Tonne*

29 respondents. Similar to the Electricity Cost data, we need to use caution with this data – are we comparing apples for apples ?? Again taking the view that the data is indicative, the important takeout is the State to State variance and within State variance.

*Annual Sales Value of Castings*

29 respondents plus a further 5 estimated. Nationally $500 million pa. Given that at a recent site visit Nissan reported $100 million pa casting sales, a conservative estimate of the value of metal cast in Australia pa is $ 0.75 billion.

*Data Summary*

When talking to your local MP, the summary of this report to convey is 2000+ employee's, 35+ apprentices, $0.75+ billion in annual sales, supporting customers in Mining, Agriculture, Defence, Rail Transport, Road Transport, General Engineering, Energy and Automotive industries. Stress the strategic importance of our industry - behind every Advanced Manufacturing economy is a metal casting industry.

For Electricity Costs and New Sand Costs foundries need to explore the causes behind the variances that we see. Is this an opportunity for your business to reduce costs ??

*Where To Now – Industry Report ??*

In many ways the Industry report is a launching point for further discussion and analysis. Does the data advance our cause as an industry ?? How can this data be better utilised to advance the causes of our industry?? Should we commission a more nuanced industry survey ?? Should we continue with the same methodology ??

Our political decision makers use the IBIS Report C2121 Iron and Steel Casting in Australia, and C2141 Non-Ferrous Metal Casting in Australia to understand our industry. It is our strong view that these IBIS reports do not accurately reflect our metal casting industry. This disconnect will need to be analysed.

Given that several of our AFI member companies are also Australian Industry Group members, the AFI has access to engage with AIG. They have considerable resources and experience with advocating. A level of engagement with AIG has already occurred with significant opportunity to do more in this area.

Individually we should meet with our local MP – educate them about the importance of the cast metal industry.

The AFI National Council has determined to proceed with another Industry Report for 2020 using the same methodology as done for this initial report. Consideration will need to be given to the questions which will be asked. Your input is needed to formulate these questions.

The aim will be to have an annual update to the Industry Report. Given this, consideration will be given to developing a methodology that may include assistance from one of our Tertiary Education partners (eg: Deakin University).

*Where To Now – Your Industry Body, AFI ??*

Such questions also lead to reflection on how the AFI National and each State branch can better serve the cast metal industry. To date my activities as President have largely been ad hoc, but based on my belief that the AFI National needs to rebrand itself.

*Rebranding*

We know that our industry is technologically advanced, innovative and requires considerable problem solving ability. However the general public perception of metal casting is that of a low tech, dirty, polluting industry.

We need to rebrand our industry, to give the public and our politicians a reason to value metal casting, thus giving us the social licence to continue to operate.

We need to define the industry as a career destination of choice, progressive and dynamic, combining the latest technology with the finely honed manual skills of our moulders and patternmakers.

*Carbon Emissions "How To" Manual*

One of the tools to help with this rebranding process, is the commissioning of an AFI branded manual that can be used by Foundries to quantify their carbon emissions. I have been asked why do this, when there are free on-line tools available. This is just one step in changing perceptions of our industry – a clear indication that the metal casting industry understands the current environmental challenges and is prepared to address these challenges.

The manual is almost ready for publication with a few more examples of actions taken by Australian Foundries to be added. The manual will be made freely available on the AFI website.

*Sustainability Statement*

Another step along the rebranding pathway is the development of a Sustainability Statement. The aim will be to have a document freely available on the AFI website that is supported by all AFI members. It will demonstrate the very strong recycling credentials of the metal casting industry.

The Circular Economy is a term used to describe an economic system aimed at eliminating waste and the continual re-use of resources. The metal casting industry has been operating in this manner long before the term was created. We need to capture this in a statement that does not shy away from the fact that we are a high energy use industry.

The Sustainable Steel Council in NZ is a steel users group that aims to promote use of steel and advocate for causes relating to their members with NZ political decision makers. A representative from SSC presented to the recent CTNZ Conference in Wellington which I attended. He was very happy to share his story of the direction they have taken to promote their industry.

The particular interest for me was that for all their documentation you could replace the word “Steel” with “Cast Metal” to give a strong representation of what AFI Sustainablity documentation may look like.

*Training and Development*

The successful Queensland based facility has been our only apprentice training option for many years. However the State based funding model for apprentice training has made it financially more difficult for non-Qld based foundries to have apprentices.

With credit to the Victorian Government, this year we have seen the re-introduction of Foundry Trade apprenticeship training through GOTafe. Importantly the training model offered by GOTafe presents the potential for expansion of apprentice training into other States.

Once the Cert III level training is properly established, we will pursue Cert IV level training. The aim will be to develop a training pathway for our new generation of Foundry Trades people.

*Foundry In a Box / Future Foundry Kit*

The challenge remains in attracting young people into the metal casting industry. The American Foundry Society (AFS) have a training tool that consists of mould boxes, moulding sand, pattern, melting pot and associated tools. It is used to introduce school age children to the principles of the metal casting process. Under direction, the children produce the mould, prepare the melt, pour the metal, knock out and dress the casting. They walk away with a bright bit of bling, knowledge of the basics of metal casting and the spark that may grow into a career in metal casting.

The UK have a similar version, and they and the AFS are happy to help the AFI develop our own kit. I would envisage each State having their own kit which could be loaned out to Foundry members to use as required. Potentially some of our recently retired colleagues could assist with this.

*AFI – Where To Now ??*

Each of these steps by themselves will not change perceptions of our industry. Collectively though we can start to nudge the needle. This will be a multi-pronged approach, requiring all of us to talk up our industry at every opportunity.

This year under our AFI(Vic) President Amber Maxwell, we have launched a quarterly newsletter. We are using the catch-cry *“Casting Industry – the career choice of makers, creators and innovators”*. For me this epitomises who we are. Promote this image with your network of friends, family and workmates.

**What else should we be doing ?? Direction from you will inform and define the activities that your Industry Body will pursue.**