

# Circulating opportunities



Following Sumitomo Heavy Industry's purchase of Amec Foster Wheeler's circulating fluidised bed business, *TEI Times* caught up with Tomas Harju-Jeanty to discuss the deal and the opportunities it presents. **Junior Isles**

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It is always a big decision to spend hard-earned money to acquire a new business, especially during challenging market conditions. But there are times when some acquisitions make perfect sense for all involved. According to Tomas Harju-Jeanty, CEO at the newly formed Sumitomo SHI FW (SFW), the recent acquisition of Amec Foster Wheeler's (Amec FW) circulating fluidised bed (CFB) boiler business by Sumitomo Heavy Industries is one such deal.

"While there has been less consolidation in the industry than I would have expected, I think that Sumitomo was ready to take the opportunity when it appeared. One of the biggest reasons was the long-term friendship and cooperation that Foster Wheeler has had with Sumitomo Heavy Industries for around 20 years," he says, adding: "During this period the Foster Wheeler CFB has become the core business for Sumitomo's Energy and Environment business area."

The sale of Amec FW's CFB boiler business, the largest part of its Global Power Group (GPG), closed at the

end of June and will ensure the continuation of Sumitomo's own CFB business. Since becoming a licensee of FW's boiler technology in 2001, Sumitomo has sold 66 FW boilers under the license.

SFW believes that with both large scale and small scale CFB technology, it is well positioned for growth, even in a power generation market that has been sluggish following the global economic crisis that began in

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"This is not an insignificant number considering there about 478 Foster Wheeler CFBs in total sold today. So it's very close to their business," notes Harju-Jeanty. "And the long term relationship helped integration. The companies know each other, the key people know each other and the collaboration has been tight over so many years. It's only been two months but the integration is getting there in an efficient way."

Geographically, the deal makes sense. Amec FW CFB business's global set-up had four operating units – one in Asia, two in Europe and one in the US – and the deal helps Sumitomo to expand beyond Asia.

"Sumitomo had operated mainly in Japan and wanted to expand their global footprint beyond Japan and Asia. GPG's global CFB operation, execution and sourcing networks provided them with a good route to deliver that strategy."

In terms of technology the two companies also shared the same thinking. Both are firm believers in the opportunities that CFBs present in the solid fuel markets – whether fossil or renewable solid fuels.

Harju-Jeanty points out that during the licensee period, the two companies enjoyed "a very close" relationship – one which the former President of Power Systems and Technology at Amec FW's Global Power Group says was closer than was typical, especially in terms of technology.

"We'd been working on projects and quite closely on common product development. Over the past several years, the Japanese small biomass generation feed-in tariff has seen Sumitomo developing smaller scale biomass CFBs to a larger extent than FW typically pursued. FW focused on larger units and the scale-up of the technology," said Harju-Jeanty. "With their domestic market calling for smaller-sized biomass units, Sumitomo has not been a licensee that simply executes what the licensor provides them [with] in terms of technology, but developed a competitive smaller size product that we commonly benefit from."

2008. The demand for energy and power generation technology has historically been driven by GDP growth and although the link is significantly weaker now than it has been in the past, economic growth is still a main driver.

"After the 2008 crisis, we recognised that when economic growth started to take place in 2010/2011, energy demand was not exactly in synch with GDP change any more. But it's still obvious that GDP growth reflects economic activity, which drives energy consumption. With growth not being so aggressive in Asia and stalled in the West, it creates a challenge" Harju-Jeanty observes. "However, we think that CFB has good opportunities even in this market environment."

In terms of burning solid fuels, the flexibility of CFB technology is unparalleled. CFBs are able to burn a broad range of solid fossil fuels such as hard coal, lignite, anthracite and petcoke, as well as biomass and recycled and waste fuels.

Harju-Jeanty believes this flexibility will see CFB taking a larger share of the solid fossil fuel market. "Even if GDP growth, one of the main drivers, is not as strong as it was during the boom years of 2005-2008, we think that our opportunity comes from the technology being able to take a larger share of the total solid fuel market."

"Environmental concern is also a key driver. CFBs provide a highly efficient alternative for utilising renewable solid fuels. The ability to co-fire coal and other fuels with biomass, means we can reduce base power carbon emissions by up to half compared with conventional generation."

This, he says, could see the technology significantly increase its share of the fossil fuel power generation market over the next 5-10 years from around 10 per cent today. "Whether it grows to a 20 or 25 per cent share is always hard to say. But due to its ability to provide cost-efficient, reliable base load production in markets that need to support renewables, we believe that

its environmental performance, fuel flexibility and operating reliability will allow us to grow our share of the fossil fuel market."

Harju-Jeanty sees opportunities in several regions. For countries that use fossil fuels, key markets will be Asia and the Middle East. "Now that we have taken CFB technology to supercritical utility scale, we are working on a number of opportunities with generators that develop high efficiency, supercritical generation in these areas. So several Asian countries, Saudi Arabia, Turkey and other Middle-East countries – are going to be our key focus areas."

SFW also noted it has been awarded a contract aiming to build two 550 MW lignite-fired supercritical units for a large utility's power generation facility in Central Europe. According to Harju-Jeanty, the contract demonstrates that the benefits of supercritical CFB technology is increasingly being recognised in Europe. "Also in Eastern Europe where fossil fuel firing is still a key part of the mix, we are working to add opportunities."

In Europe, biomass has provided the main opportunities for CFBs and Harju-Jeanty expects this to continue. Japan and Korea will also continue to offer biomass opportunities for the new company, he adds. "The biomass and recycled and waste fuel market is no longer strictly European and US but is also very much an Asian market for us today."

Looking at other potential markets, Africa is also on the radar. "Opportunistically, it is a very interesting market for us."

It is clear that what some see as market challenges, SFW sees as opportunities. "Our job is to provide the solution to the operator's challenge, explains Harju-Jeanty. "When a generator comes to us, he has two ingredients in his business – the heat from the fuel available to him, and the power he has to generate from that fuel under his contract. Our job is to create a technical solution to utilise the fuel in the most reliable, efficient and environmentally optimised way."

It is an opportunity that he relishes as head of the new company. "We are really very happy about this combination of Foster Wheeler's CFB business with Sumitomo Heavy Industries. We are strongly at home with SHI – we now have an owner that is a technology company... and operates in exactly the same way as us from the former CFB part of the Foster Wheeler Global Power Group."

"Sumitomo's approach to technology, R&D and product development supports our business very, very nicely."