Japan Biomass Power Market

日本バイオマス発電事業会議 18 - 20 May 2015 - Tokyo, Japan

POST EVENT REPORT



Post Conference Report on Japan Biomass Power Market 18 – 21 May 2015, Tokyo

Japan is at the cusp of significant growth and investment in the bioenergy sector.

Since the initiation of the FIT in 2012, at least 18 new power plants, utilising woody biomass, have taken advantage of government incentives and are now operating. Presently there are at least 55 power stations in operation, utilising wood and PKS representing over 400 MW of installed generating capacity. By the end of 2016 (and considering only announcements of authorised and approved projects under the FIT) another 20 power plants are expected to be commissioned and fifteen more by the end of 2017. By 2025 as many as 130 power plants could be in operation, representing over 1 400 MW of installed capacity.

This impressive growth was demonstrated in several conference presentations. We heard from First Energy Service Co. Ltd as well as Green Thermal Co. Ltd on their own investment and expansion plans within Japan, as well as from the trading houses, represented by Sojitz, Sumitomo Corporation and Itochu, all of whom touched on their own plans for biomass power generation in Japan.

Such prodigious growth is not without its challenges. A critical challenge and one much debated and discussed at our conference focussed on feed stock. Mr Kamikawa of the Japan Paper Association pointed to issues in sourcing thinning wood from domestic sources, a theme expanded in the presentation by Ms Miyuki Tomari of the Biomass Industry Society Network

and further emphasised by Mr Kusano of Sumitomo Corporation. There are real concerns that there is insufficient realistically available biomass in Japan to support capacity expansion plans. The implications are clear. Many planned projects may not go ahead, and some that do may go out of business.

There is an alternative; import biomass from abroad. In my own presentation focussed on Japan's need for imported biomass emphasising the requirements of Japanese importers and how and where this could be matched to regional biomass supply. Presentations from PVM and Itochu providing trader's perspectives on biomass and market development in North Asia and Mr Paul Selders presentation from the Nolan Group, providing specific examples of biomass availability in South Africa and the Western United States.

Discussion at the conference also focused on the relative merits of different types and forms in which this biomass from abroad may come. The presentation from Sumitomo succinctly explained the current biomass

options on offer, and that of Itochu emphasised the growingimportance of PKS as a viable biomass for energy generation in Japan, The joint Sojitz and Arborflame presentation and that from Zhilka demonstrated that black pellets are available, and are being seriously considered for the Japan market. Dato Lim further



expanded on the theme by focusing on PKS, and EFB as viable biomass sources including viewpoints on how EFB as a fuel source may be improved through washing or through the application of torrefaction technologies. Mr Edze Diemer of ECN brought an added dimension to the biomass debate with his presentation on wood co-

firing and the technologies available to those looking to co-fire white pellets.

Closer to home Michael Paik of Enerone noted refuse derived fuel, plastics and other municipal solid waste are also alternative biomass sources available to the industry, particularly given that waste incineration and energy generation is such an important element in Japan's renewable energy profile. Dr Bartenstein also challenged us with a thought provoking presentation focussed on combined heat and power and carbon foot print reduction, which for many is the 'raison d'être' for biomass energy generation.

The impending development of Japan's demand for biomass brings with it another challenge. Government requirements include demonstrating that all biomass is sourced from sources that are legal and sustainable. The presentation from Mr Jiro Omura of Control Union Japan, addressed issues of biomass specifications and touched on the subject of sustainability and legality for

biomass, highlighting that the current regulations are not necessarily clear on how sustainability should be demonstrated and that a number of approaches may be acceptable. The Ekman presentation expanded on this issue further by suggesting that existing mechanisms within Europe, particularly with respect to the Sustainable Biomass Partnership, should be considered as viable platforms on which to build an industry focussed on sustainable supply.

These and many other issues besides are the key challenges faced by the ascendant biomass energy industry in Japan. The conference, attended by more than 240 individual delegates and represented by more than a hundred companies, provided the perfect forum to discuss and debate these issues.

It was perfectly timed, for this is an industry at the inception of potentially significant growth and now is the time for all those whom will make this industry, to come together and shape its future.

