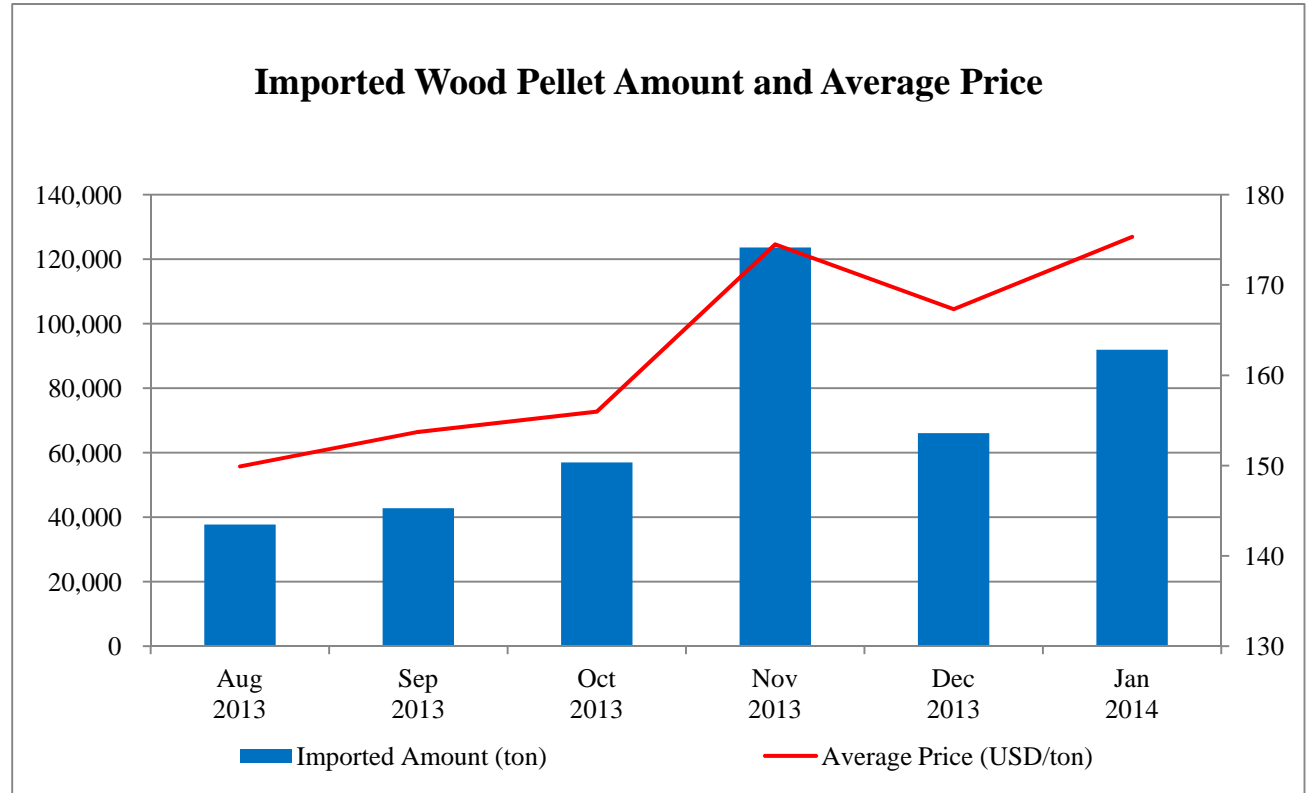


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Price Trend

In recent six months, imported wood pellet prices have increased 17% from 149.9 USD to 175.3 USD. The main reason for this wood pellet price rise is an increase in the consumption of wood pellet. The amount of imported wood pellet was nearly 40,000 tons in August 2013, and 123,628 tons in November 2013. This increase was not only because of seasonality, but mainly from the introduction of co-firing technology by Gencos, which facilitated wood pellet consumption explosively. The cumulative imported wood pellet amount from August 2013 to January 2014 is 419,233 tons whereas during the same periods the required amount of the Gencos' co-firing is estimated as 785,000 tons based on their wood pellet bidding notices. This fact supports the imbalance between demand and supply even if it is unclear how many bids are unfulfilled.



Co-firing Technology

Applicable biomass fuel varies depending on the boiler type. For ash fusion temperatures, the Pulverized Coal (PC) boiler requires higher than 1,150°C, on the other hand, the Circulating Fluidized Bed Combustion (CFBC) boiler requires only 900°C. If this requirement is not satisfied properly, slagging and fouling are generated in the boiler so that it is impossible to operate the plant. This characteristic is very important since it is also the criterion to identify the usable fuel. For example, the PC boiler is not able to combust EFB (Empty Fruit Bunches) since the ash fusion temperature of EFB is almost 900°C while the CFBC boiler is able to combust EFB. Until now, only two power plants in South Korea, Yeosu No.2 and Donghae No.1-2, use CFBC type boilers. The other seven plants¹ that are able to co-fire are limited to combusting only wood pellet among biomass, but these occupy almost 96.5% of the entire co-firing plant capacity based on pure coal consumption. This supports the contention that wood pellet consumption by co-firing will be sustained or increased while and other kinds of biomass such as EFB, woodchip, and PKS (Palm Kernel Shell) will be consumed much less.

Deregulation Issue

South Korea's biomass market is very narrow due to strict import regulation by the government. Since 2010, South Korean Gencos have pushed to ease the regulation which constrains biomass importing because bio fuel has been hardly supplied domestically and only wood pellets have been allowed for import. After the RPS (Renewable Energy Portfolio Standard) introduction, the needs of other biomass imports have been expanded as Gencos were busy trying to adopt environmentally friendly technology that enables quick installations like biomass combustion. Moreover, 23.8 million USD of RPS penalty was imposed in 2013 as six power supplying subsidiaries of Gencos recorded only about 60% fulfillment. Finally, the "Act on the Promotion of Saving and Recycling of Resources" which allows the import of other biomass pellet was amended on December 26th 2013, and it will take effect on July 22nd 2014. However, only pelletized biomass is allowed to be imported and strict inspections² will be imposed to ensure safety.

ENERONE

ENERONE is Korea's leading biomass/waste-to-energy enterprise. Founded in Aug 2007, with proprietary technologies in heat generation, its core business is the manufacture, installation, operation of equipment for the production of steam and electricity. It also serves as agent for biomass pellet manufacturers interested in South Korea. For further information, please contact EnerOnekr@gmail.com or visit ENERONE's web site, <http://enerone.co.kr/eng>

¹ The seven power plants are Samcheonpo, Yeongheung, Boryeong, Taean, Hadong, Dangjin, and Honam plants.

² For example, formaldehyde levels will be tested to filter the pellets which are made from waste furniture.