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AC Price Hikes on the Horizon?

Higher Costs May Hit Consumer Pocket-books

Based on the general structure of room air conditioners (RAC), raw material costs can be broken down as follows: 30% copper, 45% steel plate (including steel plate used in compressors), and 15% aluminum, with the remaining 10% other materials.

According to the data from the World Bank, the average price of copper in 2008 was US\$ 6,956/ metric ton (mt). While this fell to US\$ 5,150 in 2009 due to lower demand and expanded supply, the price climbed to new heights in 2010, recording an average of US\$ 7,323 for the year. The price has continued to soar in 2011, breaking the US\$ 10,000 mark in February.

The price of steel plate, which was US\$ 610/mt in November 2009, shot up to US\$802 by November 2010. Major steelmakers in Japan are set to raise their prices as soon as next month due to higher raw materials costs. The story is much the same with aluminum, which was an average of US\$ 1,665/mt in 2009, but went up to US\$2,163 in 2010. The price has continued to rise this year, getting close to US\$ 2,500 in January. Demand for aluminum is soaring, especially in China, which consumes one quarter of global production. Analysts are predicting that prices will reach the US\$ 3,000 level sometime this year.

The price of crude is an important barometer of general price inflation. In Decem-

ber 2010, crude oil prices averaged US\$ 90 a barrel. While oil prices remained fairly stable for much of 2010, higher prices in the fourth quarter of 2010 led to an overall rise of 20% in 2010. With world markets on edge over the continuing unrest in oil-rich North Africa and the Middle East, oil prices moved to over US\$ 100 a barrel in late February for the first time since 2008.

Interviews with leading air conditioner and refrigerant manufacturers around the world revealed concerns over the spiraling cost of raw materials. Many believed that higher raw material prices would inevitably impact air conditioner prices in 2011.

Raising the price of air conditioners has

become a hot topic in China, the world's air conditioner factory, where the prices of key components and raw materials needed in air conditioner production have been trending upward since the second half of 2009.

In China, compressor prices jumped by 5 to 10% at the end of 2010, the price of various steel plates increased by 45% on average, and the price of copper more than doubled compared with the same period of 2009. These materials and components make up some 90% of the cost of an air conditioner, and the higher costs will eventually be reflected in the final costs of finished products.

Refrigerant prices also increased sharply in 2010. This is true for

R410A as well as R22. The price of R22 at the end of 2010 was about three times higher than the price at the beginning of the year. Regulations on the production of R22 are becoming increasingly strict, leading to growing uncertainty over the availability of future supply. Notwithstanding the spiraling price of R22, it is now becoming difficult to secure stocks of the refrigerant.

Several reasons are behind the climbing prices of raw materials and components. First, the price of crude oil has been steadily rising, and the recent political upheaval in North Africa and the Middle East has aggravated this trend. Second, production costs in China have sharply increased in the last few years, due in large part to higher labor costs, a higher consumer price index, and currency inflation. Because China not only produces some 80% of the world's air conditioners but is also the largest air conditioner market in the world, rising production costs in China

have a substantial impact on the global air conditioning market. Third, many air conditioner manufacturers in China have increased their production capacity, which has further intensified the competition for raw materials and key components. Fourth, the shortage of copper and the weakened U.S. dollar have stimulated further hikes in the price of raw materials.

Soaring costs have put pressure on air conditioner manufacturers. In China, although production increased by double-digits in 2010, gross profit at several leading manufacturers rose at a lower rate than revenues.

Air conditioner manufacturers have tried to control production costs and keep prices stable. Some manufacturers have expanded their production capacity and invested in advanced technology to cut production costs. Some have also increased the price of new-model inverter air conditioners to boost the average price of their products.

“Compared with last year, production costs have increased by some 19% because of the increased prices of raw materials,” said the CEO of a leading Chinese air conditioner manufacturer. “Although we have tried our best to reduce production costs by decreasing business costs and updating our products, the soaring raw material prices, especially for copper, still had a large negative effect on our net profit”.

Some companies have already adjusted their product prices. In February, LG Electronics announced that it would increase the price of its home appliances in the U.S. market by 8 to 10%. Trane (Ingersoll Rand) announced that the price of its scroll and screw chillers and residential products, including RACs and unitary air conditioners, would increase by 3 to 5% in Asian markets. According to these companies, they have worked to absorb the rising costs on to end users.

Daikin has announced that it will raise the current price of its

refrigerants by 20 to 30%. Many Japanese air conditioner manufacturers are preparing their own price adjustments, with the prices of some products already moving higher.

Although higher air conditioner prices appear inevitable, prices for non-inverter products will have different growth rates, according to a white paper released by Suning, one of the two leading home appliance chain stores in China. Inverter air conditioners accounted for more than 30% of the Chinese market in 2010. It is more likely that leading manufacturers will first raise the price of their inverter products, since the high-end of the market tends to be less price sensitive.

The spiraling prices of key components and raw materials are finally exceeding the capacity of air conditioner manufacturers to absorb them. As a result, price increased in the range of 5 to 10% will quite likely be in the coming season.