Everyone loses out... almost

For the second year running the German collector market contracted substantially in 2010. Only a handful of suppliers were able to buck the trend.

2010 flat plate collector sales in Germany by provider

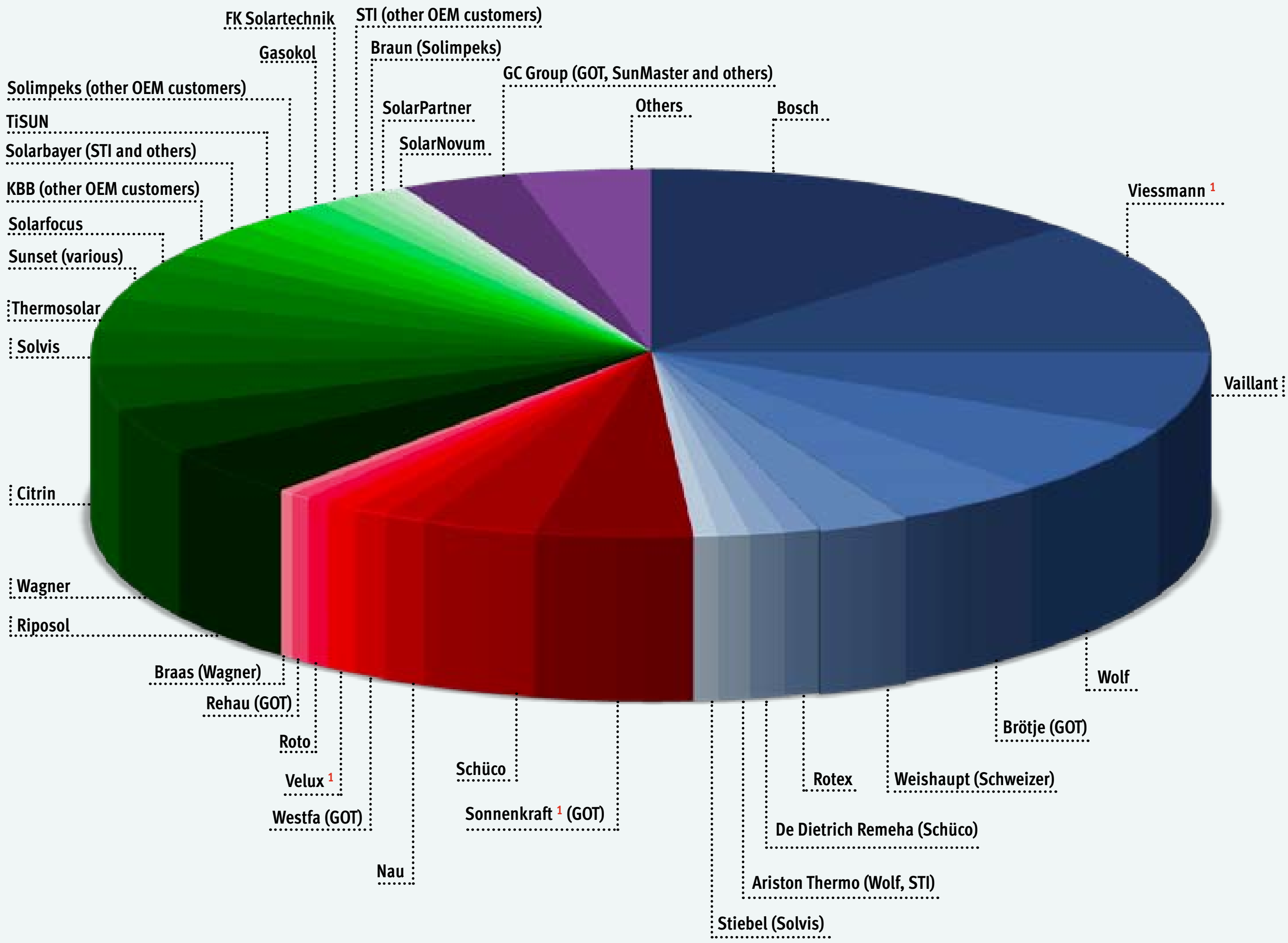

Fig. 1: The full-range heating equipment providers contributed 49 % to the 800 MW_{th} (1,150 million m² of collector area) of flat plate collector capacity newly installed in 2010 (blue). Independent solar companies contributed 31 % (green). Solar providers that are subsidiaries of large corporate groups or offer solar thermal energy as just one of their many business areas held 13 % of the market. In parenthesis: OEM suppliers of providers that do not manufacture their own products. [1] *estimate, no company data* Source: market studies by W.B. Koldehoff

People who thought that the tight German collector market had led to a major market share redistribution are in for a surprise. A current market study by business consultant Werner B. Koldehoff shows that across the board nearly every company in the industry lost out.

The share of vacuum tube collectors in the market as a whole has held up surprisingly well at 11 %. While tubes had a 13 % share in 2009, one might have thought that the high-end segment would have been affected much more by the crisis.

Profits at the big heating equipment companies also suffered from the crisis. They grabbed only a tiny bit of market share from the smaller companies. In recent years the market share of the big companies has grown steadily by a few per cent annually. While this trend has continued, it has not gathered momentum. Currently the big heating equipment companies have 49 % of the flat plate collector pie (see Fig. 1). In 2009 they had 47 %. Solar specialists have traditionally dominated the vacuum tube market (see Fig. 2). In this segment, large companies hold just short of 30 % of the market. This share is unchanged.

Flat plate collector market: Vaillant and Riposol lead the pack

Any gains for heating equipment companies as a whole are due to one company that stands out from the crowd. In contrary to the trend, Vaillant was able to increase sales of its flat plate collectors in 2010. The company steamed past Wolf to take third place behind long-standing market leaders Bosch Thermotechnik and Viessmann. In the 90s Vaillant, which has the second highest overall turnover in the European heating equipment sector behind Bosch Thermotechnik, was slow to enter the solar thermal market. However, it is catching up that much faster every year. By comparison, the Dutch BDR Thermea Group, which owns most of Brötje, De Dietrich Remeha and Oertli has not been able to play out its strong market position on the solar market, despite its position as number three in the European heating market ahead of Viessmann. All of the company's brands combined do not amount to half of the turnover of Bosch or Viessmann.

The heating industry is not the only one that managed to strengthen its market position; the solar specialists have done well too. They managed to boost their share of the flat plate collector market slightly from 30 % in 2009 to 31 % in 2010. This is also a trend that has been developing over the past few years. For the first time, Austrian collector manufacturer Riposol was able to contend with the three strongest solar specialists, Wagner & Co, CitrinSolar and Solvis. Riposol and Vaillant were the only two companies that managed to grow in the crisis. The group of solar providers which are subsidiaries of larger companies, such as Sonnenkraft, or which offer solar thermal as only one in a range of business areas, such as Schüco, continued to lose ground. These companies now hold only 13 %

of the market. In 2007 the share was 20 %, but it has been shrinking steadily ever since.

Imports are up

In 2010, 44 % of all flat plate collectors sold in Germany were imported, in contrast to 2009 when imports amounted to just 31 %. However, there is no apparent trend toward an increase in cheap products produced in countries with low salaries. To the contrary, most imported collectors (about 20 %) continue to come from Austria. Specifically, the world's largest collector manufacturer GREENoneTEC is very well represented in Germany by a number of OEM partners. Riposol also greatly contributes to the strong Austrian presence. Austria is followed by France among countries exporting collectors to Germany. Viessmann has been manufacturing its collectors in Lorraine for several years. Other imports come from Slovakia, the production site of Thermosolar, along with Switzerland, Israel and Turkey.

Vacuum tubes: Narva is catching up

The vacuum tube collector market is very different from the flat plate market. It is much smaller and there are nowhere near as many manufacturers. Also, solar specialists dominate the tube segment with a 70 % market share, whereas the heating equipment manufacturers' share is just short of 30 %. Newcomers from other industries do not play much of a role in the vacuum tubes market. Only acrylics expert Philippine, which mainly supplies the automotive industry, has found its way into vacuum tube collector manufacturing. Philippine's tube supplier is also a newcomer, Narva, a company whose mainstay is fluorescent lamp tube production.

It is worth distinguishing between tube manufacturers, tube collector manufacturers using their own tubes, and collector manufacturers using tubes from other manufacturers. The highest volumes of vacuum tubes come from production plants in China, as is the case with market leader Ritter Solar. Ritter Solar sells its collectors through its own subsidiary Paradigma and through numerous OEM partners (see Fig. 2). Viessmann, Sunda and Elco (Ariston Thermo) all have their own tube production sites in China.

Apart from a few small companies, only Kingspan (Northern Ireland) and Narva (Germany) produce vacuum tubes in Europe. Whilst Kingspan manufactures collectors, Narva produces only the tubes. In 2010, some companies like AkoTec which build collectors with Narva tubes were able to buck the

2010 vacuum tube collector sales in Germany by provider

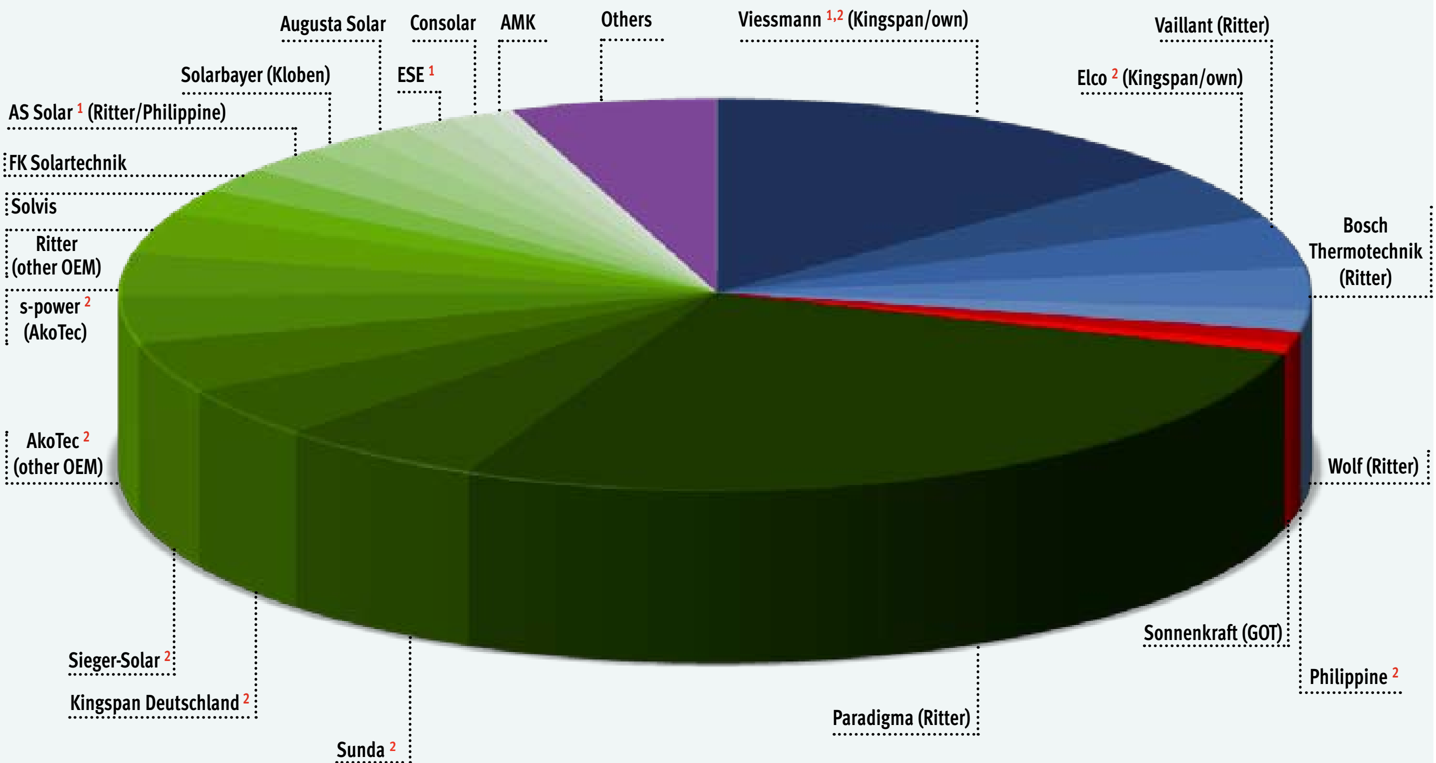

Fig. 2: The full-range heating equipment providers contributed nearly 30 % to the 100 MW_{th} (150,000 m² of collector area) of vacuum tube collector capacity newly installed in 2010 (blue). Independent solar companies held the lion's share of the market at 70 % (green). Solar providers that are subsidiaries of large corporate groups or offer solar thermal energy as just one of their many business areas are negligible in the tube collector market. In parenthesis: OEM suppliers of providers that do not manufacture their own collectors.

[1] estimate, no company data; [2] single-wall vacuum tubes

Source: market studies by W.B. Koldehoff

trend and increase revenues. Narva tubes are now found in nearly 10 % of all of the vacuum tube collectors sold in Germany. That is significantly more than in 2009.

Narva and Kingspan manufacture single-wall vacuum tubes. The absorber is on the inside of the tube and the absorber tube exits the glass tube through a glass-metal transition piece. Viessmann, Sunda and Elco (Ariston Thermo) also produce single-wall tubes. The overall market share of the single-wall tube type in Germany is about 36 %. This share dropped by 4 % over 2009. Clearly these expensive tubes have a hard time competing with cheaper, double-walled vacuum tubes.

The import share in the tube collector segment is lower than that of flat plate collectors. Although 90 % of the tubes are imported, 65 % of the tube collectors are manufactured in Germany. The imported collectors come mainly from Northern Ireland and China, along with small quantities from Italy, Belgium and Austria.

Jens-Peter Meyer

Bucking the trend, there was a slight up-tick in the number of large solar thermal system installations in 2010 as compared to single-family home systems. Photo: CitrinSolar