

The road ahead according to Jan Mücke



JAN MÜCKE

38 years old

FUNCTION - Parliamentary State Secretary

BACKGROUND

Jan Mücke studied at the 43rd Polytechnic High School in Dresden-Kaditz. Later on he studied law at the Technical University of Dresden. He started his political career in 1991 when he joined the Saxony branch of Young Liberals. A few years later he became deputy Chairman of the Dresden

district, a branch of the Young Liberals. From 1996 until 2009 Jan Mücke was a city councillor in Dresden. During this period he also became Leader of the FDP group at Dresden City Council, Federal Treasurer of the Young Liberals and a member of the Federal Executive Committee. Since 2005 he has been a member of the German Bundestag as Chief Whip of the FDP parliamentary party. In 2009 Jan became Parliamentary State Secretary at the Federal Ministry of Transport, Building and Urban Development.

FOR EFFICIENT HEATING, HOMES REQUIRE BOTH INSULATION AND MODERN HEATING TECHNOLOGY. IF A HOME OWNER ONLY HAD ONE CHOICE, WHICH SHOULD THEY CHOOSE?

Well both measures are fundamentally important of course. Ideally any work to improve the energy efficiency of a building's shell should be done at the same time as work to increase the energy efficiency of the heating system. The final choice is with the home owner, but they should take advantage of advice from a building energy consultant before deciding.

THE COST OF IMPLEMENTING BOTH INSULATION AND NEW HEATING TECHNOLOGIES CAN OFTEN EXCEED €100,000. HOW CAN PEOPLE AFFORD THE COST?

In the long run, the cost of investment in insulation, windows or a new heating system pays for itself through significantly lower heating costs. In addition, there are usually grants or programmes that can help with the cost. For instance, in Germany there is an effective subsidy programme that provides real financial support for energy-efficient construction and refurbishment. The KfW CO2 building restoration programme promotes all measures that increase energy efficiency while reducing CO2 emissions, including energy-efficient heating systems. For new-builds or refurbishments, the cost of insulating the outer walls, roof, cellar, windows and outer doors are a large portion of the insulation investment. If the resulting measurements of energy efficiency are 30% better than the EnEV 2009 new-build, they are said to meet KfW Energy Efficiency House 70 values. By reaching this standard, the building qualifies for further subsidies for any renewable energies it uses. The programme also promotes further market subsidies for the use of renewable energies.

WHAT TYPE OF HEATING SYSTEM SHOULD HOME OWNERS CHOOSE?

Choosing a heating system depends on a number of factors, including the actual situation of the building, the location and the surface area that needs to be heated. But from an energy-efficiency standpoint, you must always first consider the building's shell. Compare densely populated residential areas with rural areas, for instance. The choice of heating system from one area to the other will often vary widely. But with any new heating system, people should always insist that renewable energies can also be used.

MANY HEATING CONTRACTORS COMPLAIN ABOUT A CONFUSING MARKET WITH OVERLY-COMPLEX SYSTEMS. WOULD YOU RECOMMEND A CONSULTANT ENGINEER FOR A MODERN HEATING RENOVATION?

As a rule, every heating contractor should be able to offer advice without assistance. It is important that they remain up-to-date with developments in equipment and trends in the market, and take advantage of the many opportunities available to do this. For instance, in the last few years our Chambers of Trade and the trade associations



here in Germany have invested a great deal in the training and development of their member companies. And manufacturers are doing what they can to encourage knowledge transfer, which helps equip installers with both practical and theoretical know-how. So, to answer the question, no,

I would not recommend a consultant engineer: skilled tradesmen should already be in a position to competently advise on the refurbishment of a heating system. I should also add though, before home owners embark on any energy renovation work, they should first take advice and support from an expert energy adviser. In Germany, people can apply for a grant from BAFA (Federal Office of Economics and Export Control), and choose from the extensive list of experts at www.energie-effizienz-experten.de. These people are especially capable of advising on 'on-site consultation' by BAFA as well as planning and monitoring the construction of KfW Energy-Efficient houses 40 and 55.

WE ALL UNDERSTAND THE PRINCIPLES OF HEAT TRANSMISSION IN HOMES. WHY DO YOU THINK MANY PLANNERS STILL RULE OUT HEAT PUMPS WITHOUT UNDERFLOOR HEATING SYSTEMS IN PRE-WWII RESIDENTIAL BUILDINGS?

Take Germany as an example here : every fourth heating system in new homes was fitted with a heat pump in 2011, proving that the heat pump is accepted by the market and is routinely used. But the efficiency and cost-effectiveness of the whole heat pump system depends on a number of factors. First, the system temperature, and second, the choice of heat emitter, i.e. radiators or underfloor. If the whole heat pump system cannot be operated efficiently because of building regulation constraints in an existing building, then incorporating a heat pump makes no sense.

POLYSTYRENE IS AN EFFECTIVE INSULATOR, BUT WHAT DO YOU SAY TO CONCERNS THAT IT CAN RUIN THE FAÇADES OF EUROPEAN INNER CITIES?

Refurbishments involve a great deal of factors, and require the personal involvement of the building owner, municipal bodies, as well as technical and financial support. And an integrated refurbishment of an existing building must first meet design requirements, and not 'stand out' in a detrimental way; this consideration is over and above the energy-related requirements. An overall project of this type is only deemed a success if the energy-related refurbishment takes on a creative quality within the existing building structure; it is the role of the architect to ensure that this justifies both the effort and the cost. ■