

Why don't we build energy-saving houses?

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Residence whose energy costs are twice or three times lower than usual in the Czech Republic can be purchased at the same price, sometimes only marginally higher (we have inherited poor standards in this regard from our Communist past). As far as commercial and public buildings are concerned, the relative savings are not so high, but since the operating costs are usually in the millions or even tens of millions of crowns, even a 10% reduction, for example on the costs of heating, brings a financial effect that is more than tangible. Adding to it that fact that building companies are prepared for the construction of low-energy houses in terms of professions, technology and materials, everything seems to be obvious. The most convincing argument in this field is probably the reduction of family and corporate costs, but the number of those who can look at things at a more general level is growing. And there is something you cannot question: countries with a developed economy (20% of the world's population) consume 80% of all produced energy, and 90% of all raw materials. And 40% of all energy is consumed merely for the operation of buildings.

Investment poverty

The formula is more than simple. The solution is practical - talking about the Czech Republic - but it is not in line with the input figures, or information. No matter that it should be working, it does not. The number of real low-energy houses (i.e. with an energy consumption of up to 50kW per square metre and year), to say nothing of passive houses (up to 15kW) built here is very low. So low that any such house is a reference sample. The same applies for apartment houses - it seems that the property development company JRD is the only one that has already built some of them in a low-energy version. And the situation is even worse as far as commercial properties are concerned. Even though there are some exceptions, they are so rare that real estate experts are not even able to appraise energy-saving and environmentally-friendly houses (and to give the so needed signal to the market). So far, we have not seen a single business transaction with a "green" house in the Czech Republic. The ČSOB headquarters in Radlice, Prague, so much appreciated (and for a good reason), are the only white crow here and it looks like nothing is going to change in the near future.

And just like always, it is money that definitely in the background of this meagre situation. Our society suffers from a form of investment poverty. In other words - we are not doing so bad in terms of operations, but the investment item in the budgets of families and enterprises is not too large. And if the investor is offered some return in decades, it is no surprise he is hesitating. It is a question if such an investment is rational at all, from a sheer economic point of view. What answer can we expect from the owner of a family house when we offer him the installation of a heat pump for CZK 250,000, when he saves CZK 15,000 a year on heating? Obviously, this is the time where the state has to intervene with a financial instrument to speed up the return, or simply to allow the implementation of the energy-saving measure: for example Litoměřice, in the north of Bohemia, is considering the construction of a geothermal power plant and heating plant, for many good reasons. Aside from tens of minor problems, an amount of CZK 1.1 billion is at play here. Of course, the town and the region, let alone a private enterprise, do not have the money. Well, we might find one or two, but the return is, given some optimism in our projections, calculated at twenty years - and show me a shareholder who would approve this kind of investment. In general, we cannot rely much on market mechanisms in the field of energy savings. The rents in ecological buildings will be always somewhat higher than in other properties and the argument of energy savings, mostly on fees for energy, does not sound too strong. It is hard to calculate them reliably, especially in the environment of quickly changing oil prices etc.

However, state interventions depend on the financial possibilities of the budget. The room for them is not too big, but maybe we should not be so aggrieved. These days the Ministry for the Environment is announcing a package of supporting programme, many things have been already done and for example the results of the state support for thermal insulation in prefabricated houses are almost impressive - according to experts, the speed of this process is by far the fastest in the whole Europe. But the higher quality of energy savings is still waiting for its chance.

Room for education

It is almost certain that it is not only about money in the field of environmental, or sustainable construction. However, yet another factor that prevents and inhibits the rationalization of energy costs of operation of buildings in the Czech Republic is discussed only little: the state of mind, knowledge and attitudes of the customers of building companies and the users of their products. There are countries in Europe where children like scratching large SUV-type cars, increasingly popular in the Czech Republic, with their keys. The signs on the bodies of these oil-intensive motor giants are not an expression of social hatred (“that suits you right, for you’re so rich”), but an environmental message: that suits you right for consuming too much gas! In those countries, the drivers themselves often drive more slowly than they have to, because that reduces their consumption.

So far the situation here has been different, as demonstrated so “artfully” by Kateřina Jacques, from the Green Party, i.e. the official pioneers of respect for the nature and energy savings, in a popular TV talk show a short time ago, to the malicious joy of a large portion of the nation. Although this No. 2 member of our Green Party is well educated in the use of modern communication methods and invites all of us to her Facebook, terms such as biomass, geothermal and pellet do not tell her much. And she is not alone. Energy savings are not too interesting for domestic corporate managements as well (see [Will sustainable construction avert the fall of the oil civilization?](#)), and not even for the users of public buildings. At a seminar of [ENVI A](#), which deals with the issues of environmental construction, this was all tersely summarized by one of the persons in charge of the operation of the above-mentioned ČSOB building: “When everybody insists that the room temperature should be 25 degrees, and at the same time want to ventilate all the time, all energy-saving concepts are torn into pieces!” If we really want to save energy, it will be obviously necessary to use not just financial stimuli, but also to change the behaviour and thinking of the whole society, to understand better the context as mentioned above. This is a task for schools, culture and politicians. It almost looks like there the “free” space for environmental actions is much bigger here than in the state budget.

The issue of environmentally advanced buildings will be discussed, among other topics, at Stavební fórum’s discussion meeting called [Residential Projects: Value against Crisis](#), which will be held on Thursday, 23 April 2009, in Brno, within the framework of the URBIS INVEST 2009 trade fair. The participants will also deal with the issues of regeneration and revitalization of buildings and the subsequent growth of their value, financing and the current approach of banks, demand for rental housing at the time of recession, development of real estate prices and the significance of building quality and its influence on demand. For more information on the programme and the online application form visit the discussion web.

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