

Interview with Mr. Adrian Joyce, The Director of the Renovate Europe Campaign

The REHVA journal had an opportunity to conduct an interview with Mr Adrian Joyce the Director of the Renovate Europe Campaign which is an EU level Campaign initiated by EuroACE in 2011. Its headline objective is to reduce the energy demand of the existing EU building stock by 80% by 2050 as compared to 2005 consumption levels. In order to achieve this objective, it will be necessary to increase the renovation rate of buildings in the EU by a factor of 2.5 to reach 3% per year by 2020 and to maintain that rate until 2050. Investing in building renovation could accrue up to €40 billion per year for public finances with an additional "one-off" boost to GDP in the range of €153 to €291 billion for the years up to and including 2017. This is according to a new report prepared by Copenhagen Economics for the Renovate Europe Campaign [1].

Interview by **Prof. Olli Seppänen**, Editor-in Chief, REHVA Journal



RENOVATE EUROPE



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JL HOPSON of
European Commission

The Director of the
Renovate Europe Campaign,
Mr Adrian Joyce, is an architect
and was formerly Director at
the Architects Council Europe.

PHOTO: OS

What would be the benefits of the Renovate Europe campaign?

- The Renovate Europe Campaign, which has 23 partner companies and associations, estimates that achieving its goal “to reduce the energy demand of the existing EU building stock by 80% by 2050 as compared to 2005 consumption levels” would boost activity in the EU construction sector by up to €830 billion per year by 2020 (at 2011 prices), securing up to two million direct and indirect jobs in the EU. In addition we would increase our energy security, reduce CO₂ emissions, improve the quality of life for EU citizens and boost public finances.

To achieve the goals of the Campaign and thus reap the benefits it offers, Member States must put ambitious building renovation roadmaps to 2050 in place with intermediate targets for 2020, 2030 and 2040 that will be used to benchmark progress. In parallel, sources of funding that can be used to stimulate renovation in line with the 2050 Roadmaps must be put in place.

You had an important Conference on October 11th in Brussels- what were the main results and conclusions?

- We know that many Member States are still hesitant about whether or not to invest in energy efficient building renovation programmes, despite the requirements of the recently adopted Energy Efficiency Directive. We published in this conference a new report “Multiple benefits of investing in energy efficient renovation of buildings” prepared by Copenhagen Economics for the Renovate Europe Campaign. The findings in this report should provide the final convincing arguments for those Member States, thus leading them to act. Investing in energy efficiency of buildings is a good investment in the short-term, the medium-term and the long-term. (The report is available at our website <http://www.renovate-europe.eu/>)

The report shows that when the challenge of renovating the EU building stock is taken up with a high level of ambition, permanent increases in revenue for public finances will result. The report also provides a number of policy recommendations for European governments to help boost public finances through renovation. These include shifting or reducing incentives such as favourable tax treatment of heating and electricity use in buildings to encourage a lower usage, thus rendering energy efficient renovation of buildings more attractive. Modernising rent regulation to allow landlords and tenants to share the benefits from energy efficient renovations is another example.

What are the bottle necks preventing ambitious renovation of buildings in Europe?

- Financing is still the most important obstacle, particularly in the current economic climate but not the only one. The member states have not yet realised all the benefits that an increased renovation rate in the member countries will bring and it is one of the most important tasks of this campaign to raise the awareness of these over-all benefits. I am personally willing to speak in the events organized in the Member countries for professionals, building owners or authorities. Regarding the time frame we also have the problem of the inertia in the member states and in the construction industry. New legislation will, in many cases, be needed to push renovation as the construction sector is, in general, very conservative and may not be ready or willing to offer the services needed for ambitious renovations. This is particularly the case with house owners. In many countries the majority of dwelling are single family buildings, especially in UK and Ireland.

In the commercial sector the terms of lease contracts are one major obstacle for renovations. If the tenant pays the energy bills, there is no motivation for the building owner to make any improvements in the energy efficiency of buildings. The mechanisms that split the benefit should be developed.

The construction sector is very conservative and I have seen from personal experience that a big push from regulations is needed if we are to achieve our goals! The regulations should be progressively more demanding in line with the long term strategies and road maps which, in turn, have to be made publicly available so that the industry and building owners have enough time to prepare for the necessary changes.

How can IAQ be guaranteed in energy renovation?

- This is an extremely important issue. It is important to avoid the similar problems we had after the first energy crisis in 70's when the buildings were made too air tight and ventilation was forgotten. We have to always remember that buildings are made for people and the indoor environment should be optimal for the activities in the building. Good, healthy, indoor environment shall always be the first objective. Healthy buildings can also be very energy efficient. European CEN standards have set good criteria for healthy building, and can be used also on national level if national building codes are not adequate. The indoor climate evaluation should also be included in the heating and air conditioning inspections which are mandatory according to EPBD.

EU is behind the 20-20-20 goals. Do you think it still is possible to reach those targets, what about the 2050 goals with 80% reduction of greenhouse gases?

- Buildings account for 40% of Europe's energy consumption. As such, concrete and ambitious action to tackle unnecessary energy use in the EU's building stock should be the absolute priority of European Energy Policy.

The deep renovation of Europe's existing buildings will save 32% of the total primary energy used in Europe. This saving is equivalent to the combined total energy production of the European coal and nuclear energy sectors or a saving of 4 billion barrels of foreign oil per year.

However, of Europe's existing buildings, only about 1.2% are renovated and about 0.1% demolished in any given year. Even if the 1.2% of buildings being renovated incorporated the highest standards of energy efficiency, the European Union would miss its 20% energy saving targets for 2020. In fact, this alone will deliver almost zero absolute reductions in energy use from the built environment.

Missing the energy savings targets means turning our backs on new jobs, money savings for consumers and small businesses, but it is also refusing to use available, proven technologies, to effectively curb carbon emissions.

European governments must make the right choice for the future, and pick the deep renovation of buildings as frontrunner for an ambitious energy agenda.

Reducing energy demand has the potential to save taxpayers money while making their homes more comfortable; it has the potential, as already pointed out, to create 2 million new jobs and to pave the way to sustainable growth.

I know that the goals are really ambitious but they can be reached if all Member States fully implement the directives the European Parliament and Council of Ministers have approved. These directives show that political will exists at EU level, but the real challenge is to ensure that this translates into real action in the Member States over the coming years.

What is the motivation for renovation as energy is still so cheap?

- In addition to the energy savings that renovation of the existing buildings stock will bring, there are a range of co-benefits, which can also be harvested. By reducing

EuroACE, The European Alliance of Companies for Energy Efficiency in Building

Website: <http://www.euroace.org>

energy consumption and focusing on indoor climate issues when renovating, co-benefits can be achieved such as reduced outlay on government subsidies, and improved health due to less air pollution and a better indoor climate, both of which also lead to fewer hospitalisations and improved worker productivity.

Harvesting renovation opportunities could bring huge benefits to the EU economy over the coming decades. Based on available estimates of the potential for energy savings from the energy efficient renovation of buildings, the Copenhagen Economics Study suggests a monetised permanent annual benefit to society of €104-175 billion in 2020 depending on the level of investments made from 2012 to 2020, €52-75 billion from lower energy bills, and at least €9-12 billion from the co-benefits of reduced outlay on subsidies and reduced air pollution from energy production. If the health benefits from improved indoor climate are included, the benefits are increased by an additional €42-88 billion per year. These health benefits are evident, but very uncertain to estimate, and should be interpreted accordingly. If investments are continued after 2020, these annual benefits can be doubled by 2030.

What is your opinion as an architect on the most feasible technology for renovation? Which technology/measures should be implemented first?

- I think that it is important to develop cost effective renovation packages for the typical buildings in each Member State. I support the principles the Commission has developed when requesting all Member States to develop reference buildings that are representative for the building stock, and apply the set of measures to find the cost optimal solution. These measures should include the improvement of the thermal properties of the building envelope as well as the improvement of the building services such as heating, lighting, air conditioning, ventilation and domestic hot water. After the energy use is reduced the demand should be covered by cost effective renewable sources and, finally, by clean fossil fuels as available. **3E**

Reference

- [1] Multiple Benefits of Investing in Energy Efficient Renovations – Impact on Public Finances. A Study by Copenhagen Economics. Released at Renovate Europe Day, 11 October 2012. www.renovate-europe.eu/Multiple-Benefits-Study