HEALTHY BUILDINGS: GOOD FOR OUR WALLETS?

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'Healthy mind, healthy body', so the saying goes – but both are affected by the buildings in which we live and work. This year's edition of the Healthy Homes Barometer reveals what the challenges and solutions might be.

More and more Europeans are moving into cities and nearly 40% of us work in offices, meaning factors like air quality, correct temperature and light are more important to our health than ever before.

At this year’s Healthy Buildings Day in Brussels, the theme was all about making the business case for investments in building renovation as strong as possible, by underlining that healthy buildings and economic value go hand-in-hand.
Contents

Bendt Bendtsen MEP: Time for EU countries to draft building strategies, ‘we’ll be watching’ 4

Save Europe's suburbs: they are vital for healthy citizens – and healthy budgets 6

Energy efficiency: ‘Tough legislation means tough enforcement’ 8

‘It's the housing, stupid': How homes harm our health 10

Building a better business case for healthy buildings 12

Office space: The health and productivity nexus 14

Healthy buildings expert: ‘Homes cause hurricanes’ 16

Healthy living in Europe's suburbs is a pipe dream and EU legislators need to wake up fast 18
INTERVIEW

Bendt Bendtsen MEP: **Time for EU countries to draft building strategies, ‘we’ll be watching’**

By Sam Morgan | EURACTIV.com

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Nearly half of Europe’s energy is used up by buildings but new rules adopted by the EU earlier this year wants to inject efficiency en masse into the sector and improve massively the edifices in which we live and work. EURACTIV spoke with the lawmaker behind the new legislation.

**Bendt Bendtsen** is a Danish MEP with the European People’s Party. He was lead rapporteur on the Energy Performance of Buildings Directive (EPBD), which in May was the first legislation from 2016’s Clean Energy Package to be adopted.

He spoke to EURACTIV’s Sam Morgan.

You successfully helmed the revision of the EPBD but now that it has formally been adopted, what are the next steps?

For the first time, I think we’ve really got the commitment from member states to propose long-term renovation strategies and milestones. Getting them on board made me

Continued on Page 5
Continued from Page 4

really happy because what we’ve often seen is countries saying ‘yes, yes, yes’ at climate summits like Paris in 2015 and then ‘no, no, no’ during the negotiations here in Brussels. But we’ve got a very good directive now. The ball’s in their court and it’ll be up to the Commission to keep an eye on what’s going on. Member states are going to have to implement it in their own legislation.

What kind of timeline are we talking?

The directive gives them around two years to implement the new rules. I want to see these long-term strategies with clear definitions for 2030, 2040. We needed that. Existing buildings are the challenge. New building rate is only about 1% a year after all. Getting the existing structures in the directive was very important.

What does the EPBD offer in terms of renovation? Is there a set of minimum criteria, for example?

We’ve given the member states a toolbox. They can use it now as they see fit, be it measures on renovation rates or consumption per square metre, it’ll be up to them. Building passports are a part of this too, they’re a good tool. We can find savings that are cost-effective. No problem. The important thing is to foster increased energy efficiency in our buildings. We know the targets about nearly zero energy buildings in 2050, so countries can make their choice. We’ll keep an eye on them though.

Is that choice the reason why the EPBD was adopted with such a large majority? It seemed a lot smoother than the negotiations on the Energy Efficiency Directive, for example.

We got good support from heavy industry in Europe. We know that 80% of the buildings we have today, will still be there in 2050. We know that 40% of our energy consumption is taken up by our houses, so the building sector has to take a part in creating this low carbon society we need. The industry knows that if they aren’t up to the job then they’ll get a big bill because of the increased carbon price. So I think we had a good discussion with more than 300 stakeholders during the negotiations, we listened to everyone. That was reflected in the big political support in the final vote.

So now it’s purely up to the Commission to keep an eye on member states?

It is now up to the Commission, yes, to monitor implementation but I too will be keeping an eye out! I also think that a number of the industries and NGOs involved with this will keep tabs on their governments. Countries now have a responsibility to estimate the wider benefits of renovation, including health and indoor climate. That has to be included in their plans.

Horizon 2020 projects like REVALUE have tried to look into the cost-effective nature of renovations that you mentioned, it tried to find if there was a link between energy performance and property value. As the business case is talked up more and more, will this become less of a niche issue?

This directive is incredibly important for the whole sustainability strategy of Europe. I hope that it will become mainstream. We’ll see a lot of new things in the coming years because there are a lot of easy fixes we can make, like building automation, and they can be prioritised. These extra features, if you like, can be bolted onto the existing EPBD framework now.

But despite buildings taking up so much of our final energy demand, it’s still not something that people talk about…

Probably because it’s not so sexy! It’s still obvious that when a family has a certain budget to spend, they’re likely to go for the new kitchen rather than building renovation! But healthier buildings are going to be great value for those families and wider society.

What’s left to be done before the next EU elections in May?

I was happy to get the EPBD through, we were the first out of the Clean Energy files but now we need to get it all finished. I think Europe’s going to be among the best in terms of industrial leadership, energy efficiency, buildings. There’s so much opportunity for growth and if we get it right, we’ll see export growth in those utilities, including know-how and securing economic value. Another one of my hopes is the issue of public funding. We have a lot of it from many sources, including LIFE and cohesion funds. But we have to understand that in order to nail the big success, we need to get private money working in this. Pension funds in Europe are allocating a lot of money over the last few years. If we have the right politicians to bring this forward, secure strong long-term renovation strategies, I think a lot of private companies will see this as a big opportunity. It’s easy to make new investments in new buildings, it’s the existing ones that need the focus.

And what’s the plan for after the EU elections?

When my Parliament colleagues go on the campaign trail, I’ll probably go on a motorbike tour of Europe, because I will be leaving the EP. I’ve been elected for my party at local level, national level and European level for the last 30 years. It’s time for a change and to leave it for the next generation.
EPBD REVISION IS JUST THE START - IMPLEMENTATION MUST COME NEXT

The recent revision of the Energy Performance of Buildings Directive (EPBD) highlights the importance of good indoor environments alongside energy efficiency, and that is good news. It talks about a more holistic approach to assessing energy performance in buildings; the need to address indoor climate conditions to provide better comfort and health for occupants; and the need for EU Member States to establish long-term renovation strategies which take energy efficiency, air quality and health all into account.

But revision of the EPBD is only the start. The challenge now is for EU Member States to step up and put the EPBD into action. A clear guidance document from the European Commission to ensure implementation of the directive would go a long way to making sure benefits are achieved.

Continued on Page 7
REAPING THE BENEFITS FOR HAPPIER, HEALTHIER AND MORE PRODUCTIVE CITIZENS

Taking this approach is not only the right thing to do for EU citizens. It also makes sense for Member States’ budgets. The one-time cost of bringing housing up to standard across Europe is thought to be around €295 billion, while inadequate housing is estimated to cost EU economies €194 billion every single year. And who wouldn't want to reap the benefits of this new approach to building performance? Especially when they include greater energy efficiency and reduced emissions; increased renovation rates and economic activity; and not least, happier, healthier, better-rested and more productive citizens.

EUROPE’S SUBURBS SHOULD NOT BE FORGOTTEN

The VELUX Group has always argued for the benefits of a holistic approach to housing and energy performance. Today, we continue that conversation as we launch the fourth edition of the Healthy Homes Barometer, and debate the issues it addresses at a special event at the European Parliament in Brussels.

The Healthy Homes Barometer 2018 contains surprising new findings which highlight the crucial role played by Europe's suburbs in creating healthy living environments. For example, it finds that Europe's suburban populations have grown 54% more than its urban populations over recent decades. It also finds that the single-family homes which are so typical in suburban areas are up to 33% more likely to result in their residents reporting ill-health than multi-family homes. As EU Member States implement EPBD-led strategies for housebuilding and renovation, they must not overlook these growing communities and their aging homes.

BUILDINGS IMPACT HEALTH, PRODUCTIVITY AND MUST BE HUMANCENTRIC

As far back as the Roman Empire there were already daylight regulations for buildings. The Romans understood that sunlight, home hygiene and clean water were vital elements in maintaining citizens’ health. However, it is only in the last couple of decades that we have started, once more, to pay attention to the effects our homes and other buildings have on our bodies and minds. Modern technologies mean it is now relatively easy to measure variables such as air quality, ventilation rates and daylight conditions inside buildings, and a host of scientific studies in recent years has shown the major impact that indoor environments have on health, well-being, performance and productivity.

It is plain and simple: Everyone stands to gain from raising the standard of Europe’s housing. Done right, national governments, businesses and citizens will all see a significant windfall. Now it just requires the political and practical will. Through the work of the Energy Union, the EU has come a long way. Now it’s time to turn the Directive into reality!

Read more about the Healthy Homes Barometer and download the full 2018 report here (http://euract.tv/9PLY).
New EU rules on buildings and energy efficiency standards, adopted earlier this year, are “tough but fair” and will need to be implemented and enforced correctly, according to the architects of the legislation.

Following the successful adoption of two tentpole energy savings laws this year, the focus has switched from negotiation to implementation, as national capitals are now expected to start planning for the future.

At a high-level dinner debate in the European Parliament on Wednesday (26 September), the architects of the new efficiency rules, EU climate Commissioner Miguel Arias Cañete and MEP Bendt Bendtsen (EPP) were adamant that the hard work starts now.

“I trust that the Commission will enforce these long-term strategies for many years to come,” said Bendtsen, a Danish lawmaker who helmed the revision of the energy performance of buildings directive (EPBD) and hosted the event.

Under the EPBD, EU governments will have to draft long-term renovation strategies and take into account factors like health and indoor air quality in new builds. One of the main aims of the legislation is to increase Europe’s measly 2% building renovation rate.

Cañete acknowledged that “the implementation of the Paris Agreement needs the decarbonisation of our building stock” and revealed that he always stresses “energy efficiency first” when meeting with national and regional representatives.

The Spanish Commissioner also urged them “to use the full tools available” under the multi-billion Investment Plan for Europe, adding that the EU executive will “take into account all social benefits” when giving member states implementation guidance notes.

Help won’t be limited just to public

Continued on Page 9
bodies either: the European Alliance
of Companies for Energy Efficiency
in Buildings (EuroACE) is working on
a first-of-its-kind guidance document
for national administrations and
industry stakeholders.

Peter Bang, the chief financial
officer of Danish company Velux, the
event’s organiser, urged those doing
the implementing of the new laws to
“focus on what triggers consumers”
spending.

“Energy savings aren’t the main
priority” for consumers, Bang said.
But “things like comfort are.”

THE BIG STICK

The targets agreed this year are
for 2030 but Europe still has a lot of
work to do to meet the 2020 energy
efficiency benchmark. Energy
powerhouse Germany is one of the
most notable examples of member
states that have admitted they will not
meet it.

Paul Hodson of the Commission’s
energy directorate, acknowledged that
it is “ridiculous” that the EU executive
is still embroiled in implementation
infringement procedures but said that
work is in progress to streamline the
process.

“The last target was tough, the
new one is tougher. It needs an effort
to meet it so this isn’t about finger-
pointing. We’ll keep the big stick
of infringements for when they are
needed,” the Commission official said.

Hodson added that his services
will “go to member states, accompany
member states and launch
infringements if necessary. Hopefully
fewer than last time.”

BRUSSELS BUILDERS

One of the regional representatives
that will relish the Commission’s
help is Youssouf Bady, an adviser
to Brussels region energy minister,

Céline Fremault.

Bady explained that federal
governments like the Brussels region
have to do the same reporting as
national institutions, which is a “big
challenge” and “needs implementation
support, not just financial support”.

Brussels has a mountain to climb
in terms of its building stock, 90% of
which are over 40 years old. Over 90%
of the region’s buildings are residential
and 60% are rented, meaning the issue
of split incentives poses an obstacle to
renovation.

Split incentives arise when
landlords believe renovations are not
worth the investment as they won’t
be the ones to reap the benefits, while
tenants refuse to fork out due to the
short-term nature of their contracts.
Most of Europe’s buildings are more than forty years old and are largely inefficient. Poorly insulated, leaky buildings have a real impact on inhabitant and worker health, according to the latest edition of the Healthy Homes Barometer.

One out of six Europeans report living in an unhealthy building, with factors like leaky roofs, damp, inadequate natural light and poor temperature control all affecting well-being.

That means nearly 90 million people in this part of the world alone live in what can be described as inadequate housing. Two-thirds of building stock is more than four decades old and only 10% can be graded A or B in energy performance certification.

Currently, that problem is not being dealt with effectively because annual renovation rates do not exceed 2%. This is largely because there are few incentives to do so, non-financial barriers and a lack of awareness about the benefits.

But that is set to change going into the next decade after the European Union finalised a set of rules known as the Energy Performance of Buildings Directive (EPBD), which tasks member states with drafting long-term renovation strategies.

The updated legislation leaves the nitty-gritty of how to boost renovation rates mostly up to EU countries, due to often wild differences between buildings across Europe, but tools like incentives and improving access to information are all expected to be used.

EU energy chief Maroš Šefčovič said that “it is essential that we base our decisions on well-founded, comparable and reliable data. That is the only way for us to face the housing challenge and deliver on our energy and climate commitments.”

Although focusing on energy

Continued on Page 11
performance, given that buildings gobble up 40% of power consumption and produce a third of our emissions, the EPBD also covers indoor health and comfort.

**THE BUILDINGS DOCTOR IS IN**

The 2018 edition of the Healthy Homes Barometer builds on the finalised EPBD text by delving into what factors harm the healthy environment of our home and, for the first time, our workspaces.

The fourth iteration of the Healthy Homes Barometer reveals that homes which are too cold in winter are the most damaging health indicator. Low temperatures can affect the immune system, make heart problems more likely and increase the risk of hypothermia.

Other factors like damp and inadequate lighting can lead to problems like asthma and a poor sleep cycle.

For single-family homes, rather than apartment blocks and buildings, badly insulated houses can double the chances of being struck by poor health, according to the research.

Indeed, single-family homes mean increased chances across the board of feeling poorly, because buildings of that type have more exterior elements, like roofs, windows, walls and doors. It is basically a case of them having more things that can go wrong.

During the launch of the barometer at an event in Brussels last week (26 September), Velux public affairs expert Ingrid Reumert said that “energy efficiency used to be the main paradigm for buildings, now it’s health”.

Although the study acknowledged that income has an impact on the chances of having a house that is liable to affect your health, it also found that income has no impact once a problem presents itself.

The barometer explains that when a home has, for example, a leaky roof, those in the top 25% of available income are equally as likely to experience ill health effects as the bottom 25%, concluding that homes themselves are the problem, rather than economic situation.

Single-family homes will have to be given additional focus as Europe gears up for the big renovation, given that suburban populations grew on average 54% more than urban ones between 1961 and 2011, as people felt the allure and draw of more space and comfort away from city centres.

The healthy homes barometer warned that the “burbs are often “overlooked” when it comes to the health question and called on national governments and industry “to focus on the needs and opportunities presented by these growing communities”.

Andreas Hermelink, an expert with energy consultants Ecofys, said that new renovation strategies should prioritise unhealthy buildings, adding that a European Commission-sponsored study is ongoing into actual renovation rates across Europe.
Homeowners are often put off fixing a leaky roof or banishing damp from the downstairs bathroom due to the costs involved. But a business case is quickly building in favour of renovations. According to a study by EU agency Eurofound, “inadequate” housing costs EU countries nearly €200 billion a year, through direct costs like healthcare and indirect costs like lost productivity.

That same study concluded that a one-off investment of €295 billion would bring housing across Europe up to an “acceptable level”. Given the annual costs accrued at the moment, that cash injection could be paid off within 18 months.

The health case is clear, as bad living conditions can increase the chance of heart problems, reduce mental health, make occupants more prone to immune system defects and even result in a distinct medical condition known as Sick Building Syndrome (SBS).

SBS can cause symptoms like mucous membrane and eye irritation, cough, chest tightness, fatigue and headaches, for no apparent reason. Now some policymakers, industry representatives and academics are trying to build an even stronger business case in favour of healthy buildings. At the launch of 2018’s edition of the Healthy Homes Barometer (HHB) in Brussels last week (26 September), UK academic Professor Oliver Jones said that healthy buildings are “the economic option” and that occupant well-being creates economic value.

HEALTHY EFFICIENCY

Up until now, health has not been the first thing people think about when dealing with building renovations or setting new build standards, as energy efficiency and performance has...
hogged the limelight.

The two factors are closely linked: if a renovation improves the insulation of a building, it keeps in more heat, reducing utility bills and carbon footprint, and housing its occupants more in the bracket of temperatures that keep humans healthy.

It is a similar case with other building flaws like damp and leaky roofs.

However, at the HHB launch, architecture expert Professor Fionn Stevenson explained that “efficient buildings are not necessarily healthy buildings”, particularly when it comes to indoor air quality and natural light.

According to research by the Health and Environment Alliance (HEAL), focusing solely on energy efficiency can result in buildings with stagnant air, under-ventilated rooms and air quality-related health problems like asthma.

In the past, some building contractors have sealed up homes in order to keep as much heat in as possible. They also installed smaller windows so the contact area with the outdoor air is kept to a minimum. Both reduce ventilation and access to natural light.

**TRUE VALUE?**

While the evidence mounts in favour of renovations that can be paid for out of the homeowners’ own pocket, there are still doubts about what benefits can be reaped by landlords though.

Occupants stand to gain financially due to lower energy bills and health care costs but building owners are hesitant to make the financial outlay, given they are not the ones living there.

Members of the H2020 REVALUE project hoped to demonstrate a link between energy efficiency performance and property value, in order to add to the economic case and presented their findings on 1 October.

While failing to identify a linear relationship between the two, their research did conclude that energy efficiency is increasingly considered important by the housing sector.

The so-called split incentives situation between tenants and landlords has been identified as a real barrier to increasing renovation rates across Europe, which currently struggle to break above 1% per year.

HEAL is urging policymakers to put in place measures that will bump that rate up to at least 3% but wants governments to do it without allowing gentrification to run rampant.

Although the HHB insisted that economic situation does not affect your health once you’re living in an unhealthy building, the barometer did acknowledge that better financial circumstances mean people are more able to spend their way out of difficulty.

That is why HEAL has called for increased renovation rates not to come hand-in-hand with rent hikes, which could force the relocation of residents and businesses.

National capitals will now be expected to jump on the renovation bandwagon, as EU countries have to draft strategies on how they will implement the recently updated Energy Performance of Buildings Directive (EPBD).
Humans have been labelled an “indoor species” because of the amount of time we spend indoors. That is why there is a fresh drive to increase the healthy environment of the buildings where we spend the second biggest portion of our time: our places of work.

According to various studies, people spend on average around 90% of their time in their homes, places of work and transportation. In Europe, more people than ever are working in offices, as over 80 million of us ply our trade behind desks.

Tools like the Healthy Homes Barometer (HHB) have used these potentially shocking statistics to raise awareness about the impact things like leaky roofs, damp, bad lighting and inadequate heating have on our physical and mental health.

In the past, reporting and studies on this impact have focused on our homes but now offices and factories are under the spotlight too, particularly since there is a link between our general well-being and how productive we are at work.

A leaky roof can have a real impact on health. [Shutterstock]

A HEALTHY WORKER IS A PRODUCTIVE WORKER

One study quoted by the Health and Environment Alliance (HEAL) shows that something as simple as poor indoor air quality can cut productivity by between 6 and 9%. General discomfort caused by poor temperatures can lead to reduced job satisfaction and higher job turnover.

Factors like low temperatures caused by malfunctioning air

Continued on Page 15
conditioning can prompt asthma attacks, cause colds and lower immune system resilience. This, in turn, increases the number of sick days taken on average by employees.

At the annual Healthy Buildings Day in Brussels last week (26 September), Professor Peter Barrett of the University of Salford said that if a healthy environment “is viable in our homes, it is also viable in our offices”.

This year’s edition of the HHB reveals that personnel costs, including salaries and benefits, generally account for 90% of the operating costs of a business, meaning even “small variations in worker productivity can potentially have a significant impact on a company’s performance and costs”.

But problems are widespread and more than 80% of European office workers report they have to put up with excessively high or low temperatures one out of four working days. The barometer cites data that shows employee performance can be slashed by up to 10% as a result.

LET THERE BE LIGHT

Although poor temperature control and bad ventilation rank high among worker complaints, lack of access to natural light topped a recent YouGov survey, which revealed that 63% of respondents think daylight has a significant effect on their work.

One study in a call centre showed that workers with a window view and good lighting processed their calls up to 12% faster than colleagues who did not have either. Mental function tests also recorded a 2% success rate increase.

Ongoing research also shows that increased access to daylight during working hours significantly improves sleep patterns, as workers stand to add three-quarters of an hour to their nightly dose under the right conditions.

Industry leaders and even policy-makers are now citing these productivity statistics as proof that it is in Europe’s best interests to renovate its old and outdated buildings at a faster rate than the current 1-2% per year.

John Sommer, strategy director at Nordic construction group MT Højgaard, said during the Healthy Buildings Day that “healthy buildings are good for business” and other panellists also echoed the “economic value” of renovations.

As Europe thinks in earnest about its place in the world and whether ambitious climate policies will blunt or sharpen its competitive edge, healthy workplaces could be an important piece in the puzzle.
Healthy buildings expert: ‘Homes cause hurricanes’

By Sam Morgan | EURACTIV.com

At the Healthy Buildings Day (HBD) in Brussels last week (26 September), academic experts painted a vivid picture of how the edifices we spend our days in shape our lives and the planet itself.

Buildings are a massive source of greenhouse gas emissions: in Europe, they are responsible for over a third of our polluting output and, globally, a quarter of emissions come from them.

That is why Professor Fionn Stevenson of the University of Sheffield kicked off her HBD presentation by warning that our “homes cause hurricanes”, linking their emissions to the ever-present spectre of climate change and its impact on weather patterns.

Climate scientists are surprised that the predicted impacts of climate change are already manifesting themselves, including more frequent Atlantic hurricanes hitting the eastern seaboard of the United States and unseasonably hot temperatures across Europe.

In Europe especially, a dry summer this year was responsible for deadly wildfires and the agricultural sector was hard hit by the climatic conditions.

Stevenson highlighted how buildings regularly have to deal with “unprecedented” temperatures that exceed 35 degrees Celsius, despite the fact they may have been built with lower figures in mind. She added that

Continued on Page 17
Continued from Page 16

architects now have to make sure they are resilient to things like flooding.

Given the event was geared heavily towards the healthiness of our buildings, Stevenson explained that healthy homes and offices must maintain their energy efficiency or risk undoing the healthy aspects because of the effect of climate change.

It essentially forms a vicious circle of sorts, where the benefits of an inefficient-yet-healthy home could be cancelled out by climate-induced temperatures, pollution-caused respiratory problems or even illness, as disease-carrying insects like mosquitoes move into new climbs.

INHABITANTS FIRST

Stevenson, an expert in sustainable design, explained that the path to an efficient and healthy home has to include the people who are going to live in the building.

“If we don’t understand the inhabitant then we can’t build healthy homes,” she told EURACTIV, adding that tools like post-occupancy evaluations (POEs) should be rolled out.

POEs are monitoring exercises carried out at various stages after people move into new homes, be it at the initial moving in stage, a few months after or even years after. An evaluation looks at things like access to light, ventilation, air quality and other health-related factors.

But it is far from standard practice in Europe. Citing the region she knows best, Stevenson said that only 3% of designers in England offer it as a service and a lowly 1% actually carry it out. No EU country or professional body has it as a requirement.

In terms of who would pay for POEs, architects and contractors are at odds over who should foot the bill and Stevenson suggested that legislation should be drawn up to clarify who is responsible.

Dr Oliver Jones of the UK’s Northumbria University warned that government policy in general should change because it is currently “short-term, naive and, quite frankly, not ethical”.

EU countries are now being asked to come up with long-term strategies to improve and renovate their building stock, as part of the now-finalised Energy Performance of Buildings Directive (EPBD).

The new rules allow member states a great deal of free rein to choose how best to up the annual EU renovation rate from just over 1% and Stevenson said that POEs could play a part, given the EPBD contains specific references to indoor health.

She added that there is a real business case behind POEs as they have the potential to be a powerful risk-management tool and warned the building sector that they should “do it yourselves or it will be done to you.”
Healthy living in Europe’s suburbs is a pipe dream and EU legislators need to wake up fast

By Ingrid Reumert | VELUX Group

If European building directives are not implemented via national legislation, the people living in Europe’s old suburbs will suffer by paying a price that can’t be measured – namely their health, says Ingrid Reumert.

Ingrid Reumert is Vice President of Global Communications, Sustainability & Public Affairs in the VELUX Group.

In far too many cases, the dream of a better life in the suburbs is an illusion as living in Europe’s aging building stock can have negative health consequences. There is need for change through building legislation in each EU Member State to improve the situation. Fortunately,

Continued on Page 19
there are signs that legislators might soon wake up to the challenge, especially if they heed the recent advice of European Commissioner Miguel Arias Cañete.

“People’s health, wellbeing and productivity must be a core priority alongside building performance,” said Commissioner Cañete in an evening debate at the European Parliament last week.

The topic of the debate, hosted by Bendt Bendtsen, Member of the European Parliament (EPP, DK) and a key driver of revisions to the Energy Performance of Building Directive (EPBD) was ‘Energy efficiency & healthy buildings – How to ensure lasting implementation’. (The directive highlights the importance of good indoor environments as well as increased energy efficiency in buildings.)

EUROPEANS ON THE MOVE

Many Europeans, like other citizens in the Western world, tend to move to the suburbs when they reach a certain stage in their life. It typically happens around the time of starting a family and in the pursuit of more space, less costs, proximity to green areas and an abundance of fresh air. From 1961 to 2011, Europe's suburbs grew 54 percent faster than urban areas, which in the age of Urbanisation, is a fact unknown to many.

The dream is that by moving to the suburbs of Europe, people will get a better quality of life, or healthier lifestyle. The reality is that in many cases it’s a pipe dream and unless more of the old buildings are brought up to standard then it may not be worth pursuing. And that’s precisely why there’s a great need for thorough national implementation of the EPBD based on clear guidance from the European Commission.

INCREASED POLITICAL PRESSURE TO BRING MORE HEALTHY BUILDING SOLUTIONS INTO PLAY

It’s undisputable that there can be serious health risks associated with living in old European single-family homes and that it’s costly. It is estimated that around 84 million EU citizens live in homes in poor condition and this costs 82 billion euros in healthcare each year.

There’s no quick fix but comprehensive implementation of the of the new EU Buildings Directive (EPBD) in Member States and follow-up by the European Commission can help speed up the process. By increasing political pressure at national level for the right kind of renovation with a focus on improving people’s health, more solutions to indoor climate and energy efficiency issues in Europe’s old residential building stock are likely to be put into play.

A ‘RENOVATION ROADMAP’ ACROSS EUROPE

One out of six Europeans report living in an unhealthy building and two thirds of the residential building stock in Europe is more than 40 years old and with the current renovation rate at around 1 percent, there's great room for improvement.

Based on the EPBD, which is the mother of all building legislation in Europe, EU governments must draft renovation strategies and implement them nationally. The strategies or ‘renovation roadmaps’ must be long term and outline how to bring the old building stock up to modern levels in terms of both energy efficiency, indoor air quality, comfort and health.

A BALANCED APPROACH – ENERGY AND INDOOR CLIMATE

With around 40% of energy consumption and 36% of CO2 emissions in the EU coming from buildings it is apparent that there is a need to have efficient buildings to reach the climate goals of the Paris Agreement. However, we cannot build future buildings or renovate existing buildings based on one parameter only, being energy. It must also be balanced with indoor climate aspects as studies show that living in damp and mouldy homes increases the risk of asthma by 40 percent.

We hope that due to the revised EPBD and related energy directives, European legislators understand that energy efficiency in buildings cannot stand alone. Energy efficiency improvements in buildings must go hand in hand with efforts to improve indoor climate – with fresh air and daylight at the top of our list.

JOURNEY MUST BEGIN AS THE PRICE OF IDLENESS IS TOO HIGH

We recognise that there is a lot of work ahead to implement European building directives via changes to national legislation. It’s a journey that must start soon and even though the European Commission's deadline is 20 months, it might take a little longer. If done properly however, it’s something well worth waiting for. If not, the people living in Europe’s old suburbs will suffer by paying a price that can’t be measured – namely their health.