



To insulate or not to insulate ... that is the (PU) question

In the UK, manufacturers report PU and PIR insulation is selling well with strong demand. Yet the sector is also facing contradictory social, government and local authority demands. **Simon Robinson** spoke with IMA's **Simon Storer**.

Simon Storer, CEO of the Insulation Manufacturers' Association, is one of the most passionate advocates of rigid polyurethane and PIR products that one could hope meet. He needs to be, as the UK is becoming a tougher place to make and sell the products. But, from a commercial perspective, that may not seem to be the case.

'Although materials prices across many construction products are high at the moment, the market is very keen to buy more PIR insulation,' he said. 'Our members tell me that we could be selling twice as much, if we could make more. All of our manufacturers are very busy; there is a huge demand. We have new plants coming on stream later this year in the UK. Manufacturing capacity in the UK looks pretty good, but can we get close to producing at capacity? That is less certain.'

Much of the bounce in demand is coming from the released pressure of coronavirus lockdowns and a booming construction sector. As elsewhere around the world, it is facing high prices for timber, steel and concrete.

More haste, less speed

But there are other constraints on demand for insulated panels and rigid PU in the UK. A year ago, the UK Government introduced a flagship building energy improvement policy, the Green Homes Grant. This had the potential to drive significant demand for PIR and spray foam insulation, but it was abandoned in March

2021 after failing to reach its targets. The National Audit Office, which reports to a cross-party parliamentary committee, described it as an 'overly complex scheme that could not be delivered to a satisfactory level of performance in the time available. 'Officials rushed its design, didn't prepare sufficiently, put in place an undeliverable timetable and failed to heed industry warnings,' Storer said. 'I think what's most galling about it was that all of this is that we, and others, warned that this was a real possibility in calls with government ministers.'

Without the Green Homes Grant programme, what is next for the sector in the

UK? 'We have a 2050 target of net-zero carbon, with other milestones being set seven or eight years earlier,' he said. 'We have 29m addresses in the UK, and the vast majority will need some remedial work to improve insulation if we are going to meet the target.'

Housing accounts for 15-20% of emissions, and other buildings another 25%, he said – with nearly half of the emissions coming from buildings, in one way or another, making them more efficient will be essential. But, he warned, it will take a long time, and the costs are high. 'The UK government is too interested in high-tech solutions like air-source heat pumps, rather than ensuring that buildings are first properly ventilated, insulated and damp free,' he said.

Tough nuts to crack

Storer believes that officials focus too much on the reduction in consumer's energy bills. 'That could come from energy-saving initiatives, but this may be an illusion,' he said. 'Consumers may have slightly lower bills if their house's average temperature is the same, but we also know that people live at warmer temperatures if they can afford to.' He said that this focus on small incremental savings does little to tackle the relatively high capital costs of fully retrofitting properties

Small private landlords and private owners could be hard to persuade of the benefits of installing insulation and implementing other green solutions, he said.



Storer: focus on long term benefits

'How do you get people to spend between £20-30,000 (\$27-41,000) on something that they don't understand when, on average, people move house relatively frequently and may not see a return on this investment. There have to be incentives or means of funding the improvements needed, and I know that various government departments are struggling to find a way through this.'

Storer added that it might be possible to persuade large owners such as housing associations to retrofit insulation because it is more cost effective to do the work at scale, and they have a long-term incentive. But while there is a lack of clear policy from the top of the government, in Storer's view, the impact of the Grenfell Tower disaster hovers over the public's perception of building safety.

As an example, he cited the recent announcement by the Greater London Authority that it will not use any combustible materials in the external walls of its affordable homes. 'But this rules out some of the best materials needed to meet other climate change targets, such as renewable timber and the most efficient PIR insulation materials, without doing anything to enhance the building's safety, even though the industry knows that [PIR] is the perfect product for the job,' he said. 'This is a contradiction, and shows the policy-makers have little knowledge of materials science, building safety or the completely unnecessary unintended consequences to which their decisions will lead, especially as most residential fires involve the contents of a property long before the building fabric comes into play.'

Material relationships

He believes we need to overcome this culture of fear and doubt that's being created. '[It's a] culture that says you can't use certain combustible materials,' he said. 'Most materials combust, and the combustibility of a product is mainly irrelevant to building safety. How and where products are installed, and their relation to other materials that make up the building, is much more important.'

One of the issues is that too often when there is a fire in a high-rise block, he said, commentators immediately claim it's another Grenfell. 'This is really disingenuous,' he said. 'The Grenfell inquiry needs to run its full course, but it is already showing that a plethora of errors and mistakes led to this awful tragedy. In my opinion, it will be seen more as the exception, not the rule, and it doesn't help anyone or improve building safety to make connections where they don't exist.'

Storer is unimpressed with populist messages. 'Currently, there is a move from government and other commentators claiming that they can ensure a

building is safe, but what does that really mean?' he said. 'I agree that everyone has the right to feel safe in a building and we need to restore confidence, but that is not the same as the government making these rather empty statements. What builders and specifiers should be saying is, "What we have built is compliant with regulations, it's been tested to the standard that has been agreed by experts across the piece, and we are confident the building will perform as expected."'

Storer is calling for an acceptance of the understanding of materials science, rather than a knee-jerk reaction responding to poorly informed public opinion. 'We need standards that reflect the use of materials in the real world, which ensures the most appropriate combinations of materi-

als is used to meet all of a building's performance criteria. There is, for instance, no need to compromise fire performance for thermal performance.'

He believes that this is the only way we can create the quality of buildings needed for the future, and retrofit the current stock to meet the challenges of the 2050 targets. 'We will continue to work with government and other agencies in the hope that changes and legislation that are currently underway lead to a better built environment, but do not reach the wrong decisions, with the wrong outcome for the wrong reason,' he said. 'If this was the outcome, it would require further costly corrections at some point in the future, and be a major retrograde step for construction in the UK.'

UTECH Europe 16-18 November 2021
MECC Maastricht, NL

The Leading International Exhibition and Conference for The Global Polyurethanes Industry.

VISIT US AT STAND: F9

recycling.
storing.
blending.

pu.rec
pu.bulk
pu.blend

YOUR SPECIALIST
for PU handling

H&S
ANLAGENTECHNIK

H&S Anlagentechnik GmbH
Sandstraße 19
D-27232 Sulingen

phone +49 4271 1011
fax +49 4271 2576
info@hs-anlagentechnik.de
www.hs-anlagentechnik.de