Topic / Question	Response	Links
Heritage declares		https://heritagedeclares.org/
Bcause	We invite you to contribute to the discussion after the event using Bcause. If you would like to do so, please sign up and add your ideas. In the first instance the Bcause	https://bcause.app/discuss/debate/-NE1XIQht8qDqbnrZES
	platform will be open for contributions and debate for 2-3 weeks. We may continue this if there is still activity.	
1	akers have used/would use concepts	
	y or accept the case for demolition?	https://www.saaada21aultuus
There are now 4 pillars of sustainal added as the 4th pillar - and this in the broader reference to the fourt here:	cludes heritage.	https://www.agenda21culture .net/who-we-are/committee- on-culture or
		https://stbauk.org/wp- content/uploads/2021/11/Fro m-Retrofit-to-Regeneration- 2021-STBA.pdf
Personally I think that we should move internal toilets and bathrooms back outside as these are the greatest historic change in the moisture physics of buildings. Should we do this or embrace out inside toilets as a needed risk to the fabric of buildings to meet today's needs, just as we need to embrace IWI to meet future needs.		Unfortunately, indoor toilet is one thing I absolutely cannot give up!  I think most of us agree with cherry re indoor toilets
So the vote seems to be that we are willing to inflict inside toilets on our heritage dwellings and with them the risk of dry-rot. If we are unwilling to remove this risk for the wellbeing of our heritage buildings for our own comfort, who are we to protect them from IWI without which they are likely to make them millstones round the neck of future generations?	They key is to heat internal spaces above dew point to reduce risks of condensation and mould and those areas occupied to comfort level. Requires good digital control over heating to make this easy to operate - currently this is rare. In addition draw curtains across windows in spaces not being used	
Is central heating appropriate for many historic buildings (and the notion of wanting to maintain 19+ C in these buildings? Do we need an alternative approach to the provision of thermal comfort? Should we aim to heat the whole building or just a few rooms?	We should aim to heat people not buildings  Agreed! There's much R&D on 'personal comfort systems' i.e. heating the person, not the building. But not much uptake by the supply side. See a series of perspectives on this:	https://www.buildingsandcitie s.org/insights/news/pcs- series.html

The first and simple advice often given by one of my colleagues is 'thicker curtains across windows and doors'. It's short term and achievable for residents while other interventions are in planning	So it seems that we want to take the Martin Lewis approach to living in heritage dwellings. Heat the person and not the building. This really will only work if we had personal carbon rationing. It might well mean that the dwellings can no longer be affordable to heat and will cease to be used. It seems to me to be. the route to the demise of heritage dwellings	
Medical guidance has suggested that cooler internal temperatures are healthierbut what temperatures are we talking about here?	Let's be careful here. There is loads of evidence that being too cold indoors is bad for health. We should not be aiming to have the life expectancy/population health of earlier centuries just because old buildings used to be cold.	I would make the distinction between more infrequent use buildings or ones where people only spend a small part of their time - e.g. churches, do not need all the interior to be heating to domestic comfort levels. But think about vulnerable people living in heritage properties - heating is essential.
Unfortunately temperatures are normally assumed to be air temperature. However in uninsulated homes the surfaces radiant temperatures are typically significantly lower than air temps. Hence occupant comfort needs higher air temperatures to offset lower radiant temperatures - not lower Crispin briefly mentioned the STBA and the Guidance Wheel - if you haven't seen, do have a look at stbauk.org, the Guidance Wheel, 'Responsible Retrofit' and our other publications. John Preston STBA		
Heritage Chair  Alexandra & Ainsworth Estate Camden by Neave Brown. Brutalist building unusual heating system, Grade II* listed. Freeholder is LB Camden, wanting to put an awful radiator scheme into the building and keep burning gas. Forcing their scheme through and using the listing to not go further even though better options possible. v. hard to challenge.	On the Alexandra and Ainsworth Estate, we have radiant walls and no control of our heating at all. We are freezing or dehydrated. One of the key arguments being used is controllability of the heating system, but the solution being proposed is one that is not appropriate to the heritage.	Heritage body will look at the option presented to them and not necessarily options that might be better. Heritage are removed from this process and do not necessarily hear key voices
Little discussion of building services and how best to decarbonise heating and hot water in high density housing, for example	Yes this is the issue at Alexandra and Ainsworth. I spoke with faculty staff at a university open day and they expressed interest in using our estate for a case study	Thank you. We will likely contact one or two of your for steer and help navigating our particular estate's issues on decarbonisation

shows details for, replacement windows, EWI, roof extensions as

we developed for the worked

example.

Traditional repairs are low carbon repairs. The industry hasn't been training the repairers of 25%+ of the stock for over 60 years. Even the very expensive retrofit of New Court, Trinity College Cambridge had problems finding skilled people.	Would love to know more from Peter Cox about how they are tackling the trinity college Dublin project - what measures have you employed for this building?  If we don't have the skills to upgrade 3000 heritage buildings a year, what do the panellists suggest for upskilling the wider construction industry for the existing 'non-heritage' building stock?	Skills needed for traditional as well as historic buildings. There have been qualifications in place for 10 years. The Scottish Govt has a Retrofit Installer Skills Matrix which requires qualifications if you work on an older building - why not in England too? This is basic risk management.
is anyone here considering and rec	ording the carbon costs and	
durability of retrofit measures? Ho	•	
1		
now will need replacing before 204  Back in the days when County	l agree in general with your points, e	ntiroly However Just because
Councils gave grants, Cambs	its not listed, it doesn't mean you sho	•
County Council had a grant	replace with non-Collywestons. Pleas	
scheme for Collyweston slate	· · · · · · · · · · · · · · · · · · ·	se just repair them with new.
roofs	New Collywestons, that is	
A number of the questions above,	and presentations from the panel.	A successful proposal is a
mention 'making the building usea		conversation - the scheme
contend that the basis of any energy strategy, and particularly one for a		must work for the building as
listed asset, must be challenging the building occupiers expectations		much for the people.
and requirements. This would allow	v a strategy to be developed which	
respects the asset and works with	t, rather than work in spite of it to	
make the users 'overly' comfortabl	e	
	s and make them useable for people 2	00 years from now. If they are
too expensive to heat or cool, wha		
	llenge assumptions. It's a key part of d	
•	e understanding, knowledge and skills	to help owners of traditional
buildings	11 %	
	and heritage is no excuse to cutting ca	
,	nanage retrofit for terraces with multip	pie private owners
Where can we see the CA toolkit p		con CTDAIn/France Date Cont
Where is the best place to start in looking for practical advice on how		see STBA's 'From Retrofit to
to improve energy performance of the fabric of an old (solid wall)		Regeneration' which covers these issues
building? The Conservation Area Toolkit	What works for Islington may not	
with Islington worked example	What works for Islington may not	https://www.architectscan.or
with islington worked example will be avail in several weeks	work across the country.  Conservation policy work has	g
from ACAN here.	always been constrained by lack of	
	resources. It must be 30 years since	
The Conservation Area Toolkit	we were trying to get Govt to	
promotes clear local details and	require Local Authorities to carry	
shows details for, replacement	require Local Authorities to carry	

out Conservation Area Appraisals

and keep them up to date.

Can the panel suggest good examples of incorporating renewables into historic conservation?	East Anglia Branches of IHBC and RTPI have a training event on Wednesday on retrofit of traditional buildings - but it's the wider industry we have to reach.  As Chris Jofeh said, we need to not only talk about new courses, we really need to focus on creating market demand for good quality work. Clients too often want things that are cheap and quick, not high quality. And yes, publicly funded bodies could take a lead by being exemplary clients for building work. All subject to funding, of course.	https://historicengland.org.uk /advice/technical- advice/energy-efficiency-and- historic-buildings/ and/or https://www.historicenvironm ent.scot/archives-and- research/publications/publicat ion/?publicationid=47c9f2eb- 1ade-4a76-a775- add0008972f3, depending where you are.
Thank you for the invaluable revie	ew of current UK & Irish activity in this	space
Will the new LETI guide cover em	podied carbon costs of retrofit?	
•	rsity in buildings, do we seek to simplify	, , ,

important information) or do we seriously invest in the skills and knowledge of designers and installers?

how would the panel motivate a local authority freeholder who wants to do the cheapest solution and also can limit the changes that can be made because it employs the conservation officer and / or is being judge and jury over it's own proposal through Heritage Partnership Agreements. Where could a resident body get advice to achieve the 'right solution'.

Health and well being along with Heritage are covered by PAS 2035. How many on this call a) have PAS 2035, and b) have seen it?

Not much has been mentioned (or maybe I missed it) about the role of accredited conservation architects, who in most cases are the lead consultant in retrofit projects for historic buildings. It would have been good to include a speaker from the AABC or the RIBA Conservation Registry.

Reduction in VAT on adaptive reuse projects down to 0% like new construction is offered is an obvious opportunity for legislation to bring about a circular approach! :)

An alternative approach from EU	"The approval of the Architecture	Link to articles on ACE
to embedding a different practice	Quality Law is a milestone for the	website: https://bit.ly/3tUYvrL
- The Architects' Council of	profession, since it establishes the	
Europe has congratulated the	general interest of Architecture, for	
Spanish architectural community	its undeniable contribution to the	
on this achievement, and said	well-being of people and,	
that the 'initiative should serve	therefore, it places our country in a	
as a stimulus to other EU	leadership position within the	
Member States, in which the	European UnionΓÇ¥	
architectural organisations		
should act as catalysts for such		
legislation, as the Spanish have		
done.'		
It would be great to get some	What motivates the landlord and	
responses from Paul about the	how far do they go with	
opportunities and barriers for	decarbonisation?	
such a huge landlord.		

No one has talked about schools - is anyone working in or with schools in terms of raising interest and awareness?	Schools - see Please note the forthcoming webinar 'Fit for the Future' which takes place on Tuesday 8 November, 5pm - 6pm	https://neu-org- uk.zoom.us/webinar/register/ WN_V2bwSa3bQ5mKOcKXkco ErQ
If the resources currently focused on new-build were redirected to decarbonising the existing building stock, then the construction industry might have a chance of achieving this goal.	well said Dr Whitman!	
Embodied carbon!		
Breaking into the circular argument.	Do we need to stick ourself on to the M25 to break into this argument? We have lost 12 years since Retrofit for the Future!	
Can we re-frame this from 'Heritage' to 'traditional'	Start with using lime mortar and render, not cement - then you can prolong the life of carbon intensive fired and quarried materials. Basic re-education of industry needed!	In my view every building becomes built heritage as soon as it is completed! But there is a big subset of solid wall buildings.
I think if we can reframe preservation/conservation within a circular economy debate, there will be gains for heritage.	Also the heritage sector do have to think about accepting a certain degree of loss and think about what opportunities this might give us.	https://www.researchgate.net /publication/336852048_Circu lar_economy_strategies_for_a daptive_reuse_of_cultural_he ritage_buildings_to_reduce_e nvironmental_impacts/figures ?lo=1
Perception of harm is often used to justify not making change in the right way  Absolutely agree with the harm point. The same has been the case for environmental impact for may years and there is finally a move to biodiversity net gain.	The heritage sector accepts loss of heritage value all the time, every day; the key issue here is that energy efficiency is in danger of being seen as an overriding justification that always supports whatever heritage harm is proposed - even though less harmful solutions might be better at reducing carbon emissions	https://www.researchgate.net /publication/336852048_Circu lar_economy_strategies_for_a daptive_reuse_of_cultural_he ritage_buildings_to_reduce_e nvironmental_impacts/figures ?lo=1
Our undergraduate architecture students are demanding courses on retrofit and reuse of buildings, which is great.	I have seen this at a couple of university open days also and some where sustainability and retrofit are not even apparent or promoted as key factors in what the future holds	
Many georgian windows were replaced with Victorian 1 over 1 windows but conservation officers argue these 1 over 1 are significant	Reduce operational energy through better windows and insulation keeping embodied carbon of structure.	

'Fabric first' is a very	I'd prefer 'data first'. We must	Need to do a case-by-case	
misunderstood phrase - it applies	understand the building before we	analysis. sometimes we just	
to passivhaus, but EnerPHit, the	decide what to do to it	need to say goodbye to the	
passivhaus equivalent for		old building, other time they	
existiing buildings, emphatically		can be retrofitted.	
does NOT take a fabric first			
approach, and concentrates on			
occupant comfort, looking at			
repair and services first			
The Greenest building is the one	Third option is the retrofit the	avoid waste before 'reuse' (ie	
that is already built - Carl	existing building and get best of	fabric reuse) and then recycle	
Elefante	both.		
I know of a 40 storey hotel in	Ocean Terminal in Edinburgh which		
Hong Kong that was demolished	opened 2001 now has planning		
for offices after just 8 years of	permission to demolish half of it to		
life.	make way for more new-build		
BS EN 15978 promoting whole life	BS EN 15978 promoting whole life cycle has been in force for 11 years - how many use it?		
•	gy performance of a building and its va	llue to the owner and its ability	
to increase in value, would be mea			
Anyone wanting to demolish a	Negative building Audits in CAs		
building to build a larger one	where used as justification of		
should have to demonstrate a	demolition. Negative buildings in		
whole life carbon benefit	CAs can be extensivelky retrofitted		
including the original carbon.	instead		
_	d study into demolition and how AI can	-	
•	ata to share around demolition data in	Scotland please email me at	
Katherine@grandbequest.co.uk! T			
Have to leave this fascinating	Sorry to have to leave this great	Thanks all, great debate and	
discussion. Thanks you to all for	debate, thanks all.	really useful info	
good sense and lots of references			
provided			
Thanks everyone, very	Excellent wide-ranging discussion	Excellent debate. Thank you	
interesting	with useful takeaway on local	Thanks everyone	
	collaboration to frame ways		
	forward locally		