



SUSTAINABLE TRADITIONAL
BUILDINGS ALLIANCE

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29TH June 2021

Ref: ENERGY STRATEGY FOR NORTHERN IRELAND CONSULTATION

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Introduction to STBA for reference

1. The Sustainable Traditional Buildings Alliance (STBA) is a UK-wide collaboration of sustainability, heritage and construction industry organisations that acts as a forum for sustaining and improving [traditional buildings](#). We work together to minimise risks and maximise benefits to traditional buildings and their occupiers. We combine technical expertise with a holistic approach promoting quality of life.
2. STBA has produced [research reports](#) and [guidance](#) for DECC and BEIS. Our 2012 [Responsible Retrofit](#) report for DECC led to it commissioning the [BRE Solid Wall Study](#). This identified approximately 35% of dwellings in the UK as heritage buildings. Historic England has published STBA's [Gap Analysis in the Energy Efficiency of Traditional Buildings](#). Our work has changed awareness of performance of solid wall buildings, and of [moisture](#) in them, prompting the formation of the [UK Centre for Moisture in Buildings](#).
3. STBA pioneered the Whole-House approach to retrofit. This was embraced in the Each Home Counts report which led on to PAS 2035. We are acting as technical advisor to BEIS for the new Social Housing Decarbonisation Demonstrator Fund, which takes a Whole House approach. We are piloting a large-scale Whole-House retrofit project under the [BEIS Thermal Innovation Fund](#), in partnership with Melin Homes.
4. STBA contributed to development of [PAS 2035:2019](#) which sets the standard for domestic retrofit and is mandatory for publicly funded projects. In this, STBA was instrumental in getting the health of buildings and occupants, and heritage considerations embedded into energy efficiency guidance. We have written the new Annex E for the PAS on Significance Assessment for non-protected traditional buildings. We are now contributing to PAS 2038 for non-domestic buildings, which is currently under development.

5. In contrast to the costly Government guidance (PAS 2035 etc) which is only available from the British Standards Institute, STBA has produced freely-available web-based guidance including the [Retrofit Guidance Wheel](#) and the [Whole house approach](#).

6. STBA is independent, inclusive, and not aligned to any pressure group or commercial entity.

7. STBA is contributing to the work of the international Climate Heritage Network in the lead up to COP 26.

8. While STBA's technical work has focused on individual buildings, our approach is holistic, and our research and collective experience have prompted reflection and review at a much broader scale. This includes places as well as buildings, and the value (or lack of it) given to the heritage and quality of life in solutions being promoted for tackling climate change.

9. We are particularly mindful of the need for a whole-life approach which takes account of embodied carbon in existing buildings, and of the carbon and financial costs of retrofit measures.

10. The STBA has written a [scoping report on EPCs](#) and the issues that surround them and this might be used as an informative backdrop to the discussions on energy in NI.

CONSULTATION QUESTIONS:

Q1: Do you agree with the overall goal of achieving net zero carbon energy no later than 2050?

Yes

Q2. Do you agree with the proposed outcome of “net zero carbon and affordable energy” for the Energy Strategy?

Yes

Q3. Do the five principles identified provide clear direction around the approach that we want to take with the Energy Strategy?

No. There is a missing part. Sustainability. For example in Wales the [Wellbeing of Future Generations Act 2015](#) sets out some overarching principles and it is worth exploring these in terms of an energy strategy. Any strategy in Wales must comply with the 7 aims and also the 5 ways of working. This is best practice, so one has to be aware of the consequences of action (or inaction) and how this might impact on other key areas. Eg. Converting to electricity needs to be done so that it does not increase bills – purely an energy focus. However, what about insulating homes to reduce demand causes condensation, heritage, health risks? Etc.

I think that there must be a section that looks at risk, cross-departmental communications, holistic approaches etc. Decarbonisation needs to be aligned and allied to all departments and dealt with holistically. Energy targets need to be seen as an element of improved sustainability in NI, so other inter-related topics like health (better insulation, good ventilation, no moisture build up) need to be referenced. Retrofit can also provide wider benefits to communities – local jobs, improved green spaces, futureproofing buildings into lifetime homes, community engagement and action. This leads to the term Retrofit being too limiting to the opportunities that this investment represents. Regeneration is a better term to focus upon. The links appear to have been recognised within the Programme for Government (PfG), but it will take a lot of effort to ensure that cross departmental working happens and that it is all pulling in the same direction.

Q4. Are there any key delivery priorities for the Energy Strategy not captured? If so, please outline what you believe should be included.

The main missing link is Community.

Given the focus on ‘Placing you at the heart of our energy future’ there seems to be no mention at the outset of how the communities of NI can participate and own some of the energy system. Wales has a target of 1GW in public sector and community renewable energy capacity by 2030 for example.

Q5. Do our proposed indicators adequately allow us to measure success at achieving the proposed Energy Strategy outcome? If not, please advise on what alternative metrics should be used.

They are fine, but do cover some fundamentals associated with energy:

It is really important that the grid is balanced, so smoothing out demand so that existing infrastructure can cope with higher levels of demand, especially for electricity. So there needs to be a metric around how much of the energy generated is used.

There is also no metric to gauge community ownership, so maybe a target required there.

Q6. Do you think there are significantly different illustrative scenarios which should be developed? If so, please provide further information.

The [ENA](#) did a report for the UK looking at various scenarios and given the locality specific solutions I would imagine that NI would be in a similar situation where certain areas are better placed for differing solutions. For example in Wales there is a hydrogen network planned for the south and north, whilst mid Wales will be more focused on electrification. It may well be that there needs to be an area wide plan set out that considers all of the individual opportunities that a region presents, and a more detailed plan made from this starting point.

Diversity may be key as having all eggs in one basket might be politically dangerous. A major loss of electrical generation for example could have a catastrophic impact. The idea of having smaller, localised community owned power plants should provide better flexibility and also ease the need for large infrastructural improvements. Again this might favour a local approach, so where there are lots of biogas opportunities this might be serviced by a co-operative of farmers / landowners.

Q7: Do you agree with the four consumer population groups we have identified? Please advise on key considerations within each.

There tends to be a focus on 'groups' of people. Rural, Pensionable age for example. Many of these groups do not require assistance, so it might be easier to target those on low incomes / fuel poverty as otherwise the taxpayer may be supporting people who have the means to make improvements but are not encouraged to do so because of blanket support measures for their 'group'.

Other than that, there is a section called 'community' that is missing. Community centres etc tend to be classified as businesses and hence not able to garner support. Again some are well funded, but most are not.

Q8: Do you agree with the five measures identified to "enable and protect" consumers? If not, please outline what else should be included?

Providing support to minimise costs, for example by embracing flexible tariffs that support the use of renewable energy and then providing battery storage facilities for those in need. This could help to smooth the grid and also minimise fuel bills.

The most fuel poor tend to pay the highest rates, but again if there is a lot of community ownership rather than the 'big six' then community owned generators may choose to supply cheaper energy to vulnerable customers.

Q9: Do you agree with the proposed scope of the “one stop shop”? Please advise on any different activities you think should be included.

Yes, as long as it only deals with energy. When it comes to retrofit and other associated measures then the process needs to be undertaken by professionals in the field rather than generic information. Many solutions are personalised, and specific and generic advice especially around retrofit can be detrimental if enacted upon blindly.

Q10: Which approach do you think should be taken to create this organisation? Please outline your rationale.

A funded but independent organisation will tend to get garner the most confidence in the general public.

Q11: Do you believe that additional financial assistance to protect certain groups of consumers should be introduced? If so, please identify what consumers should be targeted and what support would be needed.

The main focus needs to be on those people who are paying over the odds for their energy due to pre-payment meters etc. There should be a requirement that the rates match the average cost of energy for all customers rather than dedicated rates that disadvantage the already disadvantaged.

Q12: Do you agree with the four identified priority clean energy sectors:

- a) Energy efficiency
- b) Renewable energy
- c) Hydrogen economy
- d) Circular economy

Please advise on any additional areas that you believe should be prioritised and your reasons for this.

Community energy. As stated above there is a need to look at how individuals and communities can be actively involved and although this does appear later it is not a headline.

Local energy. Similar to above, there is a growing need to generate and distribute energy on a more localised basis rather than large, centralised structure that we currently have. This will facilitate lower pressure on national grid networks and also encourage smaller scale but more relevant solutions.

The main area of contention for the STBA is that of energy efficiency. Not because it is not needed, but how it is achieved. It is vital that areas like NI think beyond the simple metrics of EPCs and arbitrary targets. With the introduction of PAS2035 there is a risk assessed holistic process that not only generates an indicate EPC, but it also then tells you how to make the building better and what to do in order for it to be as good as it can be. This is a quality assured process that means that repeated EPCs are not required, but enforcement of the Medium Term Improvement Plan. This can be done / enforced at point of sale if needed, but it at least gives a route for each building into the future that not only reduces risk, but it also reduces the black market in construction. This should drive up quality, enhance tax take and also reduce the costs associated with unintended consequences.

Q13: Do you agree with the economic growth opportunities identified within energy efficiency? What supporting policies do you believe are needed to take advantage of these?

As stated above, the use of PAS2035 and some level of enforcement through the Trustmark Data Warehouse information can help to ensure all works are undertaken professionally, above board (in terms of tax, planning and building regulations) and by quality assured builders. There is also a need to have educational targets aligned to opportunities around retrofit and energy systems.

Q14: Do you agree with the economic growth opportunities identified within renewable energy? What supporting policies do you believe are needed to take advantage of these?

There are wasted opportunities for onshore wind, but again there could be more community-based initiatives that facilitate private individuals to invest in the green economy. This will lower the burden on the public purse.

To take a wider viewpoint there may be options for those people who might invest in PV on their homes to invest the same amount in community energy. The rate of return (RoR) from

PV is quite low at present and so making community energy attractive with gov backed guarantees on RoR will potentially attract investment into these larger, more efficient types of renewable generation.

Q15: Do you agree with the economic growth opportunities identified for hydrogen production, demand and manufacturing within the hydrogen economy? What supporting policies do you believe are needed to take advantage of these?

This depends on the overall direction taken. If electrification is chosen, or in a specific area renewable electric is a better option, then storage via batteries might be better, but if a gasification agenda is developed / chosen then green hydrogen is an option, however it is notoriously inefficient in terms of generation, so having this level of excess power on tap seems a little non-sensical unless there is no other option. Bio-gas would seem to be a better option in the livestock areas of NI.

Q16: Do you agree with underpinning principles identified within the circular economy? What supporting policies do you believe are needed to take advantage of the potential economic opportunities?

The circular economy is really important and again Wales has a major focus on this that might be interesting to learn from.

The focus of the circular economy needs to be community based as well as corporate. NI needs to look at its natural, cultural, industrial and human resources and maximise this potential in a sustainable manner.

Q17: Do you agree that we should develop a green innovation challenge fund? If so, what scale and type of innovative projects should this support?

Yes, having a fund that can be used to stimulate solutions for NI specific issues can be useful. Products based around making sustainable improvements to traditional buildings (those regarded as being the most difficult to refurbish) would be most welcome.

Q18: Do you believe that we should work with the Utility Regulator to review how energy regulation can facilitate a green recovery and green innovation? If so, how can this be done in a way which protects consumers from the higher risks associated with innovation projects?

Yes

Q19: Do you agree with a focus on research mapping, research funding, business linkages and UK opportunity scanning to maximise the impact of the local research base with clean energy specialisms? Please identify specific opportunities in the local research base that could be progressed.

Research can be key in certain areas, however, sometimes research can delay action. A balance needs to be struck between the costs and time commitment of research and then actually getting on with the actual changes required. Many technologies are well known and developed and roll out of these, once an agreement is reached regarding overall strategic direction, should not be stalled for the sake of more research. However, where risks are greatest then a cautious approach is probably wise.

Q20: Do you believe that utilising and tailoring existing education and training routes can meet the short-term skills needs of the clean energy sector? How can activities within these routes be shaped to meet the needs of the sector?

Yes, however there needs to be a system that embeds cross cutting underpinning knowledge into all the sectors. Work has become very specialised and there is a need to have 'general knowledge' of any industry established at an early stage. For example, construction workers need to understand the building dynamics of all buildings, not just new ones. Most trainees will end up in the RMI market rather than new build, but they only understand new build techniques and products. Most trades again are very focused. They need to have an understanding of the whole team that are involved with a retrofit. This then facilitates communication and understanding around areas of commonality. For example electricians, builders and plumbers are involved in improving bathrooms, but a plumber's work might puncture through a builder's membrane, or an electrical circuit might not have the capacity to fulfil a change in electrical shower connection etc. So it is key that we get things right first time and this requires good communication and also an understanding of all the other trades involved and their requirements.

Q21: Do you agree with the proposal to establish an Energy Skills Forum to shape the future skills needs of clean energy sector? If so, what do you believe the role, remit and membership of such a group should be?

There needs to be a focus on competence with any forum rather than leaving it up to industry just to pump numbers through. Control over qualification content and standards is really important, as is determining competence. This may involve periods of probation etc to be enforced.

Q22: Do you believe that there is a need for specific measures aimed at ensuring a just transition in Northern Ireland? If so, please advise on what the focus of these should be in addition to the education and training routes already proposed for a low carbon workforce.

Community engagement and involvement is really important to facilitate ownership of any solution. Ensuring that those with less are supported is essential however it is equally important that schools and colleges are primed to make 'practical skills' as attractive as the conventional 'academic route'.

Q23: Do you agree that an energy savings target should be set for Northern Ireland?

There needs to be a target of some description so that industry knows where it needs to get to, otherwise it will dither and delay, however the use of the correct metric is vital.

For new build there MUST be a zero-carbon requirement ASAP, otherwise it is just building in more retrofit requirements (and hence cost, disruption etc) into the new infrastructure. Zero carbon is truly easy to achieve for all developers, it is just a case that the status quo works for the industry.

Retrofit is a different proposition. This has been clearly shown over the years that use of EPCs is not a reliable, coherent or successful way forward. There has been wide ranging unintended consequences, many of which have been truly disastrous for both the houses and the communities affected. Having arbitrary targets for all buildings and relying on a simple EPC to inform us on what to do needs to be replaced by a better system.

We would advocate that the use of PAS2035 / PAS2038 is a much better process. A once in a lifetime assessment generates a Medium Term Improvement Plan (MTIP) that sets down an agreed pathway for that building to become as good as it can be. This can be enforced / partially enforced at points of sale or changes in tenancy. For owners they can choose to undertake works when appropriate for them. This relieves the hassles associated with having arbitrary targets to meet at potentially inappropriate times. It doesn't remove the options for enforcement though. So creating a system that requires steps to be taken on the MTIP at convenient points or via back-stop dates should be relatively simple.

This would then put a risk assessed system at the heart of retrofit. It also means that all works have to be undertaken by a registered contractor, thus cutting out the black market.

Q24: Do you agree that Minimum Energy Efficiency Standards should be set to drive improvements in energy efficiency? If so, what buildings should be the early priorities for introducing minimum standards?

See above.

MEES can be useful for simple buildings, but certainly for the traditionally built stock the PAS is a much more reliable, lower risk and ultimately a process that embeds a higher rate of success into retrofit rather than blunt EPC recommendations. It must be understood that EPCs are not a design tool and were never developed to be one, they are a compliance tool only and should be used as such.

It is understood that EPCs are going through a review and hopefully will be improved but retrofit is a process that needs to be holistic and sustainable. Neither of these two requirements are delivered by the use of EPCs alone.

As stated above PAS2035 does generate a rating and also the MTIP will also provide an ultimate rating for the property if the measures are followed. So EPCs do have a use within the PAS2035 process, but they are used within it to show compliance. The design element is done by professionals. This is a key element to address with any MEES. The industry and population need to both where they are going (in terms of EPCs) and how they will get there (PAS2035).

Q25: Do you agree with the general scale and proposed pace of change outlined in DoF's five phase plan for building regulations? If not, please outline what achievable timescale or programme should be implemented and your rationale for this.

No.

Industry will not change until it is forced to. Industry also already has the technology and materials to delivery zero carbon now. Industry will do as it is told to, so rather than having several more years of creating housing that will require expensive retrofitting into the future and also embedding infrastructural inefficiency / carbon use into NI, it would be better A for carbon reductions, B for the population, C for the Government and ultimately D for industry if the zero-carbon requirement were to be brought in sooner rather than later. The piecemeal approach just leads to larger long-term problems. The STBA would suggest that all new buildings should be zero carbon by 2023 at the latest.

Q26: Do you think that we should seek to explore how the rates system can be used to encourage energy efficiency? If so, please outline key issues that would need to be considered.

This relies on using EPCs again. It has been shown above that chasing EPCs via MEES or Rates can cause more trouble than it is worth as people use EPC recommendations as a design tool. PAS2035 needs to be mandated for any works and hence rates incentives need to be linked to using Trust mark approved contractors, the PAS2035 process etc as well as any EPC target rates. Note also that many buildings can only ever achieve certain ratings, so an older property on oil for example will never reach an A or B without disproportionate amounts of capital works, so 'as good as it can be' may only be a D or a C for many properties.

Q27: Do you agree that we should introduce a pilot domestic retrofit scheme by spring 2022, followed by a substantive scheme as part of a "one stop shop" approach? If so, what changes are needed to the wider energy efficiency support landscape to ensure a joined-up approach?

Most of the knowledge required for positive retrofits is already known. The main issues standing in its way are: 25 warranties required under ECO (STBA is currently addressing this with Trustmark and BEIS), poor supply chain and knowledge around traditional building materials especially with breathable insulations etc. I would only recommend that traditional houses are 'researched' so that a suitable palette of measures are created that will survive in the NI climate.

Q28: Do you agree that we should ring-fence the PSO funding for vulnerable consumers including the fuel poor? Please advise on changes you believe should be made to the level and scope of the PSO for energy efficiency.

There is a place for the 'Innovators' and 'Early Adopters' in the pathway to standardisation / acceptance of new technologies / ways of working. Support for this sector may well be needed so that those mistakes, that inevitably come with retrofit, occur within the able to pay / prepared to pay market. I would suggest though that any work is minimised, and that the vast majority of support is given to the fuel poor market.

Q29: Do you believe that green private finance solutions have a role to play in supporting domestic consumers to invest in energy efficiency? If so, what specific green finance solutions should be explored?

The Green Finance Initiative will have a lot to say on this matter. However, again we would suggest that any green finance is associated with the PAS process rather than a simple EPC one. PAS2035 can help embed quality and lower risk and this is what finance institutions generally want from their investments.

Q30: Do you agree that Invest NI should deliver a pilot energy efficiency support scheme for businesses, to be followed by a substantive scheme delivered through the proposed “one stop shop” organisation. If so, what type of support do you believe is most appropriate for different groups of business consumers?

A number of organisations recently put in responses to BEIS on the non-domestic MEES consultation. It may be worth contacting BEIS to see what solutions / issues were raised with this.

Q31: Do you believe that green private finance solutions have a role to play in supporting non-domestic consumers to invest in energy efficiency? If so, what specific green finance solutions should be explored?

Q32: Do you agree that we should seek to develop skills and capability, enhance quality assurance and standards, and use an accreditation body to provide guarantees on work undertaken by the energy services for retrofit sector? If so, how can we help to prepare the sector for these changes?

Again use of PAS2035 has this built into its structure.

Q33: Do you agree that information, awareness and behavioural change should be a key strand of future energy efficiency support? If so, what are the key behaviours that should be targeted?

It is vital that people understand their homes and how they operate. Many people do not have an understanding around issues like:

- Ventilation
- Moisture (condensation)
- Heritage
- Building physics
- Behaviour and choice affecting energy efficiency
- Tariffs for utilities

Drainage

All of these things need to be embedded into primary age children and again in secondary school when looking at citizenship issues.

Q34: What measures do you think can have the most impact to support people to reduce the miles they travel in private vehicles? Please explain your rationale.

Q35: Do you agree with setting a 70% renewable electricity target by 2030, whilst retaining the flexibility to increase this to 80%?

Yes

Q36: Do you agree with the criteria identified that would allow in order to consider any future increases in the renewable electricity target?

- a) Projects can be delivered in a cost-effective manner.
- b) Offshore wind can be delivered by 2030.
- c) Storage technologies can minimise system curtailment of renewables.
- d) Greater clarity on electricity demand for heating and transport.
- e) Consumers' bills are not disproportionately impacted.

If not, what alternative criteria might be used?

Q37: Do you agree that we should explore with BEIS the possibility of extending the Contracts for Difference scheme to Northern Ireland? If so, what terms would be needed to ensure generation in the region whilst protecting consumers?

Q38: Do you believe it is possible that an offshore wind project in Northern Ireland could be operational before 2030? If so, please outline what targeted actions could be taken to deliver this.

Q39: Do you believe that a fixed platform offshore wind project should be targeted to be part of the renewable generation mix? If so, how would you propose some of the challenges associated could be overcome?

Q40: Do you believe that floating platform offshore wind offers the best long-term opportunities for offshore wind in Northern Ireland's waters? If so, what additional steps could be taken to encourage these projects?

Q41: Do you believe that other marine renewables can play a key role in our renewable generation mix? If so, please identify what technologies offer the greatest potential and what steps can be taken to support these.

Q42: Do you agree that a strategic approach to planning the location of renewable projects should be taken? If so, please outline practical steps that could be taken to deliver this.

Q43: Do you believe that there should be a requirement for renewable developers to share some of the financial benefits of developments with local communities? If so, what share do you think would be reasonable? If not, please provide your rationale.

Yes

Ideally the developers are the community.

Q44: Do you agree with taking separate approaches to on-gas grid and off-gas grid consumers? If not, what approach should be taken?

All properties are individual and require individual approaches for the future as per PAS2035. Having a clear policy that states 'all solid fossil fuels' will be withdrawn by 202X and no new 'oil boilers' will be allowed to be installed after 202Y allows the industry to plan and adapt. However, these newer technologies do have certain limitations and hence support may be required in order to facilitate their use. So there will probably be a demand for supporting finances where non-fuel consequences will be experienced. For example, lower intensity heat from heat pumps will require a better insulated building and also potentially new delivery systems (UFH / larger radiators etc).

Q45: Do you agree that we should not rule out potential low and zero carbon heat solutions at this stage? If not, please outline your rationale.

Yes

Q46: What low and zero carbon heat solutions do you believe we should prioritise for trials? Please identify where such trials should be focused and what key issues should be tested within each.

Q47: Do you believe that the role of heat pumps will be different depending on whether consumers are on or off the gas grid? Please outline what you think the specific roles should be.

If the plan is electrification, then all consumers should be encouraged to change over to heat pumps where it is appropriate for them. Again care is required so that heat pumps do not get a bad name. They must be designed, installed and commissioned by registered tradespeople as a holistic package. It is important to have one contact point so that if there are issues then there is no quibble about who is responsible for putting it right.

Q48: Do you agree that Northern Ireland should develop a pilot grant scheme to support low carbon heat technologies for domestic and small non-domestic consumers? If so, please identify key issues that need to be considered in designing and delivering such a scheme.

It must be holistic and look at all the wider implications of changing over to a different system. It should also be cost neutral, so that there is no incentive to undertake inappropriate works in order to gain business.

Q49: Do you agree that legislative and regulatory steps should be taken to facilitate biomethane injection into the gas network?

Yes

Q50: Do you believe that support should be provided to encourage biomethane production for injection into the gas network? If not, please outline what alternative approach should be taken to decarbonising the gas network.

Yes, but focused on community projects that contribute towards localised solutions.

Q51: Do you agree that the local Gas Network Operators should develop and publish a plan to decarbonise gas out to 2050? If so, what key issues must be considered within it?

ENA has already published something similar to this and so NI needs to draw on this document. <https://www.energynetworks.org/creating-tomorrows-networks/>

Q52: Do you agree that the sale and installation of new oil boilers should not be allowed for consumers on the gas grid? Please outline your rationale and, if you agree, what a viable timeline for introducing this might be?

Yes.

Q53: Do you believe that off-gas grid consumers should have the option to retain oil boilers for use with biofuels? If not, what is a viable timeline for introducing a ban on the use of all oil boilers?

Yes. Changes need to be made to boilers to facilitate this, so the issue would be around banning heating oil sales from a particular time.

Q54: Do you agree that the local Oil Industry should develop and publish a plan on how biofuels could play a role in decarbonising heat out to 2050? If so, what key issues must be considered within it?

This is probably better done by an independent voice. Otherwise it is asking turkeys about Christmas.

Q55: Do you believe that support should be introduced to promote the uptake of biomass for off-grid consumers? If so, please advise on what support is needed and where it should be focused.

With the history of biomass in NI, we would recommend more of a focus on bio-fuels as this is the more likely fuel replacement in the domestic market.

Q56: Do you agree that the sale of coal and wet wood should be banned in Northern Ireland? If so, do you believe this should be extended to include other solid fuels with the exception of kiln dried wood?

Yes. No. air dried wood is preferable as it has a lower embodied carbon. Other solid fuel alternatives might appear that are sustainable.

Q57: Do you agree that we should develop a Northern Ireland specific strategy that sets an overarching, long-term plan for cleaner, greener transport and shows how we will meet net zero emissions within the transport sector? If so, what Northern Ireland specific issues need to be factored into this in order to accelerate the uptake of Zero Emissions Vehicles?

Q58: Do you agree that an EV communication campaign should be run in Northern Ireland? If so, what key messages would be most impactful for consumers as part of this?

Q59: Do you agree that the private sector and local government have a key role to play in developing EV infrastructure? If so, what barriers can government address to ensure that such projects are commercially viable?

Wales is developing EV infrastructure via community engagement and project work – see <https://chargeplacewales.org/>

Q60: Do you agree that we should develop an EV Charging Infrastructure Plan in collaboration with public and private partners? If so, what should the key priorities of the plan be?

Realisation that most vehicles are parked at work during the day and hence charging here is as valid as charging at home.

Q61: Do you agree that public sector contracts can be a key driver for developing technologies and markets for alternative fuel vehicles? If so, what specific opportunities are there that could be progressed?

Q62: Do you agree that collaborative research will be important to demonstrate alternative fuels? If so, what are the best routes to identify and progress potential projects?

Q63: Do you believe that Compressed Natural Gas/Liquid Natural Gas and/or and synthetic fuels can play a role as an interim measure to decarbonising transport? If so, how can government help to encourage the private sector to trial and use these fuels?

Q64: Do you believe that CCUS can play a role in Northern Ireland? If so, what potential applications could be the initial focus for demonstration projects?

Q65: Do you believe that our approach to petroleum licensing should change in line with our commitment to decarbonise energy?

Q66: Do you agree that the Electricity Network and System Operators should produce a pathway to creating a flexible and integrated energy system? If so, please provide evidence to demonstrate what the initial priorities of such a plan be?

Q67: Do you agree that conventional power generation can play an important role in the pathway to decarbonised energy? If so, what opportunities and barriers exist for such plants?

Q68: Do you believe that further interconnection will be needed in the future? If so, is a new revenue mechanism needed to bring forward this investment?

Q69: Do you agree that our power system should be based around flexible solutions to align demand and supply? If so, please advise on what key decisions are needed to achieve this.

Q70: Do you believe that the SEM and DS3 offer sufficient market routes to support the deployment of flexible technologies for generators of all sizes? If not, please provide evidence to demonstrate what additional market routes may be needed.

Q71: Do you agree that a policy framework should be put in place to enhance access to and use of consumer data? If so, please outline key considerations that need to be factored into this framework.

Q72: Do you believe that we should take forward the Energy Data Taskforce recommendations in Northern Ireland? If so, please advise on key differences with Great Britain that need to be factored in.

Q73: Do you agree that a Cost Benefit Analysis of smart meters should take into account the broader benefits they can bring to consumers as an enabler of energy data and a smart system? If the CBA for smart meters is not positive, what alternative approaches can be taken to deliver these benefits for consumers?

Q74: Do you believe that financial support should be provided for micro-generation to increase the number of active consumers in Northern Ireland? If so, what should this support look like? If not, what are the alternatives?

Q75: Do you agree that network charging in a decentralised energy system will need to change? If so, what are the principles that should be adopted in distributing future network costs across consumers?

ToU tariffs need to be encouraged and so fuel poor households having access to battery storage is really important and / or community-based energy storage.

STBA

SUSTAINABLE TRADITIONAL
BUILDINGS ALLIANCE

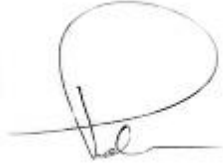
Q76: Do you believe that a new regulatory framework is needed to protect consumers who engage in decentralised arrangements? If so, what consumer protection measures should be part of this?

Q77: Do you believe that energy communities have a role to play as part of the energy transition? If so, what support is needed to progress these? If not, what are the alternatives?

Q78: Do you agree that the potential of geothermal energy should be further explored, supported by a legislative and regulatory framework? If so, what applications do you believe there are for geothermal energy in Northern Ireland?

Q79: Do you agree that further trials of heat networks should be carried out? If so, what key issues do you think should be tested through these?

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Peter Draper', written over a light grey horizontal line.

Peter Draper – Director
On behalf of the STBA