

# The GSHP Big Challenge Debate

**Tuesday 17<sup>th</sup> September**

**The National Conference Centre, based at the National Motorcycle Museum, Solihull B92 0EJ**

The Ground Source Heat Pump Association Members' Day and AGM held on 17 September focussed the second half of the morning to *The GSHP Big Challenge Debate: How do we, as an industry, raise the profile of ground and water source heat pumps to become the mainstream choice for heating and cooling?* This partly responds to the results of the BEIS public opinion survey; with questions on awareness of renewable heat systems and the likelihood of installing one in the next few years. Heat pumps have had a disappointing response with only a small percentage of those asked indicating their awareness of our technology, and even fewer likely to have a system installed.

This was an opportunity for our members and stakeholders to help us to identify the underlying issues that face our technology, based on their own daily experiences, and to put forward their ideas on how these can be overcome.

Working together we hope to make a real change to how ground and water source energy is perceived in the eyes of the general public and beyond.

## The four big questions:

1. How do we, as a sector, raise the public profile of GSHPs to become the mainstream choice for heating and cooling?
2. What holds our technology back?
3. Who should we collaborate with to make it happen?
4. Who can make the biggest difference – installers, the big consultancies, trade associations, Government...?

## Chairman's Call to Arms

*The GSHP Big Challenge Debate* is a call to arms to members to recognise that we need to do more to drive our own agenda. We cannot sit back and expect others to do it for us. Yes, policy appears to be moving in our direction but, as I have said previously, we have been here before. Understandably, whilst market activity in the UK was very low, it was difficult to justify significant investment in the promotion of our own sector, but there is now a very real possibility that significant growth could be coming. It is vital that we do not let this opportunity slip through our fingers. We all have a role to play, manufacturers, supply chain, technology consultants, general market and carbon consultants, installers and the consumers, be they domestic, commercial, corporate, facilities management companies, Housing Associations, local authorities, academics. We have to listen to the market,

identify what is holding us back and then generate the mechanisms to counter this and to build confidence both in our technology and in our practitioner members. Trade Association membership must be a byword for both quality and customer service if we are to succeed. I hope that you will all feel able to contribute to this really important part of our day and of the future direction for our industry.

Bean Beanland  
September 2019

## Methodology

The debate took place following the AGM and was carried out in a plenary session. Delegates were invited to offer suggestions on how we can raise the profile of the ground and water source heat pumps, including open loop.

## The debate

### 1. How do we, as a sector, raise the public profile of GSHPs to become the mainstream choice for heating and cooling?

#### Demonstrator Projects

Richard Davis raised the electrification of heat demonstrator project and how the decision is taken on which homes to target. He suggested that we need to get social media influencers as part of the project who already have big social media followings. He questioned whether with 750 houses of influencers, would we get the end user drive/profile that we would be looking for?

Bean agreed that social media influencers are very powerful and it is worth exploring. Even outside the Heat Pump Demonstrator programme, it might be possible to identify social media influencers who have a climate change agenda and to get the industry (manufacturers) to sponsor an installation.

Andy Howley agreed that it was a good idea but need to make sure the property is suitable for the project.

Bean confirmed that the programme has three phases, Management Contractor phase, Delivery Contract (BEIS view three regional contractor) and finally analysis contractor at the end. BEIS has ruled that those involved in management phase could not be involved in the delivery phase due to a potential conflict of interest. He raised the question on how GSHPA influences the bidding parties and get members technical knowledge into all the schemes and still have the ability to get people into delivery phase. Individual members are being positioned to assist the known credible bids.

#### TV advertising

Sharon Louth asked about TV advertising. She commented that there is a lot of negativity in regards to GSHPs however, this is usually due to poor installations. Sharon suggested that GSHPA or the wider industry advertised on the TV as part of future campaigns.

Bean responded that E-On ran a series of advertisements, which did get a positive reaction. He raised the question on what message GSHPA would want to convey and would it need results from the Heat Pump

Demonstrator programme to provide the data to underpin this? Bean suggest HPF/GSHPA needs to encourage larger corporate member companies (which have substantial marketing budgets) to consider following E-On's lead.

Mark Burton confirmed that Valliant got good leads from the E-ON adverts and Bean questioned whether Valliant would decide to do a campaign following this. Mark confirmed that Valliant has previously carried out campaigns using mainstream television, digital media, Facebook, Twitter, Instagram etc.

Andy Howley stated that large commercial consulting firms do not necessarily want to push renewable energy solutions, preferring to cut and paste fossil fuel solutions from previous projects.

Scott Banes stated that the E-On ads were good however, TV advertising is very expensive and not targeted. Any future campaign needs to ensure they are aimed at the correct market.

### **Digital media**

Bean called for all members on social media to follow each other and encourage the discussion about heat pumps.

## **2. What holds our technology back?**

### **Bad installs**

Robin Curtis confirmed that the Chair of REA had a heat pump system that was a problem install. He also confirmed that Kevin McCloud, had a GSHP installed, and they have been featured on Grand Designs.

Bean agreed that the UK is very good at promoting bad stories and that HPF/GSHPA need to build the ability as an industry to tell people how good heat pumps can be. We need to promote more case studies, potentially following the example of the European Heat Pump Association with its excellent booklet on 16 commercial scale projects across the Continent.

Lolli Olafsson confirmed that education is key. A large percentage of potential clients think GSHPs are only suitable for new build. However, there is a need to make sure energy is used efficiently in the home in retrofit installations.

### **Fighting back with case studies**

Bean encouraged members to share case studies. The secretariat will pull together a template to ensure consistency.

Sharon Louth confirmed that GroundTherm has installed a closed loop ground source system in central Manchester on the gas grid using boreholes where the client wanted to future proof against rise in gas prices. The same client also has an air source heat pump at a second property in Whitby.

GI Energy, now ESB, has schemes for Cross Rail and other commercial developments however, they agreed that they don't publicise as much as they should. Projects include the V&A in Dundee and Cambridge University with multiple boreholes. Installations do not always capture all the data required to promote the resulting efficiency;

rather, they tend to respond to monitoring legislation and cost. It was agreed that the secretariat should contact ESB about the V&A in Dundee for a case study.

Bean confirmed that there is a lot of domestic property in London under development and the questions need to be raised about why they are not moving to GSHPs. He cited an example of a major developer which routinely works with six big brand mechanical consultants however the developer felt that only one of them was sufficiently knowledgeable to be trusted to deliver our technology and that this is the smallest of the six firms. HPF/GSHPA need to up engagement with CIBSE to bring these consultants up to standard.

Lolli Olafsson stated that high profile projects, such as converting an airport, are needed to showcase the technology in mainstream media.

### **Loss of incentives**

There is an issue with cost of installations with the end of the Renewable Heat Incentive in 2021.

The question was raised regarding those people who cannot fund GSHP installations especially for retrofit systems. Bean confirmed it remains a very difficult proposition with a lack of government incentives but that innovative funding solutions were beginning to emerge.

### **Lack of data**

It was agreed that it is very rare to follow up on the performance of installed systems unless it results from feedback from problem installations. Arup are currently carrying out large installation in North America however, there is a need for data collection from previous projects.

Bean asked, how do we persuade clients to pay for data collection?

It was discussed that if large companies invest in data collection then they can promote their success stories and improved low carbon credentials. This could be a powerful form of encouragement for them to collect data. Phil Jones also added that finding the right champions in these big consultancies will help with spreading this message. However, the HPF needs to define a compelling set of member benefits to get these consultancies on board.

### **Training across the industry**

Chris Davidson raised the lack of knowledge with big consultancies internally. To solve this HPF/GSHPA can provide training. In addition, we should help them to recognise when to seek help.

Phil Jones thought that there would be an appetite for training for new incoming graduates at the larger consulting companies.

Nic Wincott stated that there are courses currently provided by CIBSE for CP2 however they are not receiving sufficient uptake and so the majority of the dates are cancelled. This could potentially be a reflection of the marketing and must be taken into account for any new courses.

Bean confirmed that a member benefit will be to offer a range of training from conceptual CPDs to detailed technical courses and there is a recognition that training is key which is one of the reasons GSHPA are supporting MCS training,

Training at every level and education at every level. Could we go to MCS Charity and get some funding?

Ken Kneale suggested that the emphasis for the training needs to be within the middle ranking consultants.

### **3. Who should we collaborate with to make it happen?**

All towns and councils which have announced low carbon initiatives have, so far, been concentrating on working out where the carbon emissions come from. They need to be targeted as key areas to promote GSHPs as a core solution.

Phil Jones stated we need to look at the sector in two distinct segments; domestic and non-domestic. Non-domestic or commercial, is influenced by the likes of ARUP, big consulting companies. The domestic market is different, where there would be value in approaching Roger Harrabin, the BBC correspondent, as an example.

There is also a middle market: Canary Wharf style domestic blocks which are residential, but non-domestic in installation scale. Therefore, HPF needs get all the right member offerings in place to encompass these various and varied segments.

### **4. Who can make the biggest difference – installers, the big consultancies, trade associations, Government...?**

#### **Members of the public**

Bean confirmed that one of the tools required is to provide a procurement guide for potential clients. One issue raised regularly via the Technical Panel is that potential clients receive three quotes from installers and each quote is different and it is difficult for the client to make a decision on which system would be best for their needs. This tool could also be shared with MCS and OFGEM.

#### **Local Authorities**

Phil Jones confirmed that there is a disconnect in local authority between planners and clients. Therefore, HPF should produce a short guide for people in local authorities about what is a GSHP and give them tools to argue with developers about using renewables.

Bean suggested that HPF could offer CPD sessions to local authorities, Local authority planners and the Association for Planning Officers.

Sharon Louth confirmed that Stockport Council will not issue planning consents without some renewable energy content. Robin Curtis raised the question as to what power Local Planning Authorities have to enforce conditions in planning consents that reduce CO<sub>2</sub> emissions. The example from the GLA is that the authority is considerable because of the devolution of planning to LPAs.

### Electricity suppliers

Ken Kneale commented that the heat pump industry historically has not involved the electricity suppliers. He suggested that at least one major supplier believes that there will be a different tariffs for electricity used for low carbon technologies such as heat pumps; therefore, it is in the suppliers' interest for members of the public to install GSHPs, as they will sell more electricity. They also have the resources to advertise widely.

Bean has confirmed that he has spoken to Octopus Energy with regards to making available heat pump friendly tariffs, similar to the Agile tariff for EVs.

Bean commented that at the Future Resources Show, the organisers want a round table at next year's show with EV industry, National Grid and HPF.

### Community Champions

Bean explained to the meeting that all projections for net zero carbon emissions rely on insulation levels achieving targets which have, hitherto, been unattainable. Even the incentive of free materials for home owners to install loft insulation had a very low uptake. However, SSE found that when they identified a champion in the community, on a street by street basis, the levels of uptake were considerably higher.

Parish Council Future Community, South Cambridgeshire, looked at ways of encouraging people to adopt different renewables. Parish Councils would be a good forum to reach people and find local champions. Tim Baker said that Parish Councils can encourage their community with neutral advice, facts and resources. They can influence local development plans to include heat pumps, and they can identify potential community scale projects, such as 'Swaffham Priors'. They need support and materials, etc., which could be disseminated through the National Association of Local Councils as one possible channel, via County and District Councils, MPs and councillors as influencers and policy setters.

### Actions

Action	Responsibility
Demonstrator Project: Liaise with BEIS on the opportunity to choose high profile social media influencers for the selected installations	PDC
Develop a targeted campaign to raise the profile of the industry, using local 'champions' and high profile media correspondents	Secretariat
Develop a library of case studies, including a publication of key, high-profile case studies	Secretariat
Develop enhanced membership benefits for HPF and GSHPA	Council
Target larger consultancies to join HPF and encourage data collection	Council
Develop training across the industry and continue to provide CPD presentations for members	Training Committee
Develop a CPD course for Local Authorities	Training Committee
Develop a procurement guide for potential domestic clients	Standards Committee/ Secretariat
Continue to develop relationships with the National Grid, ENA and electricity suppliers and Association of Planning Officers, etc.	PDC/Chairman

## Next Steps

The next steps will be to set up a timetable to carry out the actions and explore all the options raised in The Big GSHP Challenge Debate and regularly report back to the membership on progress.