

Written evidence submitted by Green Heat Ltd (DHH0006)

Peter Thom, Managing Director, Green Heat Ltd

I worked under Sir Denis Rooke as the Service Manager for the Cambridge District of Eastern Gas during the lead up to privatisation in 1989 – the last Gas man to run the gas industry!

Green Heat Ltd was established 30 years ago and we have many milestones, awards and successes on our journey towards zero carbon and have already helped to save over 1 million tonnes of carbon dioxide during this time.

Lobbied for John Major to go to Rio in 1991, supported the setup of the Energy Saving Trust with Dr Eion Lees to help implement the Rio agreement. We helped to develop Green Home Energy Audits and lobbied successfully for SAP Ratings to be included in Building Regulations in 1995. Supported Diana Maddock with the development of the Home Energy Conservation Act in 1995. I was then asked to chair the Heating Strategy Group for the Government supported Energy Efficiency Partnership for Buildings which I did for over 12 years. During this time we lobbied for Condensing boilers to be mandated for in Building Regulations in 2005 (Lord Whitty) and then for the highly successful Boiler Scrappage Scheme (Lord Hunt). I also trained over 400 trainers to deliver the Energy Efficiency Course, which I helped to develop, to over 76,000 heating installers. During this time I was also President of the Institute of Domestic Heating & Environmental Engineers (IDHEE) on 2 occasions. Last year the IDHEE merged with the Chartered Institute of Plumbing and Heating Engineering (CIPHE) to form one professional body for the heating and plumbing industry and I am now a Trustee of the CIPHE. I have been in the heating/energy efficiency industry for 55 years and have a little knowledge of heating design, customer needs and practical cost effective solutions.

I am therefore concerned and a little baffled by current Government policy and direction on decarbonising heat and their thinking that everyone is going to replace their gas boiler with a heat pump?! Indeed they have just launched a £2 billion scheme to support this (Below is a copy of an article I prepared for H & V News earlier this year expressing some of my concerns which are already becoming reality just one month into the scheme)

Over 85% of Buildings use gas for heating and about 1.6 million gas boilers are installed annually with efficiencies of over 92%, yet there are about 4 to 6 million non-condensing boilers still working, so why is Government not

prioritising their direct replacement? This is not just low hanging fruit but lying on the ground and would reduce both carbon and nitrous oxide emissions.

I checked the electricity generation figures earlier this month. Of the 31 GW being generated 62% was by less than 30% efficient gas fired power stations, followed by 15% Nuclear, 14% Wind and 5% Biomass, no solar as it was dark during this peak load time. For comparison these figures on a much colder winter morning last December with 42GW being generated, 55% gas, 17% Nuclear, 11% Wind, 7% Biomass and 5.5% Coal! Again no solar.

New gas condensing boilers are 92% efficient and with Flue gas heat recovery and a smart controller can achieve efficiencies of nearly 100%. Natural gas is currently 2.72 p/kW and on peak electricity predominantly generated by gas at 28% efficiency is 18p/kW – over 6 times more expensive. Air source heat pumps if working at maximum efficiency have a COP of 3 so will still be twice the cost of gas to run?

I believe the Climate Assembly UK members were not fully briefed on this as they and many others believe heat pumps to be zero carbon??

We live in the real world as professional heating engineers and energy efficiency advisors, we have to tell the truth to our customers and take responsibility for our advice and actions.

BEIS commissioned Delta-EE to create *The Cost of Installing Heating Measures in Domestic Properties* report which was published recently and provides the true cost of installing heat pumps compared to gas boilers, I would hope that a similar report is published showing the real running costs of various systems which brings me on to VAT on fuel. Bearing in mind the evidence I have provided on current power generation surely the 20% rate should be added to all fuels as I have pleaded for with Ministers for many years. The 5% VAT rate just sends out the wrong message on saving energy when it is supplied relatively inexpensively. The increased levy could be ring fenced to finally alleviate fuel poverty. I would also support the reduction of VAT to 5% on the installation of any carbon reducing measure and this must include gas boilers.

Below is a copy of a letter I sent to the Prime Minister in February this year (still waiting for a reply) with yet another plea for this reality check. Also below are copies of the letters sent to Theresa May (2017) and David Cameron (2015)

I just hope that some common sense will start to prevail. There are over 11.5 million homes that have an EPC, with a rating worse than C. Are we really going

to improve all these properties by 2030/2035 – in the next 10 – 15 years with current thinking and policy?

Below are:

Copy of letter to Boris Johnson 8th February 2020

Copy of letter to Theresa May 18th January 2017

Copy of letter to David Cameron 18th January 2015

Copy of H & V News article on Green Homes Grant Voucher Scheme

I believe most of the issues raised in this enquiry are addressed in my observations and requests for change made over the past 5 years as a voice a voice of experience from the front line, please let me know if you need anything further from me.

Peter Thom

Managing Director

Green Heat Ltd

The Rt Hon Boris Johnson MP

The Prime Minister

10 Downing Street

London

SW1A 2AA

8th February 2020

Dear Prime Minister

Climate Emergency – Heat for our homes and buildings

Congratulations on your recent success in the election and getting Brexit moving. One of the world's greatest challenges is Climate Change and what we in the UK are going to do about it. We have had many years of failed policy and it is important that

we now get a sensible and do-able route map agreed to take this forward. I have highlighted these failures to your predecessors in 2015 and 2017 and it is important that you're new Government fully connects with industry and the consumer on this difficult journey ahead.

I am now a veteran of the heating and energy efficiency industry which I have been part of for the past 55 years so I can remember the days of coal fires, paraffin heaters, single bar electric heaters and the use of coal gas for early heating systems. Methane was discovered in the North Sea in the mid 1960's and we converted 20 million appliances to work on this clean Natural Gas. Now over 80% of homes are connected to the gas network and use this low carbon fuel. We then lobbied to get Building Regulations changed and in 2005 only high efficiency condensing boilers could be installed – This has created a 20% reduction in carbon emissions, the best of any sector according to this week's report by Ofgem.

However the Committee on Climate Change are recommending a move away from gas and to “carbon free” electric heating such as heat pumps and Chancellor Hammond last year announced that because school children were going on strike about Climate Change we should not allow any gas into New Homes from 2025 – Your BEIS department are currently consulting on this knee jerk policy change.

My question is why would you prevent the installation of new gas boilers being installed that are over 92% efficient but allow electric heating to be installed that uses electricity generated by gas fired power stations that are only 30% efficient? Also you may be aware of the substantial investment in the development of Hydrogen gas boilers which are now – “Oven Ready”, and can work on a wide mixture of gases. It is also important that we adopt a new name for Hydrogen gas such as Eco-gas. Hydrogen may not sound positive to some people and we do not call natural gas - methane.

There will be a mixture of solutions as we continue our journey towards zero carbon but we need to take the consumer with us and not be seen to impose any unnecessary financial or disturbance burden.

The same can be said for the army of small heating installers who will be tasked with installing future heating appliances. We currently install about 7000 High Efficiency gas boilers a day to high standards with very little complaint. Any changes to this may require costly and time consuming training and accreditation. It is important that this is relevant, low cost and accessible. The failed Green Deal has left the industry with open wounds due the high cost and bureaucracy of the scheme which put many out of business. The industry is already concerned with the outcome of the Bonfield/ Each Home Counts review which has adopted more of the same as the Green Deal with Trustmark/PAS 2035 adding even more costs and red tape. It really is important that Government and Industry work together to achieve these common aims otherwise the industry may well just disengage, creating an even greater skills shortage.

Last year the Institute of Domestic Heating & Environmental Engineers (IDHEE), which I am a Director decided to merge with the Chartered Institute of Plumbing & Heating Engineering (CIPHE) which we achieved on the planned date of 31 October 2019 to create one professional body for the professional heating and plumbing installer. We are now in a position to help and support with any ambition to re-align training and accreditation for installers to meet the needs of the future but we need a firm commitment from Government for this to succeed.

I believe it is widely agreed that we do have a Climate Emergency which will require drastic and radical policy changes to take place so my second question is why is energy in the UK charged at the lower VAT rate of 5%? In poorer countries such as Portugal energy is charged at their higher rate of 23% and indeed most if not all countries charge at the higher rate. I understand the political sensitivity of this – raising taxes does not win votes etc, however raising VAT on energy could be directly attributed as a result of Extinction Rebellion demands for action. The polluter pays principal has worked on petrol!

I estimate that £4 billion extra tax would be raised which could be ring fenced to support and actually alleviate fuel poverty once and for all. Maybe your Chancellor could set this out as a possible future policy and measure the reaction but I believe you will have to do this sooner rather than later.

Finally, my last plea is to not miss all the low hanging carbon fruit. There are still lots of early gains in carbon reduction. We had a very successful national boiler scrappage scheme albeit underfunded and you also ran a similar scheme in London while you were mayor. We estimate that there are up to 4 million older F and G rated zombie boilers still working, polluting the air with both carbon and nitrous oxides. Displacing these would not only reduce carbon dioxide but help with the clean air strategy for our cities and towns.

I do hope that you will consider taking these suggestions and observations on board and please let me know if we can help with taking this forward. I also hope that you will find a Climate Change Champion in your Government to take the lead in a Ministry of Climate Change and take responsibility for setting out a route map across all departments for achieving them and to take a lead role at COP 26 in Glasgow this November. It is important that we can actually demonstrate that we all understand the urgent need to get things done.

Yours sincerely

Peter Thom FRSA, FCIPHE, FCIM, AIGEM

Managing Director

Green Heat Ltd

The Rt Hon Theresa May MP
The Prime Minister
10 Downing Street
London
SW1A 2AA

28th January 2017

An Open Letter to The Prime Minister

Dear Prime Minister,

Each Home Counts (Bonfield) Review

Two years on from expressing my serious concerns over the failure of the Green Deal, I feel compelled again to voice the frustrations shared by my colleagues in the heating and energy efficiency industry, over the recommendations made in the 'Each Home Counts' Bonfield Review.

The review was commissioned by the Government in July 2015 to look at consumer advice, protection, standards and enforcement to tackle problems within the supply chain, such as rogue traders, poor quality installations and compliance issues. The review was finally published on 16th December 2016 - just before Christmas and nine months late following approval by 10 Downing Street.

This follows the disastrous failure of the Green Deal, which was highlighted in the open letter I sent to your predecessor in January 2015, explaining in detail why heating installers did not engage with this Government scheme. I attach a copy of this letter, which was sent two years ago today.

The original scheme was going to be open to all Gas-Safe registered installers, without the need for the added costs of PAS2030 for management systems, additional accreditation, inspections and surveillance. This was agreed with industry, as we are already highly regulated with a requirement to undertake costly training and examination every five years to maintain gas accreditation.

So I was somewhat surprised that following 200 meetings with 170 stakeholders and a further 410 organisations, the Bonfield Review is suggesting more of the same by retaining all these barriers. Clearly, the installers' view is not being listened to and they were probably not well represented at these meetings.

Peter Bonfield's Review makes 29 recommendations, including the setting up of a Strategic Governance Board proposed to oversee and monitor these and decide on the levels of auditing required.

There is also a suggestion that all installers will have to pay to join the Government's Trust Mark scheme. This could well distort the market for other better known and trusted quality mark schemes, such as Which? and local Trading Standards' 'Buy with Confidence' accreditations.

Operating best practice, with each customer's individual needs carefully considered in every job, is the absolute priority in our business. Yes, it is essential that the customer is protected to ensure they receive a professional service from an accredited engineer and provided with

the correct information and advice, but there is robust legislation and regulation in place that already protects the consumer.

I am not aware of any evidence that the perceived problems outlined in the review exist in the heating industry. I am also not aware of any evidence that existing consumer protection is inadequate or failing.

This then raises the question of how successful Government schemes, such as the Green Deal and RHI, have been in tackling fuel poverty, carbon emissions or helping the needy; or if they have been value for money. Indeed, the Audit Commission says not. An uncapped payment system under the Renewable Heat Incentive in Northern Ireland has enabled businesses to burn unnecessary amounts of fuel and to claim millions of pounds of public money in subsidies.

In a review of the Green Deal, the National Audit Office concluded that the scheme had not achieved value for money because its design and implementation failed to persuade householders that energy efficiency measures are worth paying for¹. The loans were too expensive and the scheme kept changing, with the result that only 1% of householders applied for financial help under the Green Deal.

The Green Deal cost taxpayers £240million, including grants to stimulate demand. However, this figure does not take into account the enormous costs in both time and money to the heating industry in undertaking training and accreditation certification, which was completely wasted and unrecoverable. Inevitably, smaller installer businesses were hit hardest.

The NAO audit found that the design of the Green Deal not only failed to deliver any meaningful benefit, it increased suppliers' costs – which were then passed onto the consumer in higher energy bills – in meeting their obligations through the ECO scheme.

These schemes have been very complicated and restrictive to a very low number of installers, so are not that accessible. Perhaps all schemes need to be evaluated on sound principals and a value for money basis and all the red tape and extra layers of accreditation such as MCS and PAS 2030, cut away?

I am concerned that there seems to be a 'syndicate' of organisations who are not part of the supply chain, who are feeding on our industry; providing costly and time-consuming training, accreditation and systems that offer no extra benefit to the tried and tested standards that are already in place. Which leads me to question if the driver behind this review is to protect these syndicate organisations?

There are important lessons to be learned from the failure of previous initiatives. Being on the 'front line' with consumers, heating installers are in the best position to know what is needed and workable to protect, engage and educate homeowners on all home heating and energy efficiency measures. Indeed, in a OnePoll survey conducted by HomeServe during last year's Gas Safety week, gas and heating engineers were shown to be the country's most trusted traders².

Surely then, engaging with them in a thorough consultation process must be an absolute priority when considering the implementation of any further changes and new initiatives?

I have worked in the industry for over 50 years and have seen numerous schemes come and go, with increasing red tape and bureaucracy frustrating their progress and complicated, changing qualification criteria leaving consumers confused and reluctant to engage.

Our homes are still among the least energy efficient in Europe. As a dedicated campaigner for improving the energy efficiency of our homes in the UK to bring more affordable warmth to more people; and to cutting carbon emissions to protect our planet, it saddens me to see these barriers put in the way of progress.

I and my colleagues in the industry totally support the Government's commitment to improving household energy efficiency to provide affordable and sustainable energy, but any policies and schemes proposed to do this must not be at a cost for the consumer – or supplier. Any change of course must take into consideration the particular needs of smaller installer businesses. The costs of the Green Deal were more than financial and many smaller companies were forced out of business as a result of its failure.

The heating industry really does not need any more regulation. We are a good and well-trusted group of professionals, delivering best practice and doing a great job of improving the energy efficiency and comfort in people's homes; and not a rag tag of rogue traders, as seems to be the perception in the Bonfield Review.

Removing the red tape and added costs of regularly changing policies are key to making these schemes work - for everyone.

I do hope that you will give careful consideration to my concerns. I have seen personally how Government's closer collaboration with industry can result in the successful introduction of new energy efficiency measures. I would welcome the opportunity to work with Departments again to ensure we can make progress together.

Would you consider recommending a 'working party' of professional heating engineers and installers to work with your policy-makers to look at ways in which industry and Government can collaborate to improve the efficiency of UK housing stock? This has worked well in the past.

I look forward to your reply.

Yours sincerely

Peter Thom FRSA; FIDHEE; FCIM; AIGEM
Managing Director

Sources:

1. National Audit Office: Green Deal and Energy Company Obligation:
<https://www.nao.org.uk/press-release/green-deal-and-energy-company-obligation/>
2. HomeServe: <https://www.homeserve.com/newsroom/2016/September/Gas-and-boiler-engineers-nations-trusted-traders>

An Open Letter to The Prime Minister

The Rt Hon David Cameron MP
The Prime Minister
10 Downing Street
London
SW1A 2AA

28th January 2015

Dear Prime Minister,

The Green Deal

It is with regret that I have to inform you that my company, Green Heat Ltd, will uncouple from the Green Deal as a Green Deal Heating Installer today, the second anniversary of the launch of this flagship initiative.

I have been one of the greatest supporters of this scheme and we have tried very hard to make it work over the past two years. I have raised my concerns at the Green Deal Forums, which I was invited to be a member of as a small heating installer, but this Green Deal field is still being ploughed when it is full of boulders.

There appears to be a reluctance to make any real changes to the scheme that would enable small companies like mine to engage viably and economically.

The original scheme was going to be open to all Gas-Safe registered installers without the need for the added costs of PAS2030 for management systems, additional accreditation, inspections and surveillance. This was agreed with industry, as we are already highly regulated with a requirement to undertake costly training and examination every five years to maintain gas accreditation.

In addition to this, we are able to self-certify boiler installations for Building Regulation compliance as agreed with DCLG following the successful Energy Efficiency training and accreditation of over 70,000 heating installers. We also provide a Benchmark logbook with every boiler installation. This is signed by the installer and the customer, confirming that the installation complies with all the relevant standards and regulations. (The same standards and regulations required by PAS2030).

The Green Deal Oversight and Registration Body (GD ORB) was then set up on behalf of the Secretary of State at a cost of over £5 million. A meeting took place with all the accreditation bodies and it was decided that Gas-Safe accreditation was not sufficient and all installers had to follow PAS2030, together with all the costs and bureaucracy that go with it. This is a bit like turkeys voting against Christmas!

Green Heat Ltd has been providing Green Home Energy surveys and installing condensing boilers for 25 years. This is also my 50th year in the industry and together we have a proven track record in helping our customers make huge savings on energy consumption. We have a natural affinity with the Green Deal, so we invested in an online management system for PAS2030 compliance and applied for accreditation.

This involved an inspection of our online management system, which I was advised had to be printed off for the inspector. The inspection took a whole day and included a visit to see a boiler installation. The cost to my business, including lost revenue, was £1500 which cannot be passed onto my customers.

We are now advised that this has to be repeated annually and because of the lack of activity in the Green Deal until the GD Home Improvement Fund was launched, we are due for an inspection in February and again in March this year. This is a considerable additional cost

burden on the company and cannot be justified. We have challenged the accreditation body concerned whose only response is that they have to do it - presumably to tick a box!

The initial slow take-up of the Green Deal has been well documented and we soon realised that we could not get access to the initial £270 boiler grants for our customers. However, we knew that British Gas were.

This prompted me to make a Freedom of Information Act request. This also had to go to appeal to reveal the information, which confirmed that British Gas had in fact secured over 11,000 boiler sales supported by these grants using taxpayer's money.

Your DECC then agreed to change the scheme and the Green Deal Home Improvement Fund was launched on 9th June 2014. Although this was open to small installers and included a £1000 grant for new mains gas boilers, consumers could only qualify for the grant providing a second measure was installed, such as a flue gas heat recovery unit (FGHR). Many did not require a second measure, leaving them 'unhelped'.

On 22nd July DECC decided to remove FGHR from the scheme; the scheme then abruptly ended two days later. Although we managed to secure some funding for our customers, we also had to deal with large numbers of disgruntled clients who felt they had been misled by your Government.

Following a consultation period with Industry, the second phase of the GDHIF was launched on 10th December and closed the day after for solid wall insulation. This left just £6 million available for other measures for the **whole** of England and Wales.

Sadly, the input into the consultation from industry appears to have been ignored. With Flue Gas Heat Recovery being removed from the scheme and LPG and oil boilers still not included, the help for consumers seems to have been stripped away. With fuel poverty still a major problem in this country - particularly among those dependent on fuel not supplied from the mains gas network - these moves are failing to deliver the support to those the scheme set out to help. More and more people are being left disappointed, disillusioned, out of pocket and ultimately, let down.

The result is that even the GDHIF has become unworkable. It creates more phone calls of complaints from the public about how the scheme is unhelpful and misleading.

I would also like to bring to your attention to how the Green Deal Communities Fund is also working against and letting down small Green Deal Installers and Assessors by distorting the market. We have worked very closely with all the Cambridgeshire Councils over many years on climate change and energy efficiency issues and were highly delighted when they were awarded £7million of the Green Deal Communities Fund last March.

However we are really disappointed with the harsh reality of this, as although there is supposed to be a commitment to use installers and assessors from within the county, this is not the case. We have recently been advised that over £133,000 of Green Deal assessments have been undertaken on this scheme locally, heavily subsidised by taxpayers' money and using assessors from outside the county.

This not only distorts the market, but also undermines many local businesses who have made substantial investment in training and accreditation for these schemes and are not getting any return. I am not sure where this leaves your localism?

I do not want the good reputation of my company to be tarnished anymore by the failures of the Green Deal. This, coupled with the frustration of not being able to provide the help and

improvements customers believe they will be funded for, is why we have decided to uncouple from today.

I do hope that you will give careful consideration to my concerns and enable the required changes to be made to improve the scheme. Removing all the red tape and added costs so small installers can engage with the Green Deal fully, without any additional cost or time burden, is key to making this work - for everyone.

Then and only then, will the true value of the Green Deal be realised by those who should benefit from it most, the customer and of course, the environment.

I look forward to your reply.

Yours sincerely

Peter Thom FRSA; FIDHEE; FCIM; MCMI; AIGEM
Managing Director

Green Homes Grant Scheme – H & V News September 2020

My worst fears came to reality when the Government finally announced some of the detail of this new initiative with the headline: Quality assurance at the heart of new £2 billion green homes grants.

I am fearful for the domestic heating industry professionals who may be forced into another complex, expensive bureaucratic Green Deal Mk 2. The Government press release urged trades people to sign up and join Trustmark and engage with PAS 2035 with the inference that if you are not Trustmark you are a cowboy or rogue trader!! This all has serious implications for the majority of small heating installers and especially those qualified heating engineers who are members of a professional body like CIPHE. I have written to 3 Prime Ministers on this since the failure of the Green Deal and was assured that there would be no additional financial burden to installers. I am concerned that this scheme may well be ill thought out (if at all) and they are just reverting to type

with a Green Deal Mark 2 which would be a disaster! We were also given assurances following the Bonfield Review of the Green Deal, Each Home Counts, that the heating industry were already working to the PAS 2030 standards and would not require to join any additional quality mark scheme?

By comparison two other Government funded schemes were launched this month; The bike voucher scheme which just required bike shops to have adequate insurance; and the £10 off a meal scheme which just required a restaurant! So why is our industry being penalised?

I do hope that Government will also see the sense in supporting the replacement of older non condensing boilers with 92% efficient ERP compliant boilers or maybe Hydrogen ready boilers? This is not just low hanging fruit but fruit that's already on the ground – so why are they missing from the scheme??

Several commentators on this also highlight the need for consumer protection as the perceived need for these overarching additional standards. But when asked the Government have never been able to explain which current consumer protection legislation is not actually working. Maybe the motive is a plan to create employment with an army of inspectors and administrators, all being paid for by the installer, consumer and the tax payer?

The BEIS statement just confirms my worst fears and just demonstrates how little Government listens to industry. Breweries and drinking parties come to mind!! Does Trustmark have any critical mass of any trades people?? You could then calculate how many small businesses will be in effect locked out. Small business owners have been shafted on Furlough dividend payments and now this. However this will no doubt be a great scheme for companies like Carillion – Déjà vu!!??!!

The following is part of the open letter I sent to Prime Minister May 3 years ago and is equally relevant to this new scheme:

I do hope that you will give careful consideration to my concerns and enable the required changes to be made to improve the scheme. Removing all the red tape and added costs so small installers can engage with the Green Deal fully, without any additional cost or time burden, is key to making this work - for everyone.

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October 2020