

# DIARY DATES

## Exhibitions

Over the next few months you can visit the Worcester stand at any one of the following exhibitions, where a selection of our latest 'A' rated gas and oil-fired boilers and renewable technologies will be on display.

For further information visit [www.worcester-bosch.co.uk](http://www.worcester-bosch.co.uk) and click on the events page.

### March 2010

**PHEX – Aston Villa FC, Birmingham**  
10/03/2010 – 11/03/2010

**Homebuilding & Renovating  
LG Arena, Birmingham**  
18/03/2010 – 21/03/2010

### April 2010

**Hip Ex – Newbury Racecourse**  
21/04/2010 – 22/04/2010

**PHEX – Wembley, London**  
28/04/2010 – 29/04/2010

### May 2010

**All Energy – Aberdeen Exhibition Centre**  
19/05/2010 – 20/05/2010

**Greenbuild – Manchester Central**  
26/05/2010 – 27/05/2010

### June 2010

**Royal Cornwall Show  
Royal Cornwall Showground,  
Wadebridge**  
10/06/2010 – 12/06/2010

**CIH – Harrogate**  
22/06/2010 – 24/06/2010

**The Southern Homebuilding & Renovating Show  
Sandown Park, Surrey**  
26/06/2010 – 27/06/2010

Keep up-to-date with the daily goings on at Worcester, Bosch Group by following us on Twitter and Facebook



[Twitter.com/heatingyourhome](http://Twitter.com/heatingyourhome)



[Facebook.com](http://Facebook.com) and search for Worcester-Bosch-Group

FSC

MARCH 2010

# THE INSTALLER'S CHOICE

**10 things the heating industry need from the next Government**

**40<sup>th</sup> Anniversary of the Combi boiler – part 2**

**Harness Test – freebie for everyone who attends a Worcester fault finding course**



## Choosing quality brings its rewards

### Free shopping vouchers with selected Greenstar boilers\*

Buy any selected Greenstar boiler during February and March 2010 and there's even more in store for you than the built-in quality and reliability you've come to expect from Worcester. That's because for every selected boiler you buy, we'll give you £25 worth of shopping vouchers absolutely free. You can choose from Marks and Spencer, John Lewis or Love2shop vouchers, which are valid in over 18,000 locations. How will you spend yours?

To find out more, call **08705 266241** or visit our website.



[www.worcester-bosch.co.uk](http://www.worcester-bosch.co.uk)

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## Welcome from Carl Arntzen

Welcome to the March 2010 edition of Installer's Choice. And what a year it has been already. The new Boiler Scrappage Scheme is in full-swing with a positive response from consumers and industry experts alike. And we've got the first installation from a Worcester accredited installer on pages 16 and 17.

With politics high on the agenda for the heating industry, our cover story this month is entitled '10 things the heating industry need from the Government' – an article from Neil Schofield, head of sustainable development, on how the Government can aid the industry.

We've also got the second part of our three-part story on 'the rise of the combi boiler' from Martyn Bridges, director of marketing and technical

support. And we bid a fond farewell to Mike Wright, who is retiring after 23 years of loyal service at Worcester.

On page 14 we give you the low down on consumer exhibitions and what homeowners are talking to our team about. And we're giving one lucky installer the chance to win a Bosch power tool worth £250 on page 22, with a simple caption competition.

On page eight we also welcome the new editor of H&V News, Claudia Hathaway, as a guest contributor.

We hope you enjoy the magazine.

**Carl Arntzen**  
Director  
Bosch Thermotechnology Ltd

\* Selected boilers: Greenstar Si, CDI, Highflow CDI, FS CDI and all Greenstar oil-fired boilers. Terms and conditions apply.

## Worcester's boiler carton gets the **Blue Peter** treatment

Left to right: David Hobbs, James Hobbs and David Smith model the nifty matchbox outfits



A Worcester installer has devised an entertaining way of re-using his empty boiler cartons:

David Hobbs, of David Hobbs (Plumbing and Heating) Ltd, created a fancy dress outfit for a friend's 30th birthday party, with the help of some left over boiler containers, sticky tape and paint! David explains; "We were invited to a friend's fancy dress party, which had a 'things beginning with M' theme. Originally I

wanted to create a giant matchbox, that all three of us (my son and son in-law) could fit into, and then I noticed the empty boiler containers. I like to think I had a bit of a Blue Peter moment!"

**If you're inspired by David's artistic use of our empty boiler cartons, or have your own interesting way of recycling left over boiler materials let us know by emailing [marketing@uk.bosch.com](mailto:marketing@uk.bosch.com)**

## Take control with **Worcester's** new web page

Worcester has added a new section to its website, which enables both trade customers and consumers to understand how to get the most out of their heating system controls. Information includes:

- 'Find a user guide' – for both current and discontinued controls
- A search to find which controls go with Worcester's current products
- A brief guide to Worcester's controls, broken down into: basic timers, digital controls and new generation controls, room thermostats, programmers and programmable room thermostats
- A page on how controls can help reduce fuel bills
- A link to frequently asked questions about boiler controls
- An enquiry form where visitors can request more information from the technical department

**Go to [www.worcester-bosch.co.uk/boilercontrols](http://www.worcester-bosch.co.uk/boilercontrols) to see for yourself.**

## Worcester's Improved Digistat Range

Worcester has improved its range of Digistat controls, following feedback from customers.

Reliability is enhanced by improving the aerial within the receiver panel that fits into the boiler, as well as ensuring the receiver is now more focussed on receiving transmissions on the band width. A 'Signal Strength Indication' has also been added, to allow installers to check the signal strength before fixing the Digistat room thermostat position.

**Find out more by visiting the product section of [www.worcester-bosch.co.uk](http://www.worcester-bosch.co.uk)**

## News Flash

**In February it was announced that the Scottish Government is committing, in full, £2 million on a boiler scrappage scheme to support boiler scrappage in Scotland, as part of the Scottish Energy Efficiency Action Plan due to be published in the Spring. Installer's Choice will keep you up to date on the scheme.**

## Carl to climb **Mount Kilimanjaro**

The start of 2010 brought with it some of the worst cold and snow spells that the UK has seen for a number of years. But while the rest of the UK cried out in disappointment; for Carl Arntzen, director of Bosch Thermotechnology, the varying temperatures was the perfect grounding to begin training preparations for his most arduous physical challenge – climbing Mount Kilimanjaro.

Carl is joining a group of six heating and hot water industry heads all of whom will be doing the five-day 5,892 metre climb at the beginning of the month (March 2010) to raise money for charity SACRED, South African Children's Resource for Education and Development.

Carl explains: "I have always been into sports and have recently completed a number of marathons and half marathons. So, when pump manufacturer Grundfos approached me to see if I'd be interested in joining them on their second climb of Mount Kilimanjaro, I jumped at the chance. The opportunity to raise money for a good cause, combined with the physical challenge, meant that there was no doubt in my mind that I wasn't going to miss out on the chance to do the climb. I immediately said yes and I'm delighted to get involved.

"The climb is a gruelling five-day trek, starting on Monday 8th March 2010, which will see us climbing for an average of five – six hours, per day. The route for each day is also mapped out indicating how long we intend to walk for, the habitat we will be trekking through and the altitude we will reach.

"We have a target of £50,000 that we would like to reach. We are off to a good start but hope that others will recognise that this is an incredible challenge for an extremely worthwhile cause and therefore support us in our fundraising



efforts. To maximise the fundraising potential, all the costs of the climb are being met by myself and the other climbers involved so all 100% of monies raised will go to the charity, SACRED.

"Watching footage of the celebrities that made the same climb for Sports Relief last year really brought home the reality of the challenge as some of them really struggled with exhaustion and the varying altitudes. I am, at the

moment, getting to grips with the training and am really looking forward to the challenge, but ask me again after March 8th when I'm halfway up a snow-capped mountain and I might have a different answer!"

**To find out more information about the climb and the people Carl and the team are raising the money for, or to donate please visit [justgiving.com/c4mc](http://justgiving.com/c4mc)**



## Ten things we need from the next Government (of whatever colour)

The next Government has some major decisions to make in terms of domestic heat generation. Neil Schofield, head of sustainable development at Worcester, issues his own manifesto for change.

We've all played "If I was Prime Minister for a day" and daydreamed of the dramatic changes we would make if we held the reins of power for 24 hours.

Luckily for you my ideas on transport policy and the future of the National Health Service will never be implemented, but I do think that after more than 30 years in the heating industry I am qualified to offer some ideas to the next Government on potential policies for the heating industry.

I believe there are ten key policy initiatives which the next Government must grasp.

### 1. A coherent plan for Domestic Heat

84 per cent of the UK's homes are heated with a gas-fired boiler and any strategy must reflect this. Currently, the Government's efforts appear to be directed at electricity but, unless we propose the wholesale scrapping of every single gas-fired boiler currently in operation, we need a plan which takes into account a slow decommissioning of our boilers alongside a simultaneous ramping up of our reliance on renewable technologies, first for hot water and then central heating. This would allow manufacturers, installers and homeowners to begin to plan for the future.

### 2. Reduce the capital cost of renewable technologies with a sensible pay-as-you-go scheme

The biggest barrier to renewables take up is the upfront capital which is born solely by the consumer. What's the answer? The Portuguese have come up with a very innovative pay-as-you-go scheme involving a consortium of Government, banks, energy suppliers and manufacturers, which enables consumers to pay for the cost of solar power installation with the savings made on their quarterly energy bills. That's the sort of innovative solution we need over here.

### 3. Reinstate consequential improvements into proposals for the next changes to the Building Regulations

The abandonment of the consequential improvements clause in the last revision of the Building Regulations was a serious blow for the heating industry. I prefer the 'carrot' to the 'stick' but the reinstatement of the clause which forces consumers to upgrade heating systems when major building projects, such as extensions, are planned is a must. This was not the first time it has been abandoned, it was also shelved in 2005 at the eleventh hour.

### 4. Reform the Microgeneration Certification Scheme (MCS)

MCS is acting as a barrier to the uptake of renewable technologies rather than a facilitator. That's a damning statement, but as proof just look at the number of installers who have gone through the scheme and then ask them if it was worth it? Renewables oversight is important, in the same way that gas registration is important to maintain standards, but we need to make this oversight less of a burden. What's the answer? We all want the householder to have a good deal but MCS is protecting them so much they are not having renewables at all. Scrapping MCS might be a bridge too far but let's reform it based on the installer.

### 5. Widen the scrappage scheme for old boilers

The announcement of a scrappage scheme for old boilers in the Pre-Budget report was one of the few shafts of good news for the heating industry last year, but it is currently limited in its scope to the first 125,000 applicants. If we are to have a real chance at hitting our climate change targets this scheme needs to be enlarged so that all households with a Band 'G' boiler can take part. Then let's move on to all non-condensing boilers!

### 6. Implement a comprehensive retrofit strategy

Whilst a scrappage scheme will encourage many more households to decommission their old boilers, many will still be unable to afford an upgrade. To ensure that we give all sections of society an opportunity to benefit from lower fuel bills and, simultaneously, take many thousands out of fuel poverty, we also need to implement a comprehensive retrofit strategy aimed at lower income families, registered social landlords and housing association properties.

### 7. Start a consumer engagement and information campaign

One of the biggest barriers to the uptake of renewable technologies in the home and energy efficiency measures is consumer support. All too often the debate is centred around the effects of climate change on small Pacific islands. We need to bring the debate much closer to home by extolling the virtues of increased efficiency with a comprehensive public information campaign.

### 8. Place the installer at the heart of domestic energy strategy

The installer is all too often ignored when it comes to implementing energy strategy and yet it is the installer who the householder turns to for advice on how to heat their home, not the Government or their energy supplier. Any future Government that thinks it can implement wholesale change in domestic heat without engaging the installer will be plain wrong.

### 9. Invest in a comprehensive Installer Training Programme

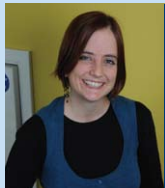
We say we want households to embrace renewable technologies but then don't give installers the knowledge and advice they need to help guide consumers. We need a comprehensive installer training



programme for renewables along the lines of the energy efficiency training back in 2005 put in place for Part L. We've done it once we can do it again.

### 10. Energy Minister

Pledge to keep the next Energy Minister in place for at least the full term of the next Parliament. One of the most frustrating problems the heating industry has faced in recent years as it has tried to shape Government policy is the revolving door that is the post of Energy Minister - 12 different incumbents in 12 years and hundreds of consultation documents. The industry needs continuity and if any of the major parties can pledge that the next Energy Minister will stay in post for the whole term of the next Parliament it will be warmly welcomed by all.



This month Installer's Choice welcomes the new editor of H&V News, Claudia Hathaway, who talks to us about the importance the 'end-user' has on ensuring the efficient running of the home and the role controls have to play.



## GIVE CONSUMERS THE CONTROL

In this brave new world with its emphasis on cutting carbon, energy efficiency has never been more important. I think everyone would agree that this is a good thing, and it has led to the development of a whole host of renewable solutions, such as solar thermal panels and heat pumps. And of course we have seen the advent of condensing boilers, which are so much more efficient that it's hard to believe we ever used traditional boilers to heat our homes.

However, as we know, the energy efficiency of a system depends on a lot more than simply the 'engine' that drives it. There are lots of other factors that come into play – is the building well insulated? Is there a lot of solar gain? How many occupants? I could go on. But there is one variable that has more impact than any other on how efficiently energy will be used in a building: the controls.

Evidence is emerging thanks to the proliferation of Display Energy Certificates (DECs) that buildings designed with an 'A' rated energy system, are performing very inefficiently when it comes to being occupied. It serves to highlight the importance of teaching building

owners how to use their heating system efficiently. And, if the UK is ever to reach the aggressive carbon reduction targets set by the Government, this is most vital in domestic housing. Efficient boilers must come with efficient controls that are easy for the homeowner to understand and use.

For example, having been at the helm of H&V News for six months I am now aware that the heating system in my two-bedroom flat is woefully inefficient. I've gained enough understanding to know that this is not down to my boiler (which I think is D-rated – so not the worst by any

**The boiler scrappage scheme is a wonderful initiative, but we all know that the savings will simply not be achieved without the right controls.**

means), but rather to my controls. Or rather, the lack of them.

I do not have a thermostat, so I just set the thing to come on an hour before I'm due home and it merrily burns gas from then until I go to bed. Now while being fairly efficient, it's not the most reliable, and I've recently had to get it fixed a number of times – and it wasn't until the third engineer came round that he mentioned to me I should think about investing in some proper controls.

The boiler scrappage scheme is a wonderful initiative, but we all know that the savings will simply not be achieved without the right controls. It's so important to get the message to consumers that they won't get the savings they've been promised unless they look at other areas of their heating system – and at the home as a whole.

And the point is, I wouldn't have known about the importance of controls if my friendly engineer hadn't mentioned it. It's down to the installers on the front line to give well-rounded, thorough advice and expertise. It'll do the industry a world of good.

Installer, Terry Morgan and his team from Hereford Boiler Services Ltd scooped one of Worcester's E2020 awards for an environmentally friendly installation in Hampton Bishop.



## ECO Award winning Terry is all gold

**Terry Morgan, director of Hereford Boiler Services Ltd won one of Worcester's monthly prizes in the Environment 2020 Awards for fitting four Greenskies solar panels alongside a high-efficiency Greenstar Danesmoor oil-fired boiler and a thermal store to heat a garden room and external swimming pool.**

Terry explains: "My customer was very keen to utilise renewable technology for this project. This new garden room facility, which includes a mini gym and sauna, is heated with an underfloor heating system which is fed by the new Greenstar high-efficiency boiler. Over a year the solar panels can provide up to 70% of the heating for the swimming pool and hot water provision for the garden room for free by taking thermal energy from the sun – even on cloudy days.

"Since completing the installation the feedback has been very positive indeed. They only had to turn their boiler on for four hours throughout the entire summer of 2009 to supplement the hot water heating from the solar panels. It's a bit too early to judge what kind of savings they will make but with oil prices so high it will no doubt be an excellent long term investment."

Terry is no stranger to the competition after picking up a monthly award in the 2007 Environment 2020 Awards and he is no less pleased with the company's latest accomplishment. Terry said: "To win another award for our work is incredibly rewarding. For the country to really make a difference in the fight against climate change then we need to embrace renewable technologies in the home. Competitions like the Environment 2020 Awards really help encourage installers to promote these new products."

Terry has been fitting solar panels since they were first introduced to the UK market – he even remembers early forms of the technology from his apprentice days. In addition to solar, Hereford Boiler Services also now install other energy-efficient appliances including ground and air source heat pumps.

The award-winning work has won Terry a £500 voucher for a National Trust cottage holiday and a year's family membership to the National Trust.

The Environment 2020 Awards initiative is an annual competition organised by Worcester and recognises installers who take an environmentally responsible approach to their work. Terry will now be put forward, along with 11 other installers selected throughout the year, for the title of Overall Winner which will be announced in spring 2010.

The scheme also rewards the artistic efforts of young people up to the age of 16 who have created an outstanding piece of artwork that highlights the need to be energy efficient and addresses the causes of climate change.

**For further information and to download entry forms, please visit [www.worcester-bosch.co.uk](http://www.worcester-bosch.co.uk)**



By the early 1980s, Worcester commanded only a two per cent market share in a gas boiler market of around 750,000 boilers per year, almost all of which were traditional or regular boilers.

## The rise of the Combi – Part 2



**To increase the market share for Worcester the overall market share of Combi's needed to increase. With the help of a controls manufacturer Worcester introduced an electronic controls package that would modulate the output of a high output boiler.**

"This was a revelation for us," says Martyn. "It allowed us to get rid of the thermal store and design a wall-hung, high output boiler with a small heat exchanger."

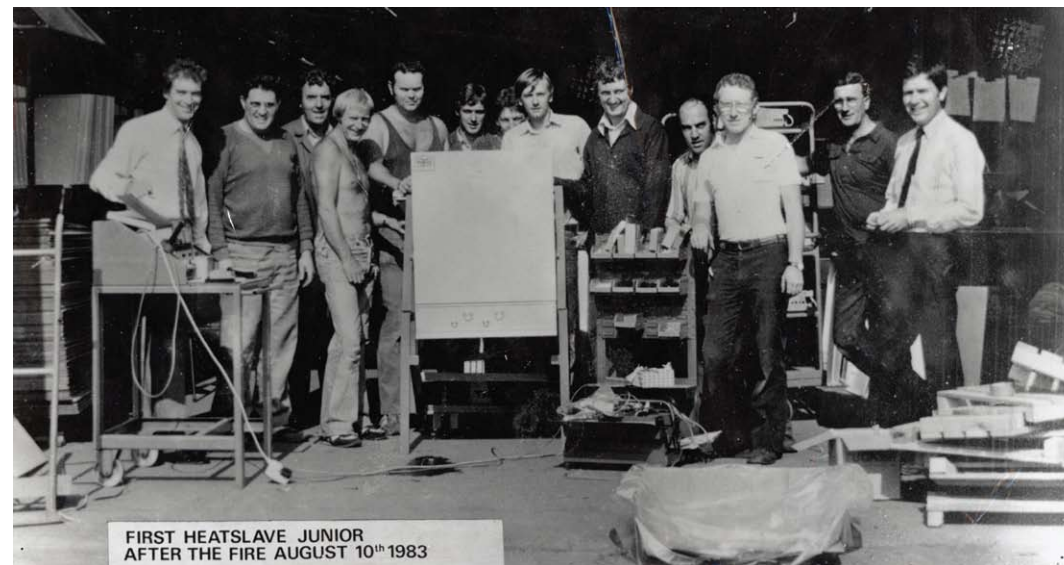
The Heatslave 9.24 weighed around 50 kilograms, but with its 24 Kilowatts of power was capable of generating two gallons of hot water per minute at a temperature rise of 40c at infinitum. The boiler was also equipped with sensors in the hot water outlet pipe and central

heating flow pipe which constantly monitored the temperature of the water and adjusted the boiler output accordingly. Most importantly within the range was Open, Balanced and a multi directional room sealed fanned flue version which opened up a whole host of different siting possibilities.

"The 9.24 was the start of a period of major growth for Worcester which enabled the company to float on the AIM of the London Stock Exchange for

110p per share, shares which were worth £13 within eighteen months," says Martyn. "By 1988 we had gone from 18,000 boilers in the first year of the 9.24 up to 30,000 boilers. This was really the start for us."

The relaxing of water authority rules about connecting combi boilers to the water mains and the success of the Worcester range encouraged many UK and foreign manufacturers to begin to enter the UK market for combi's.



"Combi's were still getting an indifferent press and many installers were still unused to fitting them. We realised that if we were to keep our competitive edge we needed to support installers and offer them comprehensive training," says Martyn.

The result was the Combi Concept training programme, which offered support to installers who wanted to get into fitting combi boilers. "It was the start of a strategy which still drives our business today, the installer is King," says Martyn.

The next stage in Worcester's development of the combi boiler was the 9.24 Electronic, which was aesthetically more pleasing to the eye allowing it to be fitted in kitchens, which was becoming increasingly important. Its grey fascia panel and green controls would become a common sight in kitchens all over the UK in years to come.

The 9.24 was fitted with a modulating central heating circuit with an anti cycle control which was designed to stop combi boilers rapidly cycling on and off on its boiler thermostat, a situation which was common in systems without a room thermostat. The modulating circuit enabled the

*The next stage in Worcester's development of the combi boiler was the 9.24 Electronic, which was aesthetically more pleasing to the eye*

close control of boiler output to perfectly match the load of the system, particularly when TRV's 'kicked in!

The increasing success of the combi boiler led to Worcester outgrowing its factory at Diglis on the south side of Worcester and the decision to invest in a new facility at Warndon, near the M5 motorway. The eleven acre site, opened in 1990, remains one of the most up to date manufacturing sites for boilers in the UK, capable of manufacturing around 300,000 boilers per year.

The next product development was the Worcester 350 which was specifically designed to overcome one particular issue that many households found with combi boilers. "The water flow rate was not as fast as a storage system and many consumers found that if they had hot water taps simultaneously running

in the bathroom and kitchen, the flow was not nearly adequate for their purposes," says Martyn.

The Worcester 350 was a wall-mounted boiler with a laser welded back panel, designed to give a much greater flow rate of 3 gallons per minute, 50% higher than any other wall-hung combi at the time. "The 350 was perfect for the new type of family homes which were being built, often with en-suite bathrooms, where it was likely that multiple hot water taps would be in use at any one time," says Martyn.

The replacement for the 9.24 was the 240 series of combi boiler which was a smaller, slimmer product capable of 24 Kilowatt output, but it quickly became clear that there was a gap in the product range. "With the 240 and 350 boilers there was a big gap which we needed to fill so we developed our 280 boiler which was capable of a flow rate of 2.5 gallons of water per minute."

Along with Highflow series of floor-standing boilers this range remained in operation for nearly seven years until the development of the CDI boiler in 1996.

**Next month we continue our history of 40 years of the combi boiler with the development of the CDI range.**

# INSTALLER'S CHOICE

## Spotlight

John Heslop, Universal Heating Services Ltd



**John Heslop, of Universal Heating Services, based in Newcastle-Upon-Tyne, developed a major fault with his old boiler and opted for a Worcester Greenstar gas-fired model as a replacement.**

"We chose a Greenstar 24 Ri gas-fired boiler as the fluing options are very flexible and, after alterations to the house, the extra length flue meant we could still site the boiler in the utility room, despite the fact that it is no longer next to an outside wall."

His Worcester Greenstar model replaces another older condensing boiler fitted many years ago before condensing was a requirement. "I fitted my first condensing boiler

over 20 years ago when they were very much the new thing" he says. "The modern ones are much better with their modulating burners and ability to match heat output to the requirements of the heating system."

John has noticed the difference with his new boiler already. "Everything is working well and as the Greenstar is almost inaudible in operation - it is a big improvement on the boiler it has replaced. It's early days in terms

of energy savings, but I'm confident that the new boiler will work out fine for us."

In fact, John is now considering installing Worcester renewable products in his home. "We are considering the Greenskies solar thermal heating package now, but we live in a conservation area so we have to discuss the planning implications of the installation with the local council. If we get the green light I won't hesitate."



## Worcester's show and tell

This month Installer's Choice spoke to John Dallaway, consumer events co-ordinator, to get the lowdown on the exhibitions your customers are attending and how the Worcester team answers the questions they need to know.



### Can you tell us what your role involves?

I help to plan all of the consumer exhibitions and events that Worcester has a presence at. These fall into three main categories – the major exhibitions like Grand Designs Live and Homebuild and Renovation, county shows and agricultural shows like Royal Cornwall, and we also support installers at their own events, for example when they are launching a new showroom or having an open weekend.

### What is life like on the consumer stand?

We travel across the whole of the UK, from Inverness to Cornwall, from the West of Ireland to Norwich. The majority of events fall between April and September and there can be up to five events happening at the same time so it takes a lot of organisation to make sure each one runs smoothly.

We talk to people who are doing refurbishment projects that cost over £1million to people making relatively minor upgrades for around £5,000 – so there's lots of variety. No two situations are the same so our experience is really valuable when talking to consumers.

### What's the best thing about the job?

The most gratifying part of the job is when someone shakes your hand at the end of a conversation and says, 'thank you very much, I'm now clear about the direction I need to go'. Because there are so many companies involved in this industry we often get people coming to us saying 'I've been here for four hours and I'm more confused than before I got here'. Because we're in the enviable position of having such a wide product range we can be more impartial about the different options.

Our main priority is to help customers to find the best solution. We don't try and sell on an exhibition stand, we are there to demonstrate and explain our products. If a potential customer goes away with the answers to their question, having spoken to a helpful Worcester representative, I feel that leaves a far better impression.

### What are the most frequently asked questions from consumers?

Generally people come to us for advice on improving their heating system and it is usually for one of three reasons. They are either in a distressed purchase situation – they

have a boiler that's not working and need to replace it, they are doing work to their property and want to incorporate a new technology or they are trying to be more efficient and save money, so they want to upgrade their heating system with the most suitable solution. So questions will range from what would be the best heating solution for this application to how does this renewable product work. The answers will then spark lots more questions.

### What technologies generate the most interest at the moment?

I would say that 75 – 80% of all our enquiries are for renewable products. Within that, heat pumps generate the most interest and more specifically the type of heat pump that we are asked about most regularly is air to water.

### What is the strangest question you've been asked on the stand?

At a show in Belfast two years ago a guy came to me and asked if he could lay the pipes for a ground source heat pump under all the dung in his cow shed because it produces heat!



## Worcester supports solar thermal funding scheme

**A new scheme aims to encourage installers to offer a solar solution to their customers. Neil Schofield, head of sustainable development at Worcester, gives you the lowdown.**

I've been telling anybody who would listen for years that the installer is the key to getting consumers to sign up for the benefits of solar technology.

It is to the installer, not energy companies or the Government, that consumers turn to for advice on how to heat their homes.

That's why I was delighted to find that the installer is the key target for a new solar thermal funding scheme which aims to reduce the cost of installing solar panels for the homeowner.

The new A1 Low Carbon Solution Scheme will offer £250 funding towards the installation of a Worcester solar thermal on roof system by any installer registered with an Ofgem accredited microgeneration scheme.

The scheme is aimed at the one-off independent installer who is looking to offer a Worcester renewables solution to their customers. Once the system is installed it is not uncommon for homeowners to find that all their domestic hot water needs between April and October can be met from their solar panels. That translates into a big saving on annual fuel bills.

Any installation in a privately-owned home is eligible for A1 funding, but the solar thermal packs must be purchased from Plumb Center in order to access the funding.

The scheme is free to join provided you are Gas Safe registered and BPEC or LOGIC trained and, crucially, MCS accreditation is not required. Installers

will also benefit from best practice and quality assurance support once they are part of the scheme.

My view is that innovative schemes such as this could help many installers who have been reluctant to make the jump into renewables. The ability to offer a Worcester solar thermal on-roof system and, crucially £250 worth of funding towards the installation could help many installers get into the market and be competitive.

**For more information about the A1 Low Carbon Solution scheme visit the scheme's website which can be found at [www.a1-lcs.co.uk](http://www.a1-lcs.co.uk) for more information. Alternatively, call the A1 Team on 0845 6000 337. A1 will arrange an appropriate time for a telephone assessment interview.**





Mrs Edwards receiving her new Worcester Greenstar boiler with installer Peter Thom

# THE FIRST OF MANY – first Worcester Greenstar boiler installed under the new Boiler Scrappage Scheme

**Just three days after the scheme was launched, Mr and Mrs Edwards, from Cambridge, were the proud owners of a Worcester Greenstar high-efficiency condensing boiler and rid of their old Band-G appliance - mainly thanks to the Government’s swift introduction of its Boiler Scrappage Scheme.**

Cambridge installer, Peter Thom, of Green Heat Ltd, fitted the new Greenstar boiler for Mr and Mrs Edwards. The scheme was launched on Monday 18th January and by the Friday their new heating system was fully installed.

When Worcester first sparked the debate on the Boiler Scrappage idea

last May, few within the industry believed that the Government would sit up and listen, especially not so quickly. But in less than seven months the numerous calls from all corners of the heating industry – installers, merchants, homeowners, governing bodies and of course manufacturers were heard and as promised, a month after Darling’s Pre-Budget Report,

the boiler scrappage scheme was underway.

The Boiler Scrappage Scheme became the deciding factor for the Edwards, creating an enticing incentive for them to upgrade from their 26 year old balanced flue boiler (circa 1984), which was easily identified as a ‘G’ rated boiler due to its cast iron heat

exchanger and permanent pilot light. The efficiency was calculated at 65%.

The installers calculations, based on the size of the property and the Edwards heating and hot water requirements, resulted in recommending a Worcester Greenstar 24i system boiler, which is more than 90% efficient, a 25% improvement on the old system.

Mrs Edwards explained: “We first heard about the scrappage scheme on a news programme on television, which was our first prompt. We were aware that our boiler was ancient and could well be a Band-G. It also hadn’t been working properly for some time, so this news really encouraged us to do something about it.

“We did some more research on the internet and were quickly convinced that we should apply. We’re both retired and would generally avoid taking out loans so this grant was perfect for reducing the cost of our investment.”

### The Extra Push

“We have had our loft insulated in the last couple of years and have been very conscious about saving energy since then, so upgrading our boiler was the next step really. We just needed an extra push to make the decision and the Boiler Scrappage Scheme did the trick.”

With their new boiler installed, Mr and Mrs Edwards benefit from a far more efficient heating system, reducing their bills and their carbon footprint and now have far more space in their kitchen. The installer removed the old boiler which was hidden in the corner of the kitchen behind the dishwasher and fitted the new compact system boiler in the loft.

To decide on the best new boiler the team involved discussed the customer’s needs and carried out a heat loss calculation of the three-bedroom semi detached property which was built in 1950 and has a solid wall construction. With limited space in the kitchen or anywhere else in the property it was decided to specify a Worcester Greenstar 24i system boiler to be located in the roof space with a vertical flue. The customer agreed to install a loft ladder, boarding and lighting as required for loft installations. Peter comments: “Worcester’s condensing boilers are the most reliable products on the market and if a customer is looking to upgrade their heating system it is very important that they invest in a high quality product.”

With the rest of the heating and hot water system assessed a fully pumped system from the previous semi gravity system was also recommended. And a twin channel programmer, cylinder

thermostat, wireless room thermostat, system bypass and boiler interlock and thermostatic radiator valves were also installed.

### Completing the Process

To complete the process, the old boiler was taken to a local recycling company called Donarbon, which offers waste management solutions for businesses, local authorities and the general public. Donarbon take the old boilers and extract the different materials which can be reused in other appliances.

Mrs Edwards concluded: “We had a lovely team who worked very quickly and we are extremely pleased with the result. We are quite environmentally conscious and enjoy doing our recycling, so the fact we were able to recycle our old boiler too, gave us an even greater sense that we were doing the right thing. Now we can look forward to far cheaper heating bills and know we have helped the environment a little bit more.”

With the old G rated boiler	With the new Worcester Greenstar 24i boiler	Savings
SAP rating = 43	SAP rating = 60	Extra 17 SAP points
EPC = E Rating	EPC = D Rating	EPC improves from an E to a D
CO <sub>2</sub> emissions = 7.92 tonnes per year	CO <sub>2</sub> emissions = 4.34 tonnes per year	Reduced carbon dioxide emissions of 2.58 tonnes per year
Energy cost = £1421.57 per year	Energy cost = £1011.67 per year	Reduced energy costs of £409.90 per year

### Summary

With the reduced energy costs and the £400 scrappage grant the payback period for the new boiler is just five years. Reducing the Edward’s CO<sub>2</sub> emissions by 2.58 tonnes per year, suggests that if all 125,000 Government grants are utilised, the UK could save 322,500 tonnes of carbon each year.

**For further information on Worcester’s full range of high-efficiency boilers and renewable energy solutions or the Boiler Scrappage Scheme visit [www.worcester-bosch.co.uk](http://www.worcester-bosch.co.uk).**

# Happy Retirement Mike!

**Mike Wright, specification manager for North East and Cumbria, is a familiar face to many of our customers in North of England. Later this year, after 24 years of continuous service to Worcester, he will retire, but before he leaves we wanted him to take a trip down memory lane.**

**Q. How did you start in the heating industry?**

**A:** I started at a builder's merchants as a sales representative in the 1970s. We stocked a range of boilers including Worcester, who at the time had the Junior and Senior range of boilers. After that I went into various management jobs in building products, including a stint with the National Coal Board.

When the NCB went back to its core business of mining, I joined Thorn-EMI Heating based in Gateshead who later merged with Myson. Following that an ex-colleague asked me to join Worcester and the rest, as they say, is history.

**Q. What was your first job at Worcester?**

**A:** I was initially appointed as an area sales manager by Cecil Duckworth, the founder of Worcester, before becoming a regional manager. I've held various management roles within the company and have been in my current position of specification manager for the North East and Cumbria for the last five years.

**Q. Has there been a mentor during your career?**

**A:** Cecil Duckworth. He did all the hiring back when I first joined. He was a very charismatic leader who people would do anything for. David Jones, the national sales manager when I first started, was also a big influence.

**Q. What is the biggest change you have witnessed in your career?**

**A:** My job when I joined was to get our boilers specified and accepted by local authorities and water companies. We were selling a concept back then because the idea of a combination boiler was so new and the market share was so small. It was very challenging and exciting to be involved with such a pioneering company at the time. Nobody could have predicted that combination boilers would become as successful and dominant as they now are.

**Q. What has been the most personally satisfying part of your career?**

**A:** Firstly, seeing the sales increase year-on-year, which demonstrates that you are selling a very good product. Secondly, encouraging young people to progress within the company. I've seen novice salesmen advance up the management structure to become board members. That tells you Worcester is a company which looks after people and rewards hard work.

**Q. What do you think the future holds for Worcester?**

**A:** I have enormous confidence in the management team and with the product range, particularly the move into renewable technologies. I've had a wonderful time and I know I leave a company which is in very good health. It has been a privilege to have been part of that success and to make a contribution.

**Q. What will you do with your retirement?**

**A:** I'm a very keen amateur gardener and I intend to enrol in a local agricultural college to get my Royal Horticultural Society qualification. I also have a golf handicap to get down!



## Easy PCB tests are just a swipe away thanks to two Worcester employees

In a bid to help make checking a boiler control board simpler, two Worcester employees have scooped a Bosch innovation award for their 'Harness Test PCB', here we find out more.

Colin Davies, training supervisor at Worcester, came up with the idea to create a credit card sized PCB

test for all Greenstar boilers, which allows the engineer to check the PCB without damaging the edge connector by trying to force the probes of an electrical tester into the connections. And, working with

Richard Forester, electronic controls engineer, the Harness Test PCB is now available for installers who attend the fault-finding course at Worcester.

Colin explains: "Installers were telling me how difficult it was to test the PCB in our boilers, as the current method was so fiddly. So, Richard and I put our heads together and created the credit card sized Harness Test PCB. It's small enough to fit into the PCB without having to struggle to fit it in,

but large enough not to be difficult to handle.



"It's now being produced and we've had some fantastic feedback from the installers who have used it."

The new Harness Test for the PCB includes the following features and benefits:

- Simple and handy credit card size
- Compatible with all Worcester Greenstar boilers (including older models)
- Annotated with sensor names for simple measurements
- Provides easy access to harness and components
- Faster fault diagnosis, meaning reduced time on site
- First-time fix rate increased,

ensuring fewer need for a return visit

- Component changes minimised, meaning lower cost for homeowner
- Allows installer to fix problem themselves, allowing fewer engineer call outs

With over 1000 units already in use, Worcester has received a great response from installers.

T. Griffiths, a heating engineer, comments: "This is the best diagnostic tool I've used, now I can exactly pinpoint the problem on the boiler and confidently leave my customer with a working heating system."

**All installers who attend Worcester's fault finding training course will receive the new Harness Test PCB – for free! To find out how you can enrol visit [www.worcester-bosch.co.uk](http://www.worcester-bosch.co.uk)**



Brian Murphy, and his team of technical advisors answers some of the most common questions they've been receiving from installers:

## Your questions answered



**Can I get government funding for an air source heat pump?**

You can now! Our Greensource air-to-water range of air source heat pumps has been granted MCS approval, meaning they are now eligible for a £900 grant from MCS.



**My customer wants to heat their swimming pool with solar panels... How many do I need?**

It depends on the size of the pool, whether it is indoors or out, and whether it's insulated or not. See our recent Technical Bulletin TB0002a, available from [www.worcester-bosch.co.uk/tb](http://www.worcester-bosch.co.uk/tb)



**My customer asked me to install the new FW100 weather compensating controller. Now they are saying that the property never seems to get up to temperature. Any idea why?**

Check the minimum outside temperature setting on the unit. This is factory set to -15°C. Try adjusting it to between -3° or -1° depending on your location.



**My Greenstar CDi boiler is flashing SE, What does this mean?**

The SE function is to advise you that the boiler requires an annual combustion and safety check. SE is displayed when the burner has run for 2324 hours, this is thought to be the average burner run time over a 12 month period. The function can be easily reset. See the Worcester website, [www.worcester-bosch.co.uk/tb](http://www.worcester-bosch.co.uk/tb), for full details.



**What is the minimum operating pressure for a Greenstar Natural Gas appliance at maximum output?**

It is important to recognise that the regulator on the gas meter should typically supply a gas pressure between 19-23 mbar, depending on the gas flow rate.

The British Standard allows a maximum of 1mbar pressure loss from the meter to the appliance. However, there is an additional pressure loss across the appliance isolation valve and pipe work before the gas valve operating pressure test point, potentially equivalent to 1.5mbar.

Therefore, a maximum of 2.5 mbar pressure loss can be expected from the outlet of the meter to the gas valve operating pressure test point (1mbar pressure loss across the installation pipe work + additional 1.5mbar pressure loss across the appliance controls). E.g. If the meter is supplying 19mbar during maximum output, an operating pressure of 16.5 mbar measured at the appliance inlet pressure test point is acceptable providing the pressure loss from the meter does not exceed 2.5mbar as detailed above.

What to do if the pressure at the appliance operating pressure test point is below 16.5 mbar?

- i) The pressure loss is less than 2.5 mbar and the meter is not supplying the correct pressure – contact the gas supplier, **OR**
- ii) The pressure loss is greater than 2.5 mbar and the gas supply pipe is restricted or incorrectly sized – rectify the pipe size.

Occasionally there may be exceptional circumstances that affect the gas supply pressure, for more information please refer to Worcester Technical Bulletin 238 published in issue 157 of the "Gas Installer" magazine.

**Note: The above is not applicable to standard-efficiency appliances.**

# Win with Worcester!

During a recent visit to the home of the Worcester Warriors Rugby team, Richard Soper, met HRH Princess Anne.



All you need to do to be in with the chance of winning this month's competition is tell us, in no more than 20 words, what they could be talking about? And, please do your best to keep it clean!

The lucky winner will receive a Bosch power tool of your choice up to a value of £250.

To enter, simply complete the entry form below and send it back to our editorial office: Installer's Choice, March 2010 Caption Competition, Willoughby PR, 43 Calthorpe Road, Edgbaston, Birmingham, B15 1TS.

Good Luck!

Can you come up with a snappy caption for this month's competition?

**My Snappy caption is:**

Name: \_\_\_\_\_

Business Name: \_\_\_\_\_

Business Address: \_\_\_\_\_

Daytime Telephone Number: \_\_\_\_\_

Email: \_\_\_\_\_

**Tick box as appropriate:**

I would like to receive further information from Worcester and Calor

Please do not contact me with further information

**Terms and Conditions**  
 1. No cash alternative  
 2. The decision of Worcester, Bosch Group is final  
 3. One winner will be notified by the 19th April 2010  
 4. Offensive or inappropriate captions will not be considered

# Keep in touch

No matter where you are based around the country, Worcester has a team of local representatives available to help with your specific requirements.

This issue we focus on Neil Carter's team. Neil is the regional sales manager for the Central Region. Here are the details of his team:



**Neil Carter**  
 Regional Sales Manager for Central Region  
 Contact Neil on: **07774 994 490**



**Mick Bawtree**  
 Technical Sales Manager, Renewables  
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 Areas covered: **CB, CM, CO, DE, HP, IP, LE, LN, LU, MK, NG, NN, NR, PE, SG**



**Mark Burton**  
 Technical Sales Manager, Oil and Solar  
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 Areas covered: **CB, CM, CO, IP, NR, PE (excl 10, 11, 20-25), SG**



**Andy Jones**  
 Specification Manager  
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**Richard Dyer**  
 Specification Manager  
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**Barry John Wilson**  
 Technical Sales Manager, Gas and Solar  
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**Scott Love**  
 Technical Sales Manager, Gas, and Solar  
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 Areas covered: **HP, LE, LU, MK, NN**



**Oliver Reynolds**  
 Technical Sales Manager, Gas and Solar  
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 Areas covered: **IP, NR, PE (excl 10, 11, 20-25)**