

ACHPI news is designed to help signpost new legislation and industry developments and help you work out how they are going to effect you.

Support from installers leads to successful ACHPI launch

350 members join in first three months

The newly formed Air Conditioning and Heat Pump Institute has attracted nearly 350 subscribers since its launched in September 2009. This demonstrates the thirst for independent, reliable and up to date technical information amongst individuals who are experiencing rapid growth – and rapid change – in their work.

Air conditioning and heat pump installation is subject to increasing legislation and regulation, as well a rapidly advancing technology. In addition it is gaining a higher profile and becoming more distinct from the plumbing, heating or refrigeration industries. As the sector begins to form its own identity people working in the area need a central source of advice and information – which is where the ACHPI comes in.

The range of topics that ACHPI plans to cover in the future will include an on going feature on different types of heat pump (such as water heating and VRF), as well as explorations into more innovative technologies such as heat recovery and free cooling . There will also be recommendations for good site practice and further information on efficiency, life cycle costing and generic knowledge such as psychometrics and carrying out risk assessments. As ever, this newsletter will pick up key legislation which could effect installers and even offer business opportunities.

Interest free loans to install more efficient equipment

Helping you sell efficient replacement equipment

The Carbon Trust is calling on UK air conditioning suppliers to take advantage of a £3.5m sales opportunity from its equipment scrappage scheme: The Big Business Refit. The scheme provides small and medium businesses with interest-free funding to replace old equipment and install new energy efficient upgrades.

Mitsubishi Electric has seen a substantial increase in sales of equipment paid for by interest-free Carbon Trust loans in the last five months. Green Gateway Initiative Manager, Martin Fahey, said: "The Big Business Refit has made more businesses aware of the unnecessary burden that old refrigeration and air conditioning puts on their bottom lines and has provided them with the opportunity to secure investment for projects that may have otherwise been deferred. With unsecured, interest-free funding available to help businesses replace old equipment, there's a growing awareness amongst customers that, there's no need to 'make do and mend.'"

About the scheme - the minimum loan size is £3,000, and the maximum size is £400,000. There are no arrangement fees. Loans are unsecured, interest-free and repayable over a period of up to four years. The loans are designed to pay for themselves through energy savings, so once the loan is paid off savings go straight onto the bottom line. On average, businesses can save around £16,000 a year by replacing inefficient equipment. To take advantage of the scheme companies must employ less than 250 employees and have a turnover of less than €50m (around £42m); they must also be outside of the scope of the Carbon Reduction Commitment, and typically have an annual electricity spend of than less than £500,000.

For full details of eligibility see www.carbontrust.co.uk/loans. Free training to suppliers interested in the sales opportunity provided is available at www.bigbusinessrefit.co.uk or call 01865 885 873.



Air Conditioning
& Heat Pump Institute

KEY DATES

By 1st January 2010

No virgin HCFC can be supplied or used for servicing existing equipment.

New definitions of recycled and recovered HCFC refrigerant and restrictions on how they are used come into force under the revised European Ozone Depleting Substances Regulation.

New record keeping, system labelling and leak checking obligations come into force for users of HCFC refrigerant.

by 4th January 2011

The first inspection of all A/C systems between 12 kW and 250kW power output must have taken place (first inspection of systems over 250kW should have taken place by 4th January 2009)

By 4th July 2011

Individuals carrying out activities covered by the F Gas Regulation can no longer operate legally unless they have obtained the new F Gas qualification (City and Guilds 2079 / CITB J11).

Companies who employ personnel carrying out these activities must have obtained their full Company F Gas Certificate and interim certificates are no longer valid.

The EU must report on the impact of the implementation of the F Gas Regulations and recommend revisions if necessary.

By 1st January 2015

No recycled or recovered HCFC can be supplied or used to service existing equipment.

And more ...

BSRIA Publishes guide to Heat Pumps

Heat pumps are now the fastest growing form of heating in the UK according to BSRIA, the Building Services Research and Information Association. They have recently published a guide explaining the design of heat-pump based heating and cooling systems to maximise the benefits of reducing operating costs and carbon emissions while avoiding excessive capital costs for plant and infrastructure. The guide's emphasis is on the application of packaged heat pump plant for residential and small commercial buildings, and it also includes information on component-based plant for larger scale applications. The Guide "BG 7/2009 Heat Pumps - a guidance document for designers" is available at £50 from <http://www.bsria.co.uk/bookshop/books/heat-pumps-a-guidance-document-for-designers/>

European Heat Pump Summit promotes renewable technology

The first European Heat Pump Summit, organised by Chillventa was held in Nuremberg, Germany, on 9-10 September. The EU Directive on the Promotion of Renewable Energy Sources which became EU legislation in June this year requires EU Member States to increase their share of renewable energy in their national energy mix in an effort to boost the EU's total share to 20% by 2020. Aerothermal and hydrothermal energy, used by heat pumps, are recognised for the first time under EU law as sources of renewable energy.

An increased uptake of heat pumps is expected to reduce consumers' heating and cooling costs as well. Friedrich Busch, Director General of the European Partnership for Energy and the Environment (EPEE), said "Investment costs are now gained back very quickly. These systems will have drastically reduced their energy costs. Many EU Member States are now putting in place incentive schemes, even though the technology is widely used in countries such as Sweden, Germany and France, it still has a big market to conquer."

Regional Heat Pump Seminars in 2010

The UK Government has listed heat pumps as renewable energy sources and installation grants are available. Do you want to know how to get into this growing market? Are you aware of the rules for obtaining grants? Could you specify a heat pump for a new or refurbished property? This low cost seminar organised by Heat Pumps Today magazine will provide some of the answers and will ensure that you are not left behind as the UK market in heat pumps gains momentum. Topics to be covered on the programme include: overview of types of heat pump and typical applications; government support initiatives, design and installation training, carbon loans and energy saving, new technology for water heating and heat recovery. See <http://www.heat-pumps-today.co.uk/> for information on dates, venues and booking.

Gas-powered VRF co-generation heat pump air conditioning installed in Ipswich

A ground-breaking gas-powered VRF air conditioning system, which generates its own electricity, is taking place at Suffolk One, a learning centre in Ipswich. The £65m building will accommodate 2000 students. It also employs a gas-powered heat pump VRF air conditioning. The air conditioning equipment for the project has a combined cooling capacity of 1.2MW. It requires 19 GHP VRF air conditioning systems and 16 high efficiency split systems. The units are mounted primarily on the roof, in groups serving five "clusters" which connect and surround the core of the building.

The building uses a total of 310 fan coils, mainly ducted units for concealed mounting in ceiling voids. These are augmented by a small number of ceiling cassettes. All equipment operates on R410A refrigerant. The VRF systems include both two- and three-pipe technology, the latter used to harness significant quantities of waste heat generated within glass-clad parts of the building and transfer it to areas requiring heating. A key design issue was low sound levels - the libraries and classrooms require a very low level of background noise.

SANYO Air Conditioners consider this to be a landmark project and see this as a forerunner for a wider roll-out of the new GHP and co-generation technology across the UK and Europe.

What is the ACHPI?

The Air Conditioning and Heat Pump Institute (ACHPI) is a new way of accessing information relevant to your work. Join the ACHPI to

- keep up to date with news and practical tips
- broaden your knowledge of current technology
- help fill gaps in theory and fundamentals
- signpost new developments which could affect your business and track changes to legislation

Subscription is free until March 2010. Join as a founder member now at www.iior.org.uk/achpi

Published by the Air Conditioning and Heat Pump Institute, a section of the Institute of Refrigeration

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ACHPI
c/o IOR, Kelvin House
76 Mill Lane, Carshalton
Surrey SM5 2JR UK
www.iior.org.uk/achpi
tel 0208 647 7033
Email achpi@iior.org.uk

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