



## Department of Energy & Climate Change

### Non-Domestic RHI Case study – Fast facts

Technology type: Air-source heat pump  
Equipment manufacturer: Daikin Europe NV  
Equipment model: ERSQ011AAV1 -  
EKHBRD011ABV1  
Capacity: 11kW  
Installer: All Renewable Energy



## Heading up the green campaign in Inverurie

### Hair salon warms up with renewable heat source

#### Scenario

When Gordon and Lorna Milton decided to look into revamping the interior of their hair salon in Inverurie, Scotland, they had no idea it would lead to an award-winning green transformation. Since November 2011, Élan Hair Design, which opened in 1971, has used an £82,000 interest-free loan from Energy Saving Scotland to turn its terraced salon into the UK's leading low-carbon hair and beauty business.

One of the biggest investments the salon made was £17,000 on an air source heat pump (ASHP) to keep the first floor offices and treatment rooms at a constant comfortable temperature. Using technology similar to that found in a fridge the ASHP takes heat from the air and brings it up to a higher temperature. The heat created is used to heat the salon's water and is also used to heat its radiators. The radiators at Élan Hair Design are fan-assisted and run at 35°C, compared to conventional radiators of the same size, which usually operate at around 70°C.

"In 2010, we thought the salon was looking a bit tired so we decided to install LED lights to bring it up to date," says Lorna. "Realising that LED lights were cheaper and more energy efficient than conventional lights, we became interested in other ways of lowering our carbon footprint and lowering our bills at the same time. We approached the Energy Saving Trust for

advice and they helped us to find All Renewable Energy, who advised us on the best sort of heat exchange system for our needs."

#### Low carbon, high expectations

All Renewable Energy (ARE) told Lorna and Gordon that the heat exchanger system was most suitable for the salon's first floor offices and treatment rooms, where the rooms are small and there are walls on which to mount the radiators. The ground floor salon, being open plan, is too big for the low-temperature radiators to be effective and is heated by the salon's existing air-conditioning system. ARE installed the ASHP system over a period of four days in January 2012 with minimum disruption to the business.

Hailed as the UK's greenest hair salon, Élan Hair Design has since been nominated for 43 environmental awards and has won 12, including the 2012 Scottish Green Apple Award for Environmental Best Practice.

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Lorna Milton, Élan Hair Design

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The salon's other low carbon measures include an array of solar photovoltaic (PV) panels, a solar thermal water heating system, carbon-zero furniture, single-use, compostable towels and capes and water-saving backwash basins. The salon team has also implemented a thorough recycling and waste management system that diverts 95 per cent of salon waste, including cut hair, from landfill.

Élan Hair Design extended its premises in 2013, taking on two new staff members, but the salon was determined to reach its carbon reduction targets despite the increase in energy consumption and emissions. It expects to employ two more new staff in 2014 and also plans to open a new salon nearby, where the same low carbon measures will be applied.

"As business owners we're aware of how much energy and heating costs are rising," says Lorna. "We also care about the environment and we found that as soon as we developed an interest in renewable energy it just went on from there. We always ask ourselves how we can make all our practices greener and we've found that there is a lot of support out there to help us meet our goals."



## Credit where it's due

Each year, the 11kW ASHP system installed at Élan Hair Design is producing up to 7,000kWh and saving the salon over £700. It is also receiving around £500 each year in payments from the Government's Renewable Heat Initiative (RHI) for its solar thermal system.

Launched in 2011, RHI is part of the Government's commitment to increasing the UK's renewable energy use. It provides long-term financial support for installing renewable heating instead of a fossil fuel system, with payments being made over 20 years to reflect the amount of energy used.

Élan Hair Design reached its target of a 90 per cent reduction in its carbon footprint in July 2013. By 2016 the salon expects to save as much as £17,000 in energy and heating costs.

"There are 48,000 hairdressing salons in the UK," says Lorna. "Hairdressing is an industry that consumes and emits a surprising amount of water and carbon, so if just one per cent of salons take on board 10 per cent of the green initiatives that we have, we'll see some good results. I'd advise companies that are thinking of implementing low-carbon measures to contact DECC. There is a lot of advice and funding out there and we found that all the organisations are very joined up so you will always find the right people to help you. You'll save money and save the environment."

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For more details on the non-domestic scheme and free information on how to apply visit: [www.ofgem.gov.uk](http://www.ofgem.gov.uk)

• Or call **0845 200 2122** (RHI enquiry line open Monday to Thursday 9am-5pm and to 4.30pm on Fridays).

If you are interested in receiving RHI updates or providing DECC with RHI feedback, please email: [rhi@decc.gsi.gov.uk](mailto:rhi@decc.gsi.gov.uk)