

CASE STUDY

Newham Borough Council

Supporting energy efficiency in affordable housing



In 1965 two became one when the Essex boroughs of West Ham and East Ham joined to form the London Borough of Newham. The area, which is five kilometres from the City of London, has benefitted from unprecedented economic regeneration. It is estimated that by 2025, £22 billion will have been invested in the area, creating more than 35,000 new homes and 100,000 new jobs.

But that's seven years away and right now, economically, Newham is one of the most deprived boroughs in England, presenting a very unique set of challenges when it comes to providing affordable housing for its tenants.

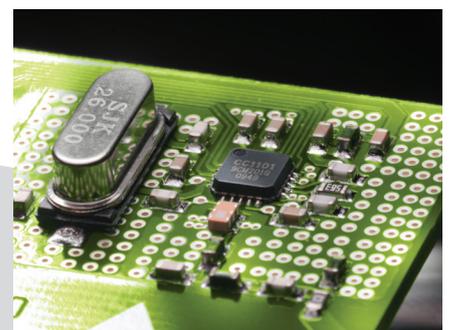
Newham Borough Council has 14,500 homes in its portfolio, including 104 blocks of flats, many of them with G-rated boilers, and the local authority wanted to ensure that these would be replaced with an energy efficient boiler that would not only lower tenants' costs but provide outstanding long term reliability too. The Dutch brand Intergas was selected on the basis of its track record of success. With only 12 moving parts – there's no secondary heat exchanger, diverter valve, valve motor or automatic air vent – there's less to go wrong; it has an exceptional flow rate even at 0.2 bar; as direct hot water is served by a separate circuit, if the pump fails the system will still deliver hot water; the aluminium heat exchanger, designed over 20 years ago, has never had a mechanical failure and the boiler was, still is, the only one available in the UK today which condenses in both heating and hot water modes, making it ultra-efficient.

New generation boilers

After a 12-month period the decision was taken to begin trialling the Intergas HRE Combi Compact boiler. As decisions go you could argue that this one was a bit of a slow burn, but the delay was a blessing in disguise as Intergas had, by then, launched its greenest boiler yet, the Eco RF.

Retaining all the benefits of the current range of condensing boilers, it also has new vacuum insulation to keep heat and energy losses to the absolute minimum while ensuring whisper-quiet operation, and the A-rated pump halves energy consumption. However the unique selling point of this new model is its remote management system. This technology, which allows the boiler to 'talk' directly to the managers at the Council, convinced Newham that the Intergas Eco RF could deliver a comprehensive service to tenants.

The Eco RF module holds software that can send and receive information wirelessly.





Intergas is the European brand leader in connected homes in social housing. Over 50,000 are currently connected using this remote management system.

Every Eco RF comes fitted with a radio frequency module as standard, which can send and receive information wirelessly from the boiler to the Council on a continuous basis. Up to 240 properties can be linked in a network via a single Internet connection. When over 100 boilers are overdue for a service at any one time in Newham because it can't gain access to the properties, this facility can prevent small, easy-to-remedy problems from developing into expensive repairs. Should a fault occur the Eco RF will immediately send an email to the council and, as the fault has been clearly identified, the first-time fix rate improves and wasteful call-outs reduce. This level of proactivity increases efficiency and tenant comfort. The analytics also help to build a profile of tenants' gas usage and develop a deeper understanding of where economies can be made.

Commenting on the installation of the Eco RFs, Stephen Zouch, managing director, Intergas Heating, said: *"We are ambitious about producing high efficiency boilers that are as uncomplicated as they are reliable, that can meet the future needs of our communities while keeping lifetime costs as low as possible. Importantly, remote management will improve support for the more vulnerable. We're delighted about the union of this boiler with this forward-looking council."*

To date 50 Eco RFs have been installed in two apartment blocks which, to save space, are housed in glass fibre, weather-proof cabinets on the balconies. Now the team is targeting back boilers, of which there are 100 remaining, saving the council £1,300 a boiler on the installation cost alone.

Progressio cum populo

50 years ago, in the true spirit of fair play and cooperation, Newham Council adopted the County Borough of West Ham's coat of arms and the County Borough of East Ham's motto "Progressio cum populo" or "Progress with the people" to create its logo.

This time the teams at Newham Borough Council and Intergas are working together to deliver a retrofit solution that will benefit tenants for another 15 years at the very least.

The benefits in brief

- First-time fix capability – any fault that occurs can be identified prior to a maintenance visit.
- Support for social housing organisations in providing the highest level of duty of care to tenants.
- Digital management of central heating boiler status.
- Service visits predictive, based on actual use.
- Online web reports, charts and comparisons. All data is available as a download; data can be exported and used for analysis of the performance of individual boilers and components.
- 240 properties linked in one network.
- Remote, fully managed system.

Reverse top: Variety of housing stock in Newham

Reverse bottom: RF module for Eco RF

Top: High rise block in Newham

INCREASED EFFICIENCY

Intergas Heating Ltd
Unit 2 Easter Park
Worcester Road
Kidderminster DY11 7AR
T 01527 888000
W intergasheating.co.uk