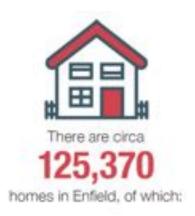
# Pumping Away in Enfield

## NLA Retrofit Conference 23 February 2022

Dominic Millen, Head of Climate Action and Sustainability









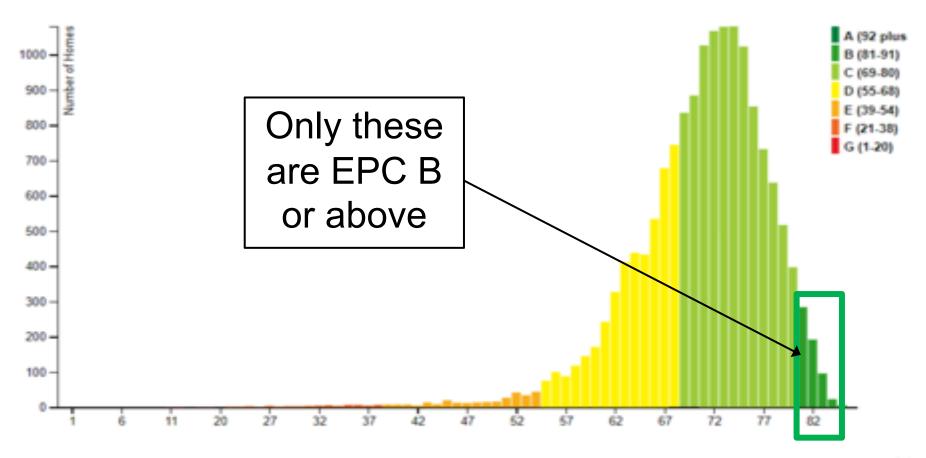


### **Retrofit a Priority**

- Housing 21% of direct corporate emissions and 70% of indirect with domestic buildings 39% of borough emissions.
- Housing quality has health and poverty impacts.
- Housing and Growth Strategy commits to environmentally sustainable homes
- Retrofit London Action Plan has target of average EPC B by 2030.
- Mayor of London has included same metric in Net Zero 2030 pathway.

#### And a big Challenge!

Council stock has higher average performance but this masks nature of properties and tenure.





## **Enfield Council Housing Retrofit**

- Insulated 343 homes through Smart Homes.
- ECO used to improve energy performance of 101 flats.
- Local Authority Delivery for external insulation to over 30 homes and works on Housing Gateway properties.
- Energiesprong of 30 properties in Edmonton as part of Social Housing Decarbonisation Fund Demonstrator.
- Heat network retrofit pilots.
- Social Housing Decarbonisation Fund for 70 properties.
- Joint lead for Retrofit London project.

Also a few heat pumps...



### Multi Block Heat Pump Project



Opportunity identified to replace electric heating in over 400 flats in 8 x 12 storey tower blocks.



#### **The Solution**



# Ground Source Heat Pumps:

- 96 boreholes
- Risers installed
- 400 shoe box heat pumps.



## Range of Benefits



Less intrusive to install.

Reduced emissions – 773tCO2 pa

Lower cost in use – 30 to 50% saved.

Grant eligible.



### **Show Me The Money!**

- Heating and hot water costs for each tenant has reduced to £350-400 per year.
- £9 million in collective lifetime bill savings over the nominal 40 year system life.
- Average cost of £15,500 per property to install.
- Eligible for £4.3 million income from the Non-Domestic Renewable Heat Initiative over 20 years.
- ECO funding means project is effectively cost neutral.



#### **Too Good To Be True?**

- Required Council funding up front.
- External grant helped to make viable versus gas.
- Must find right contractor and products there is a current lack of these due to market capacity.
- Users expect quick and instantly controlled heat so resident education and engagement is key.
- Early installations have required more maintenance than expected and related skills are not common.
- For many properties they will need significant fabric enhancements / solar PV to make viable.

### **Next Steps for Enfield**

- Deliver and learn from existing projects.
- Prioritise and prepare retrofit plans.
- Align asset renewal with decarbonisation.
- Enhance maintenance capability.
- Engage with and educate residents.







Retrofit London Housing Action Plan

Also continue to support the Retrofit London Programme as it achieves change at scale.



### **Heat Pump Delivery at Scale?**

- Must acknowledge that heat electrification is the solution with heat pumps a viable option.
- Develop clear guidance / requirements to "get heat pumps right".
- Need to view as part of a whole home solution that adds value.

#### MAYOR OF LONDON

# London Net Zero 2030: An Updated Pathway

2.2 million heat pumps in operation in London by 2030 – currently around 30,000.



# **Thank You**

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