



Heating for Homes – Pause for Thought

Technology – a complex business!

- Design
- Installation
- Inspection
- Commissioning
- In use
- Maintenance

And not forgetting....

- Innovation
- Design and build/ procurement changes





Complexity in M&E

Level of complexity increases with:

- Fewer aspects
- Fewer levels
- Deeper plans
- Bigger windows





Controlling Environments

These all lead to a much more controlled environment with more active technologies in:

- Lighting
- Ventilation
- Heating
- Cooling





An Office Environment?

This is not dissimilar to an office environment. However there are differences.....

- Limited wall space for external outlets
- Reduced ceiling voids
- Residents need some control
- Landlords are different to business facilities managers





Issues Residents Have

- Resident can't switch suppliers
- More access requirements
- More liaison requirements HIU, meter
- Reporting repairs/problems





Issues Landlords Have

- Ownership and management ESCOs, billing providers, bad debt agencies..
- Access to parts of system Plant, HIUs, meters, telecoms
- Contract set up, management, enforcement
- Resident details management e.g. voids
- Transparency in tariff setting





Conclusion

- Watch the level of complexity
- Are we expecting too much of homes?
- Use of passive design and passive/active technologies an integrated strategy with all technologies included, starting with passive.
- Keep it simple. For example:
 - Super insulation, triple aspect and electric heating
 - PVs and energy storage
 - Where we use CH, reduce the complexity and reliance on other technologies





