## things to consider when heating churches

## 1. Use of the Building

2. The Space

3. Existing Conditions / Arrangements



## 1. Use of the Building

How often is the building used?

- Daily, weekly, less frequently
- How long and how often during the day/night

What is the building used for?

 Mass, Occasions (weddings, funerals, christenings), Community uses, other...

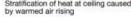
## 1. Use of the Building (cont)

How is the building used?

- Same configuration, or do things move
- Size of congregation, numbers of people in attendance to various events/uses



# Hot air





#### 2. The Space

Size, area concerned, layout

Volume – High Ceilings

Construction (u-values) new or old, unknown

Amount and type of glazing (heat gain and loss)

Orientation

## 3. Existing Conditions / Arrangements

Has the building been heated before

Condensation

Listed / Historic status

Constraints

Utilities



"That was a really smart idea to install central heating, wasn't it?"

## **Electricity / Electric Heating**

- + network being decarbonised
- + efficient (especially heat pumps)
- + options available to supplement (PV, turbines)
- + generator can be used
- can be expensive if exceeds existing capacity
- can be expensive to run (£/kWh)



"It's not as picturesque as the old steeple but it's saving a fortune in electricity bill

## Heating System Options

Radiators\*

Underfloor heating\*

Air/Ground Source Heat Pumps\*\*

Boilers (gas, electric)\*\*

Radiant Heaters (panels, glass, lighting)

**Pew Heating** 

**Panel Heaters** 

Warm Air Blowers

#### In Summary...

## THE HEATING SYSTEM

HOW TO TELL IF IT IS SET CORRECTLY

