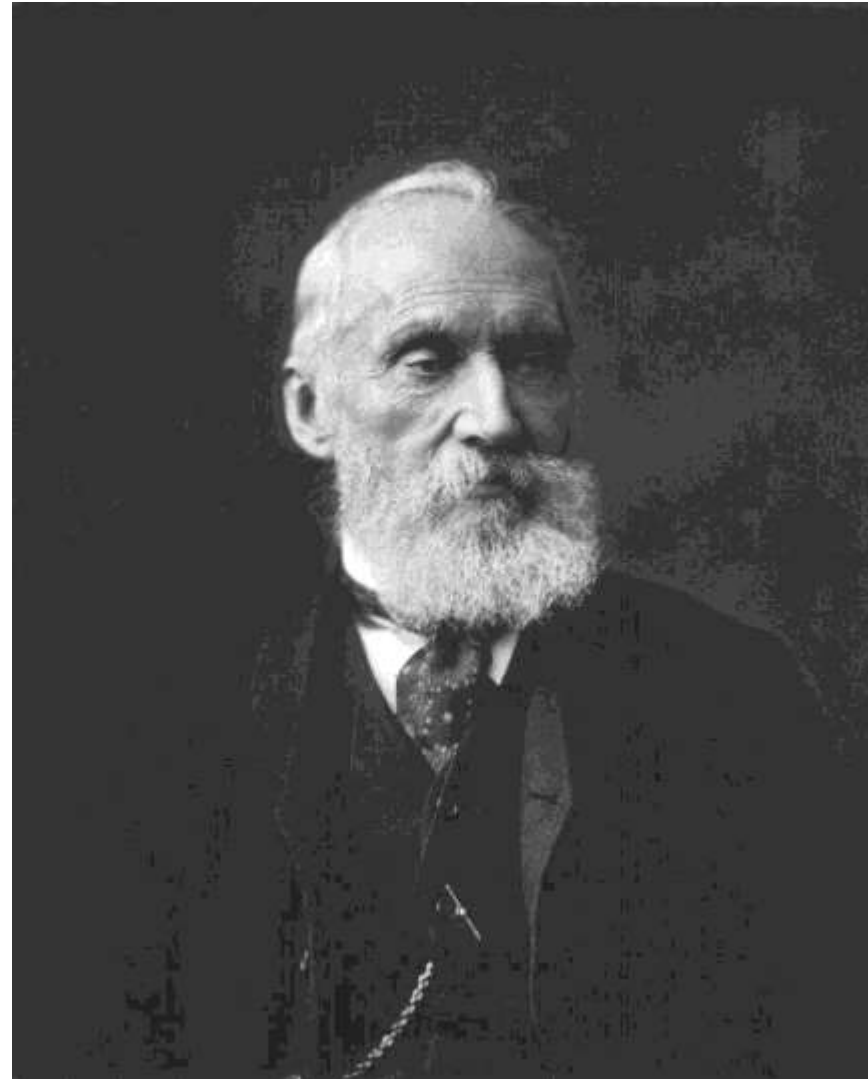
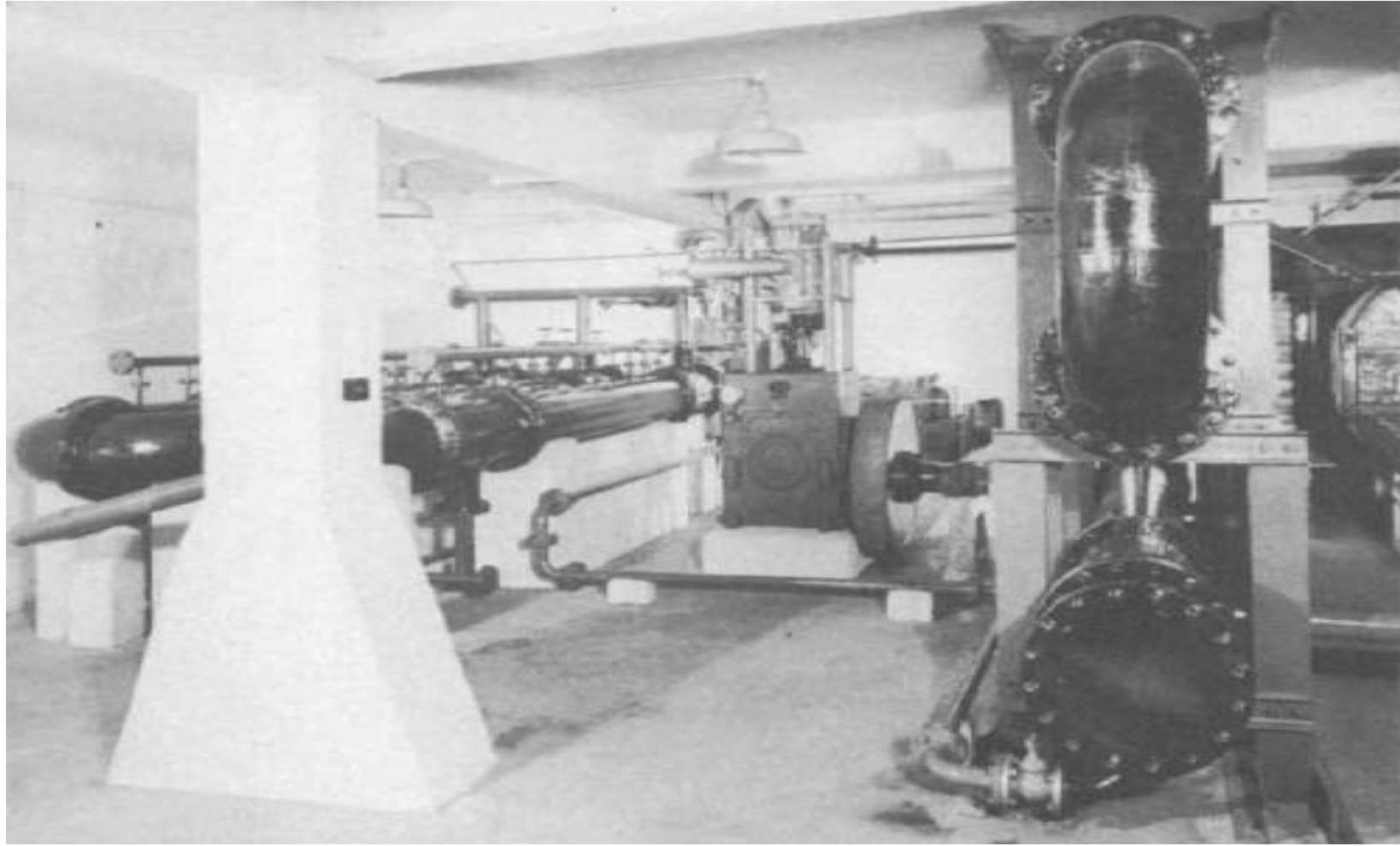


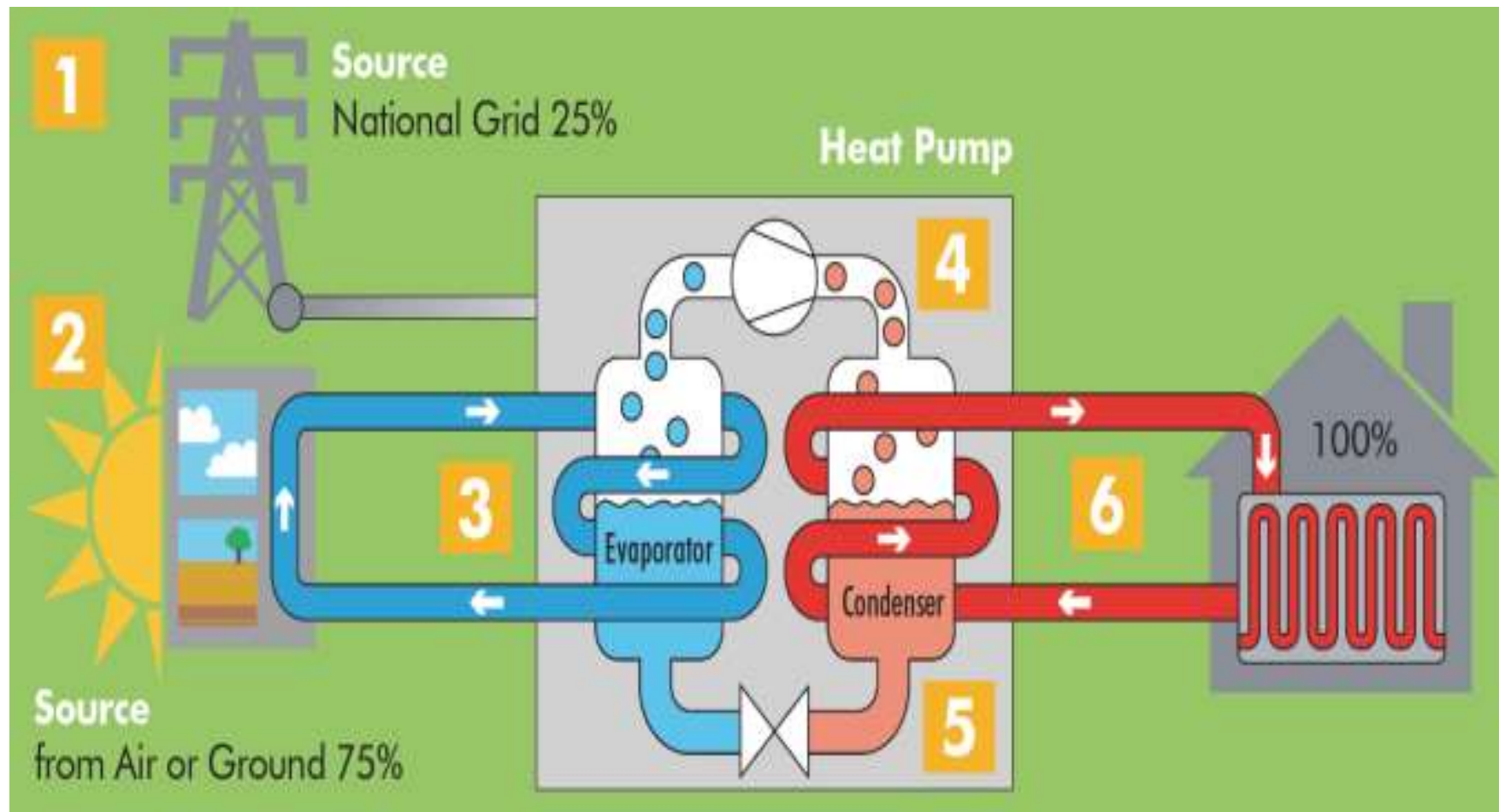
Electric Heating in new build

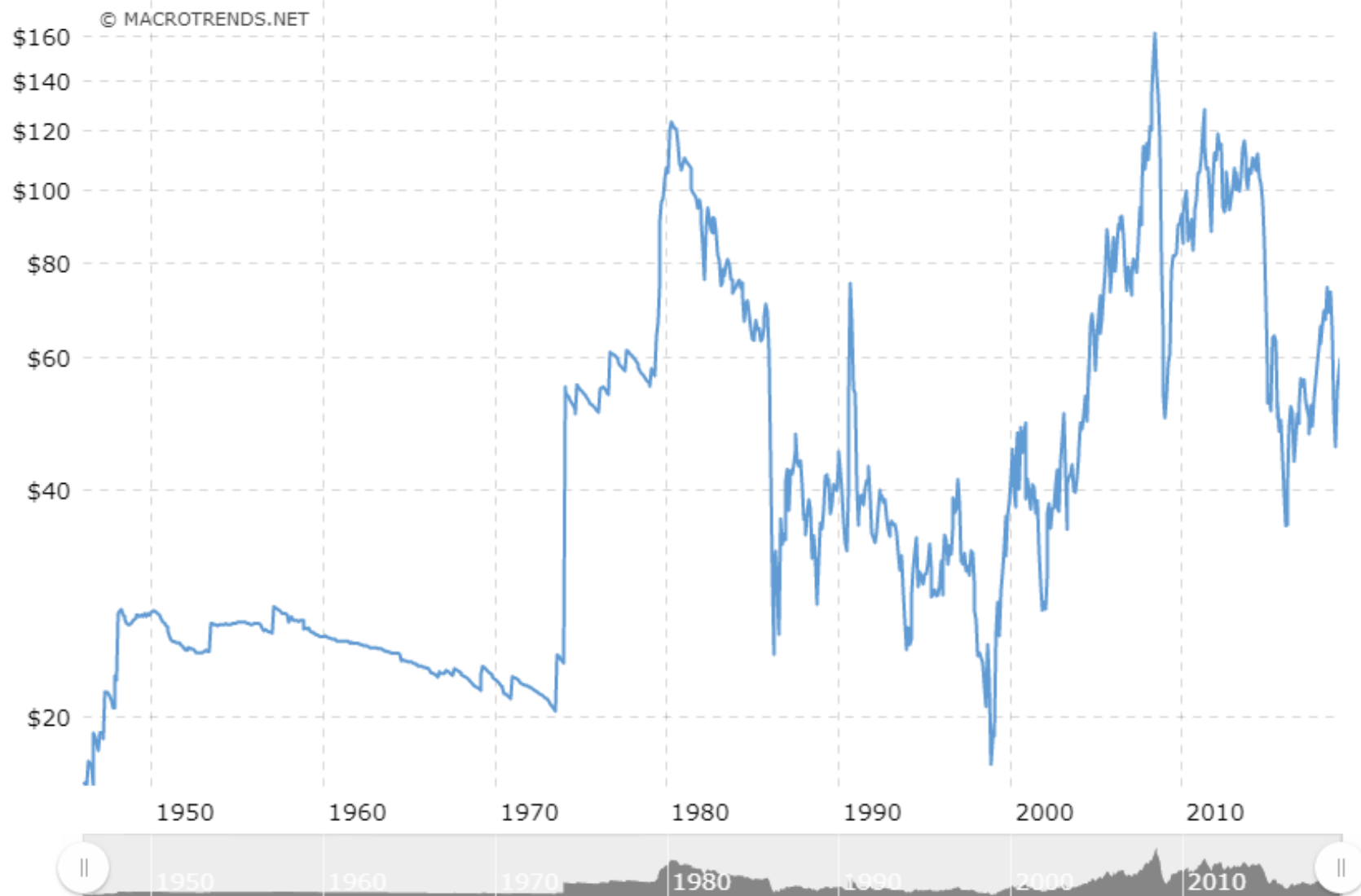
Dimplex space heating and hot water for apartments and houses











Building Regulations

- **Building Regulations today require energy performance to be approximately 60% better than that of the 2005 standards.**
- Previously Solar thermal offered the solution of choice along side a gas or oil boiler
- However under the new Part L 2011 a properly sized solar system will no longer do it on its own with a gas or oil boiler.
- Analysis of the new part L shows that a heat pump now provides the most cost Neutral solutions for all house types.



Building Regulations

- **By 2019 these buildings will need to be Nearly Zero Energy Buildings**
- The energy performance will be 70% better than 2005
- The carbon produced will be 65% lower than 2005
- A significant amount of the energy used must be from Renewables of 20%



Dimplex Heat pumps – Scheme Houses

Outstanding performance and efficiency

- Designed to meet NZEB
 - Delivers all hot water
 - Delivers all space heating to -20 degrees
 - Doesn't need help from renewables like other heat pumps or boilers



Ridgewood, Swords, Dublin – MKN Property group



Project

150 houses No. 2,3 and 4
Bedroom houses ranging in
size from 82 – 123 sqm.
A2 rating

Rokeby, Lucan, Dublin – O’Flynn Capital Partners



Project

71 No. 4 and 5 Bedroom
houses ranging in size from
177 – 259 sqm.
A2 rating

Mornington, Meath – Pivitol Construction



Project

260 No 3, 4 & 5 bedroom
semi-detached houses
ranging in size from 110 –
160 sqm.

A2 rating

City West –Davy Hickey Properties



Project

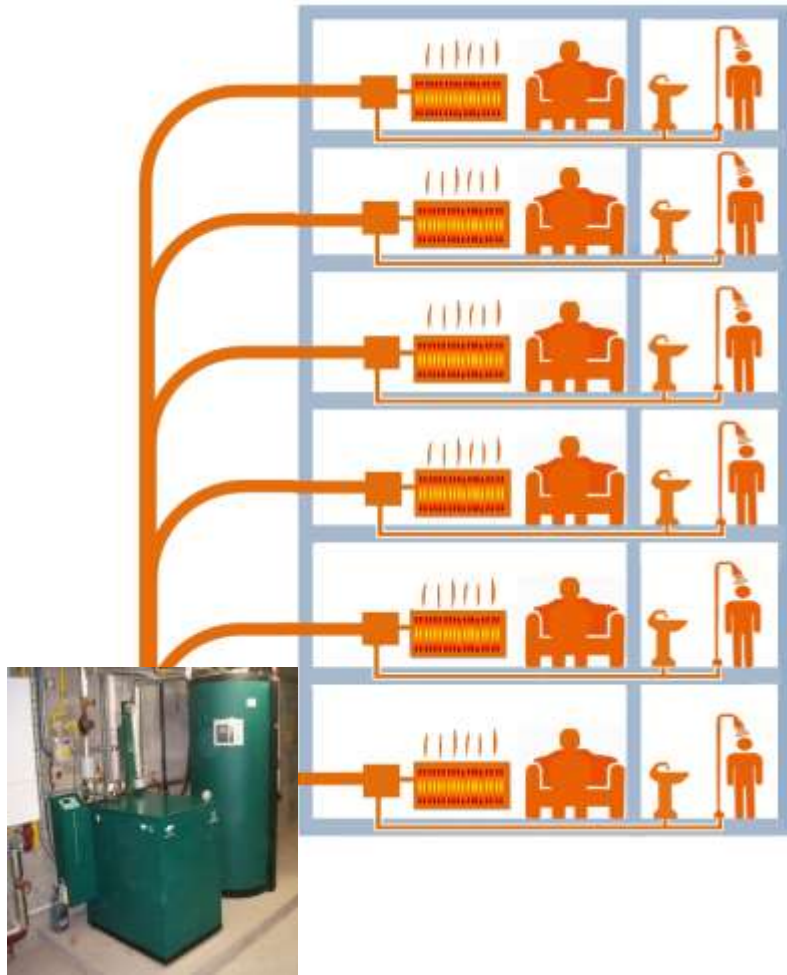
120 No. 2, 3, 4 Bedroom
houses terrace and semi
ranging in size from 120 –
150 sqm.
A2 rating



 **Dimplex**

Smart Electric heating
solutions in apartments

Current benchmark - Centralised systems



PROS

Comfort & Convenience: Hot water and heating is available instantly “on-demand”

Safety: Boilers and other heat sources are kept in a separate plant room

CONS

Capital costs – up to 2 times more expensive than alternatives

High Heat loss – system is always on and the heat network needs to be maintained at a high temperature all the time

Running Cost : Often higher running costs due to high system inefficiency, additional overheads, and sinking funds

Billing – heat metering and billing costs incurs overheads

Sinking fund: For replacement of components in to the future

Why Electric heating



Electric resistive heating was precluded in Part L of the building regulations.

Electrification of heat is a key strategy for the EU.

Lower cost solution than a Centralised system.

Less complicated with little or no maintenance.

No concerns with Carbon Monoxide.

Lower running costs when paired with renewable technologies

NZEB - Apartments

Lowest running cost

Highly controllable

Easy to maintain

Less complicated

No annual safety checks

No Carbon Monoxide.

No District heating

No Centralised Billing



How we heat living rooms and kitchens - Quantum



- Quantum is highly controllable
 - built in timers
 - accurate room thermostats
 - Every room zoned
 - occupants can control the heating.
- Systems are easy to maintain as there is no requirement for an annual safety check, unlike a gas system.
- Lowest capital and installation costs.
- Electrical systems can be placed anywhere there is an electrical connection
- Quantum delivers savings of up to 25% compared with old storage heaters.
- Quantum incorporates latest technology as it is designed to facilitate demand side management and deliver energy savings.

How we heat Bedrooms - Qrad



- High efficiency Smart Electric Radiator
- Digital time and temperature control
- Suitable for Bedrooms
- Adaptive Room Temperature Control (pre-heat)
- Open Window Detection (auto setback)
- User selectable Operating Modes – Manual/ECO/Frost
- Timer: 24hr 7 day
- Advance/Boost

How we heat Bathrooms - TDTR



- Even heat distribution
- Rapid towel drying
- Compact, slimline design
- Choice of chrome or white finish

How we heat water - Edel



- **Every year, the Glen Dimplex group sell 10 000 heat pumps in France.**
- Stainless steel tank with 25 year guarantee and no requirement for sacrificial anode.
- Very quiet operation due to sound proof hood, variable speed fan and a high performance rotary compressor mounted on anti-vibration pads.

How we save - Capex

	190 Apartments	100 Apartments	70 Apartments	53 Apartments
CHP and Boiler M&E Cost	€2,252,000	€1,189,684	€863,100	€733,679
Electric Heating cost	€1,140,000	€600,000	€420,000	€318,000
Total saving	€1,112,000	€589,684	€443,100	€415,679

Running Costs

