Choosing a heating system for your clubroom can be tough - there are many options, each with their own pros and cons that make them appropriate for different building types and usage patterns. Key points to think about when selecting a heating system include:

- How often is the room used, by how many people, and for how long?
- How large is the space to be heated?
- How well insulated is the space?
- What is the local climate like?

**RADIANT VS CONVECTIVE HEATERS**

**Radiant heaters** are designed to provide instant, directed heat that targets people and objects. This is because they produce heat in the form of infrared radiation - similar to the heat you feel from the sun. This makes them useful for rooms that are only used for short periods, large rooms that are not well insulated or draughty, and areas where people congregate. They can be powered either by gas or electricity.

**Convective heaters** provide heat by warming up the air in a room. This means warming up a space can take some time depending on the capacity of the heater, and how well insulated a space is. Because of this, convective heaters are best used for smaller rooms that are constantly in use, like offices, or lounges in clubs that operate through the day. When used in the wrong kind of space, convection heating can be very inefficient. It's easy to lose heat from the warmed air through draughts and poorly insulated windows, walls and ceilings, so make sure you address these first before selecting a heater. They can also be powered by gas or electricity.

**FUEL TYPES**

**Electric heaters** have a number of advantages. They are easily installed, are assumed to have an efficiency of 100% as it can only produce as much heat as the energy put in, produce no emissions locally and have lower initial and maintenance costs. Since 85% of New Zealand's electricity is produced by renewable sources, they are also an environmentally sound choice.

**Gas heaters** can provide heat more rapidly than electric heaters, and certain heaters can provide the look and feel of a fireplace. However, they cost more to install and must be vented outside. LPG and Natural gas are also not a renewable resource, and produce greenhouse gases when burnt. Natural gas is unavailable on the South Island, further decreasing its favourability. **Never** use any kind of gas heater that does not have a flue to vent its exhaust outside - gas heaters emit large amounts of moisture and pollutants such as carbon monoxide that is detrimental to human health when used indoors. Many countries have banned this type of heater from sale.

**HEAT PUMPS**

While **heat pumps** produce convective heat and are powered by electricity, they work very differently to standard electric convection heaters. Heat pumps extract heat from the outside air and using it to heat interior air. This process works on the same principle as your refrigerator and is highly efficient. Despite this, heat pumps are not always the best choice. Like all convective heaters, heat pumps are most effective in small, well-insulated spaces, so be sure to consider this before purchasing. When used properly, heat pumps offer low running costs, but are expensive to install. If you live in a cold climate, ensure you purchase a model designed for lower temperatures so it will run efficiently during the colder parts of the year.

**WOOD / PELLET BURNERS**

**Wood** is a renewable fuel and, so long as the amount of wood that is burned is replaced with growing trees, it's carbon neutral. If you have a free supply of dry, untreated timber, this form of heating will be your cheapest heating option. Selecting the right size of burner is important, because they are most efficient when run at full capacity. Air quality rules mean most urban wood burners cannot have the damper closed to control heat output and speed the burning as starving the fire of oxygen increases emissions. Where a burner has a larger capacity than required to heat a space, consider using a heat transfer kit to move excess heat into other areas of the house.