The Carbon Capture Process

1. **Emissions Source:** Waste gases from natural gas combustion at the power station contain carbon dioxide that would otherwise be released into the atmosphere. The station uses existing electricity and water connections, reducing new infrastructure needs.
2. **Flue Gas Conditioning:** Before carbon dioxide can be captured, flue gas from the power station is cleaned up of impurities and cooled down to a suitable temperature.
3. **Absorber:** Carbon dioxide in the flue gas is selectively captured by a chemical solvent, and the carbon dioxide-lean flue gas is released to the atmosphere.
4. **Heat Exchanger:** Heats the carbon dioxide-rich solvent to reduce energy needed for the next step.
5. **Reboiler:** The reboiler transfers the thermal energy needed for the release of the carbon dioxide captured by the solvent.
6. **Desorber:** Releases purified carbon dioxide, ready for further compression and transport.
7. **Compression and Conditioning:** Carbon dioxide is conditioned and pressurised for transport to permanent storage.