Why CHP is ideal for universities

Cogeneration makes sense for a university because most large universities utilize a district heating (DH) system. Rather than have each building or unit produce its own heat, all heat is centrally produced at the power plant, and then distributed to various buildings through a grid of pipes. For example, at most residential single family houses, there is a furnace which uses fuel to generate heat for the house. Each house usually has its own heating system. However, when cogeneration is used, there is excess heat recovered, which increases the system's efficiency relative to traditional gas turbines. This heat can be used for many different applications; at universities, it usually goes to the DH system, which then provides heat to heat buildings, for industrial uses, research experiments, and other purposes. All of this steam is produced at the power plant, and distributed through the DH system, rather than being produced at each individual building. The system is ideal for universities because they generally have a large number of buildings.



An example of DH pipes used in a CHP system