

Norma Baru Bandar Rendah Karbon

DISTRICT COOLING

Innovation

- A new way of thinking, sometimes blend with 100 years of technologies
- Design for present and future
- Work together with Architects, Town planners and governments.
- Selling the ideas beyond profit – win-win situation
- Creating values (Credits and Recognition)

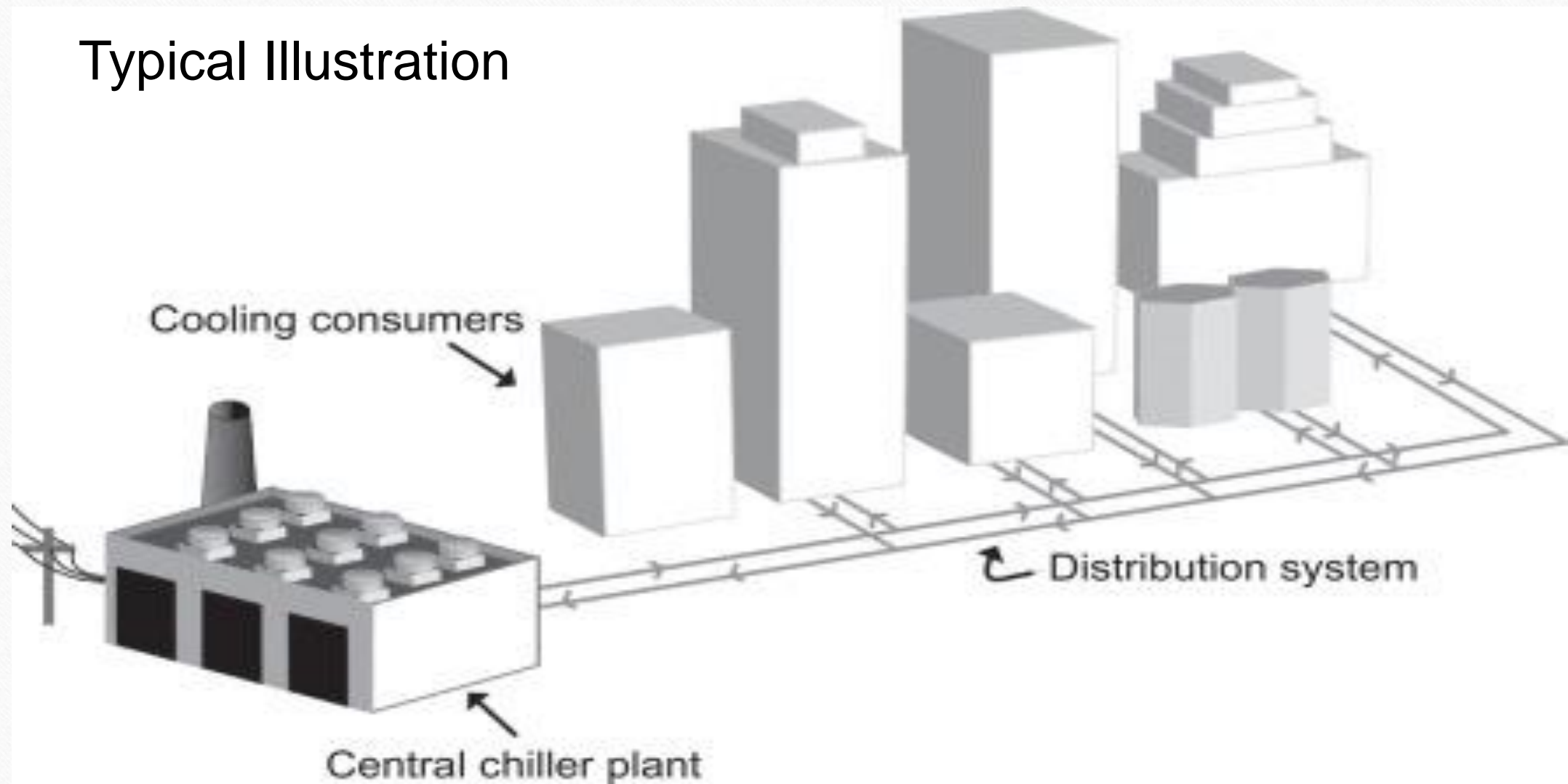
District Cooling

- A **district cooling system** (DCS) distributes **chilled water** from a central source to multiple buildings through underground pipes for use in space and process **cooling**
- Therefore, individual buildings **do** not need split systems, chillers and/or **cooling** towers.
- But they need heat exchanger and fan coil units or AHUs

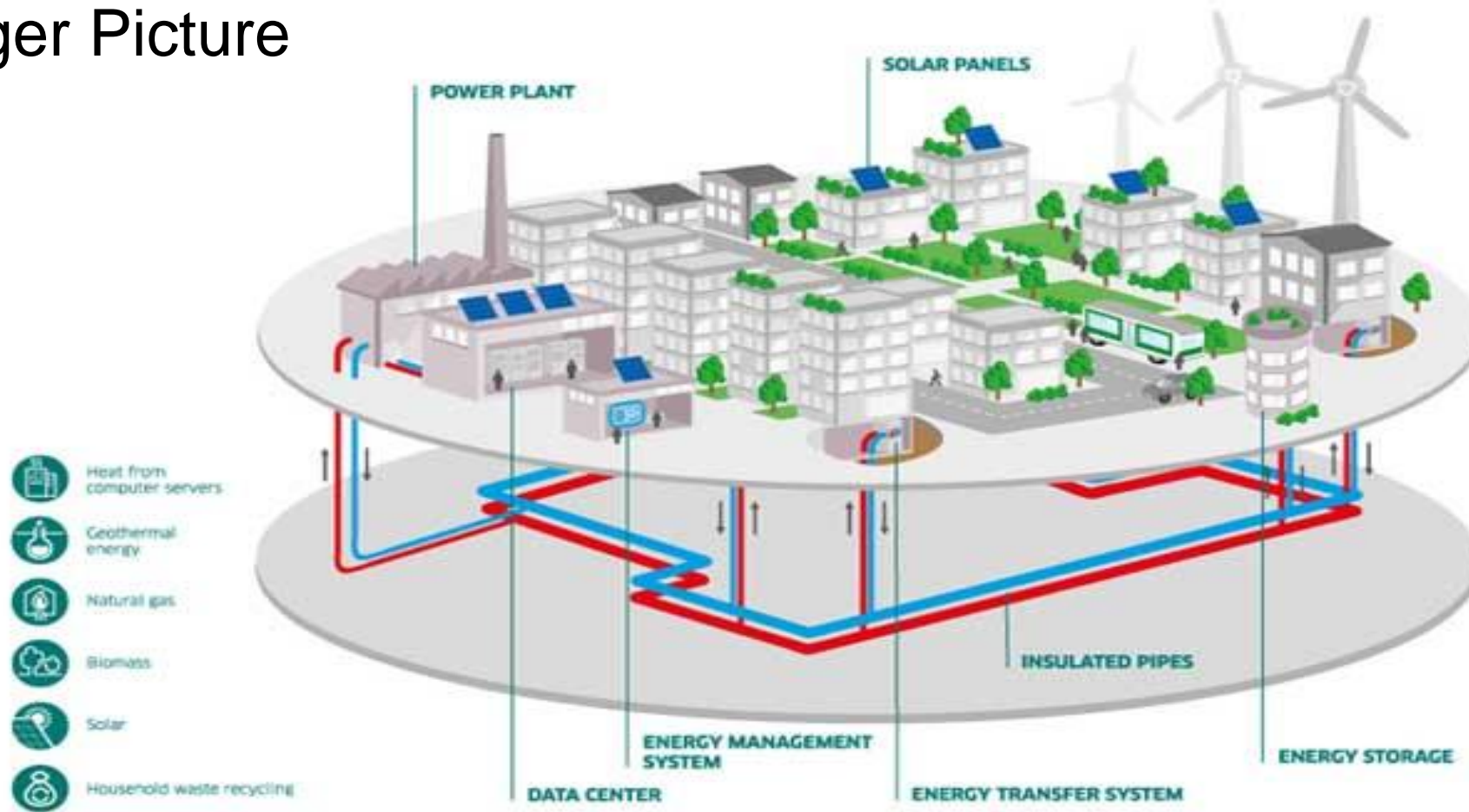
Benefits

- Eliminate Chillers, cooling towers, pumps and control systems
- Creates more space in the building
- Saves electricity ie. Reduce carbon
- Reduce emissions (CO₂)
- Saves Water
- Operational cost ie. Maintenance

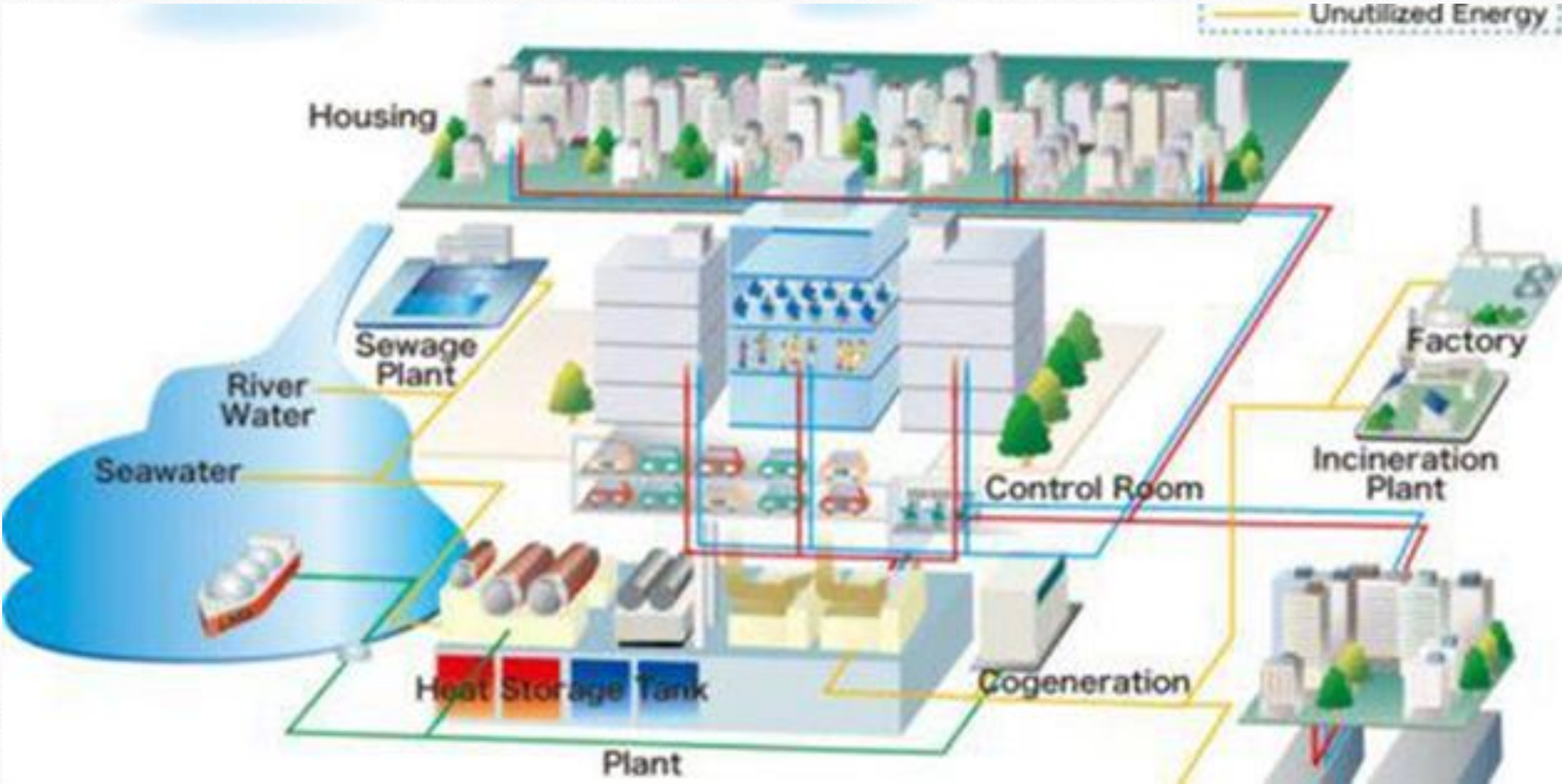
Typical Illustration



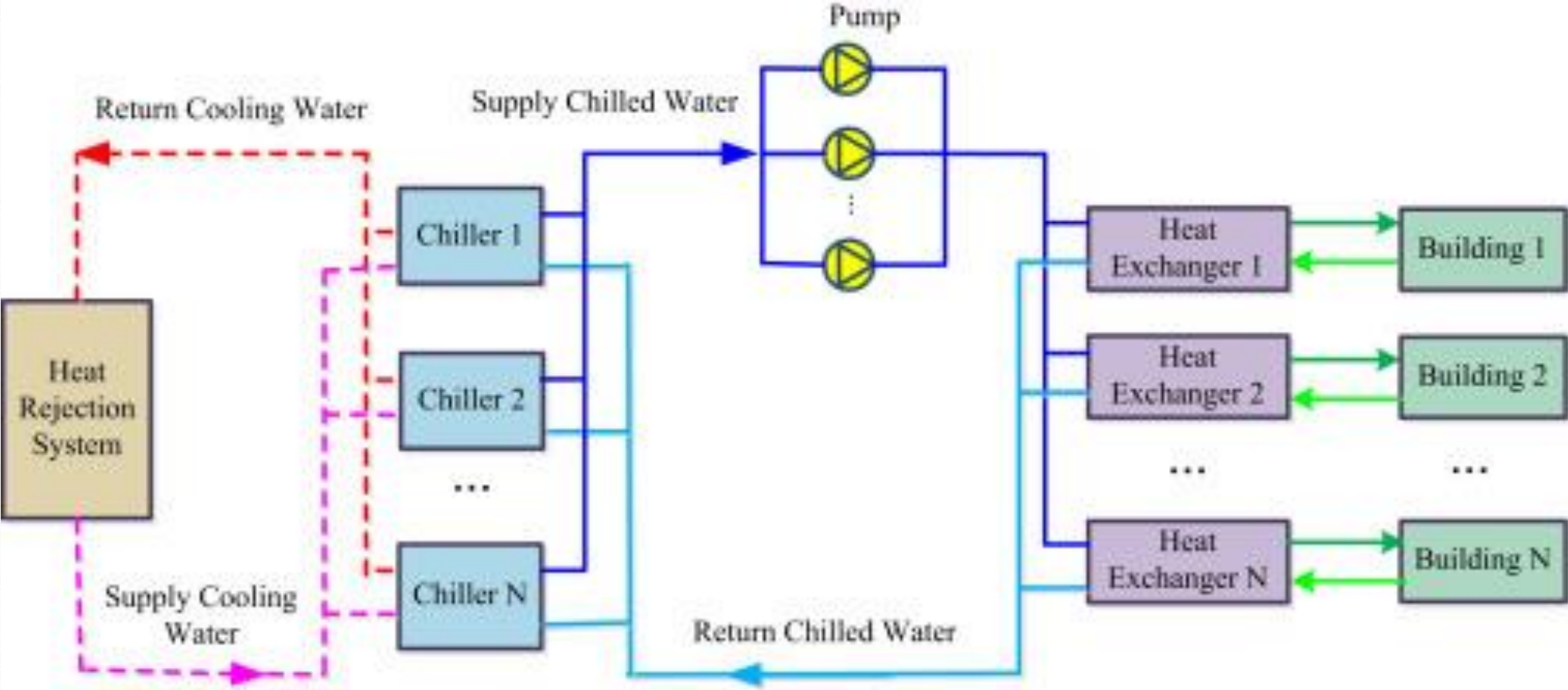
Bigger Picture



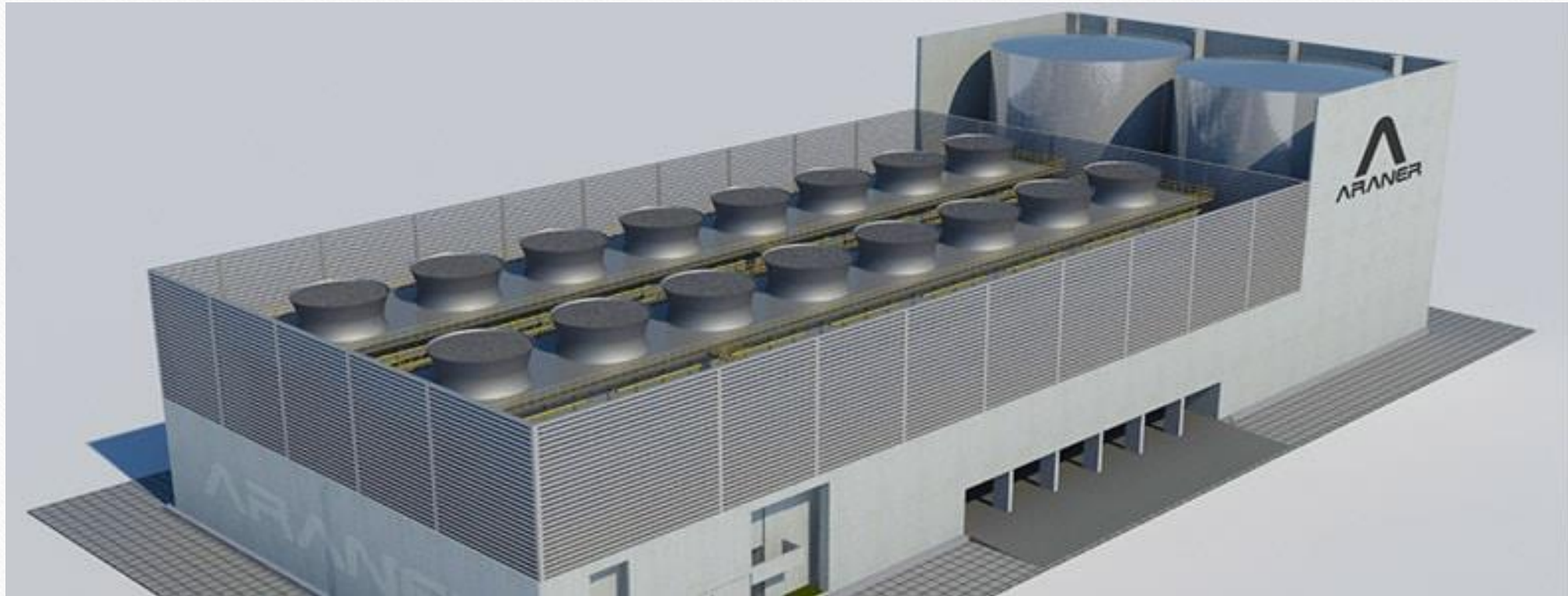
Cogeneration – Beyond District Cooling



Basic System Schematic



Typical Cooling Plant



Inside the District Cooling Plant



Innovation in Engineering for Sustainable Low Carbon Cities



Thank
You