Utilities – water / power / gas

- **Energy surveys in buildings**

  Monitoring room temperatures, outside temperatures, water temperature of central heating systems, etc.

- **Solar Design / Low Energy Houses**

  Monitoring the performance of passive solar design low energy houses. Measurement of solar gain in council houses.

- **Driving rain**

  Monitoring the effect of driving rainfall on buildings.

- **Energy monitoring in large companies**

  Measuring energy use/power consumption in a variety of company sites around the county (offices, retail outlets, etc.) with a view to conserving energy.

- **Performance of heat recovery systems**

  Recording temperature in paper mills to assess the scope for , or performance of, heat recovery systems.

- **Electricity consumption of pumps**

  Monitoring electricity consumption of pumping stations, with a view to maximising pumping during off-peak tariff periods.

- **Gas flow**

  Logging gas flow and pressure in a distribution network, using pressure transducers.

- **Monitoring radiation**

  Monitoring background radiation in the environment in the vicinity of a nuclear reactor. Radiation is measured with a Geiger counter which is interfaced to a pulse-counting Squirrel. Monitoring radiation levels in various areas around nuclear power stations.

Utilities – water / power / gas

- **Nuclear power stations cooling water**

  Monitoring the temperature of cooling water effluent from a nuclear power station and the effect on marine life.

- **Dissolved oxygen in sewage plant**

  Monitoring levels of dissolved oxygen in sewage plant.

- **Sewage flow and temperature**

  Logging output from flow meters and colorimeters at sewage works.

- **Hydrogen sulphide levels**

  Measuring hydrogen sulphide levels in sewage treatment works.
  Logging water levels in sewers.

- **Flow levels of water and sewage**

  Monitoring flow levels of water and sewage in pipes using flow meters.

- **Sewage levels in pumps**

  Measuring output from ultrasonic probes to monitor sewage levels in pumps, containers, etc.

- **Water quality**

  Assessing water quality by monitoring such parameters as pH, chloride levels, water hardness, etc.

- **Monitoring river water**

  pH, dissolved oxygen and temperatures at different depths and distances up an estuary.

- **Life cycle of flies in sewage filters**

  Recording temperature in and around sewage filters to determine the effect of temperature on life cycle of flies in the filter.

Utilities – water / power / gas

- **Monitoring trade effluents**

  Monitoring pH and temperature of trade effluents before they enter the sewage system, in order to ensure that agreed limits are adhered to.

- **Rainfall monitoring**

  Long-term monitoring of rainfall with tipping bucket rain-gauge at various sited for planning purposes.

- **Efficiency of sewage treatment works**

  Monitoring flows in various areas and processes of sewage treatment works in order to maximise efficiency.

- **Electricity consumption of pumps**

  Monitoring the electricity consumption of pumping stations, with a view to maximising pumping during off-peak tariff periods.