

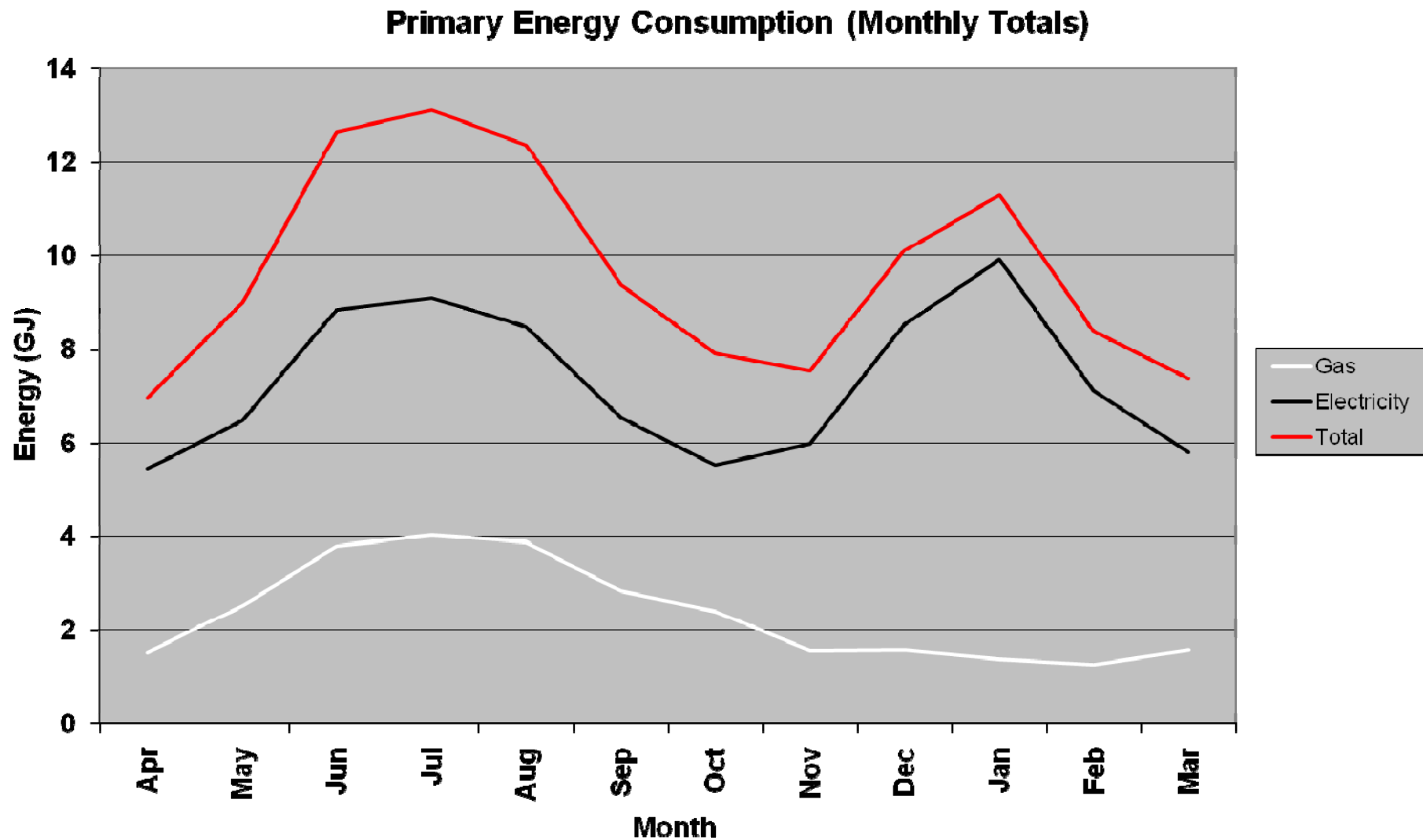
Intelligent Metering and Monitoring of Energy Data

Lachlan Mudge, Sustainable Energy Centre, ISST, UniSA

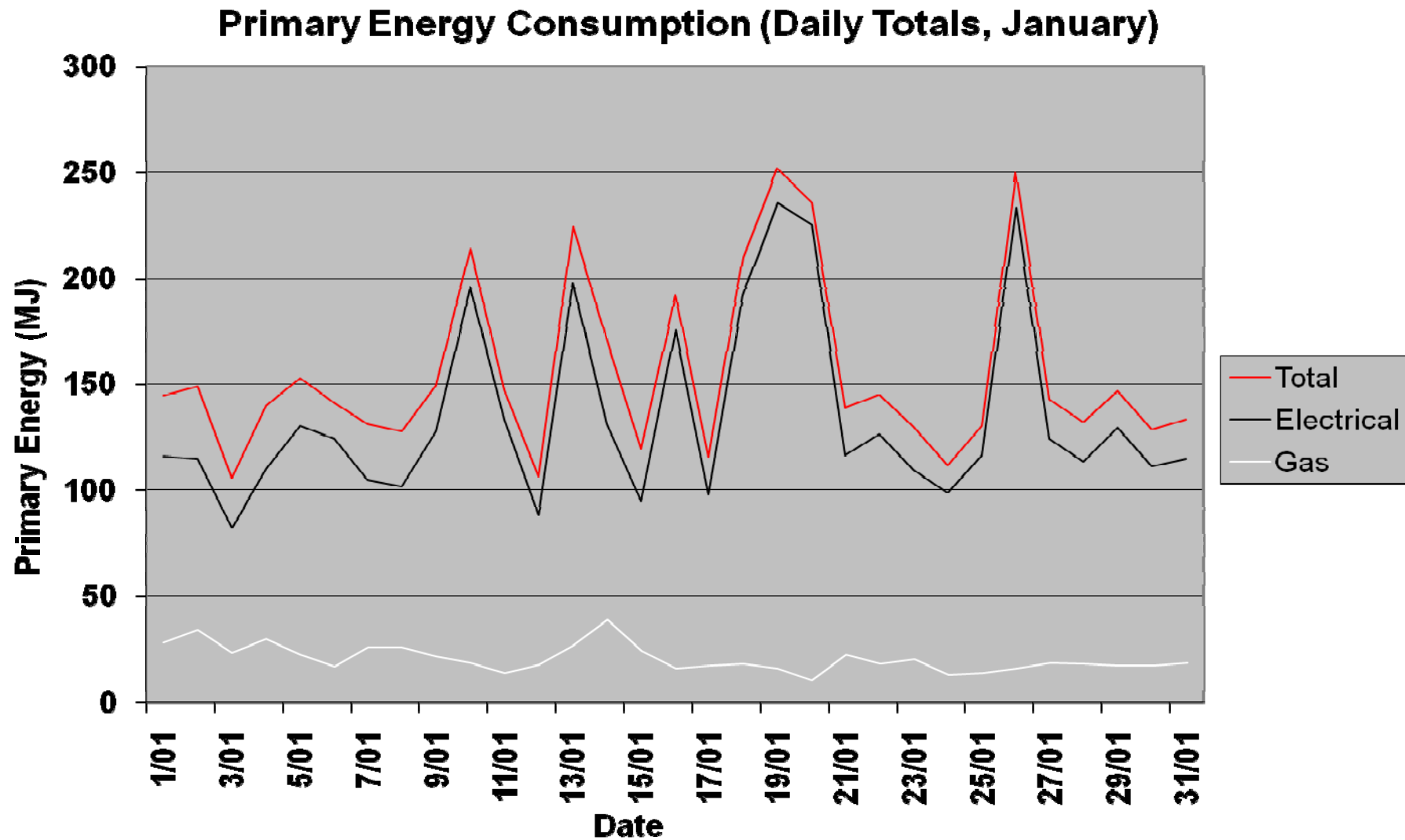
' OVERVIEW '

- **WHY** monitor energy use?
- **WHEN** to take measurements?
- **WHAT** can be monitored?
- **HOW** can readings be recorded?
- **WHERE** can equipment be located?
- **WHO** can collect data?

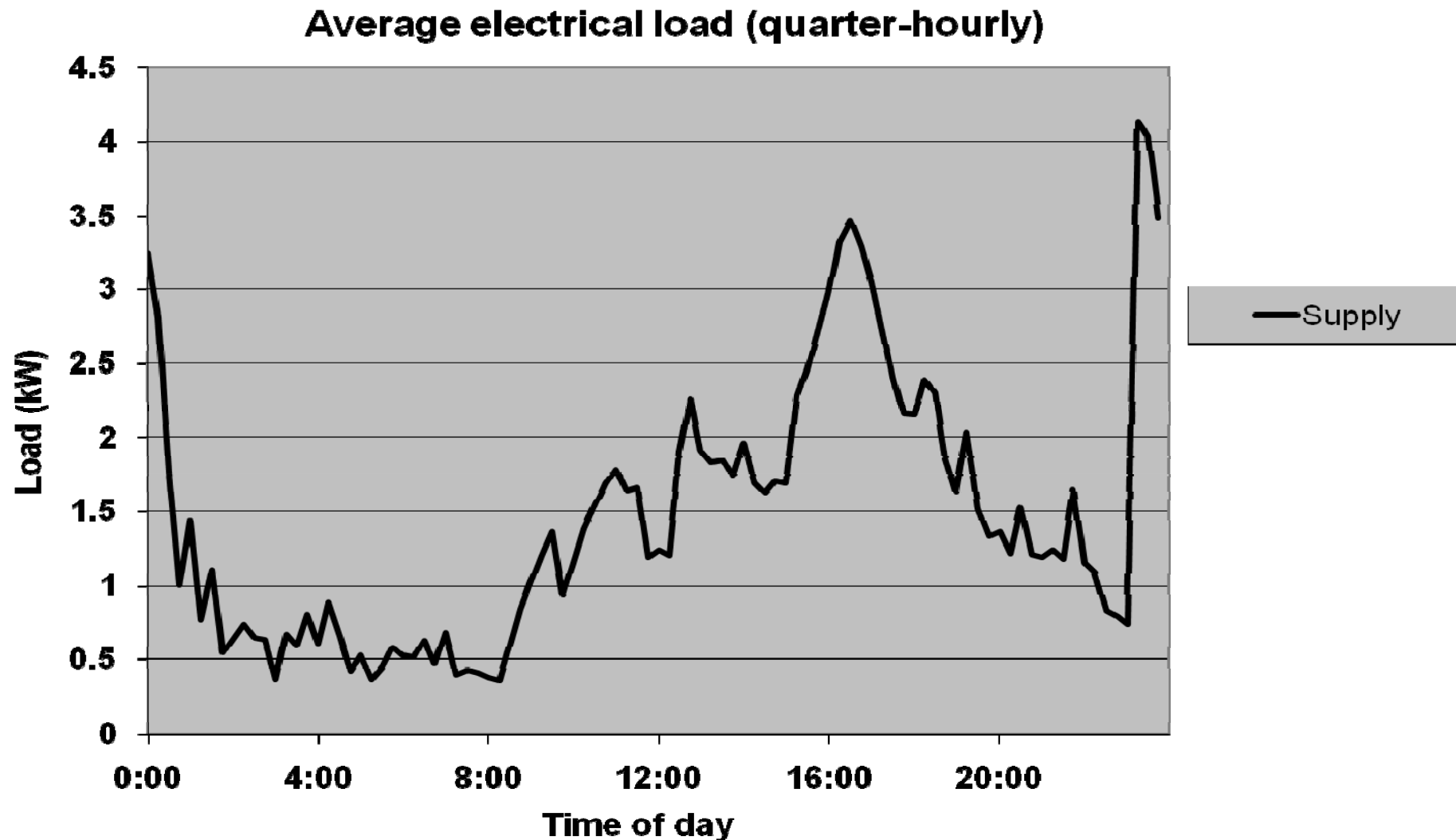
- Data Collection
 - Indirectly.....*e.g.* Householder, Utility



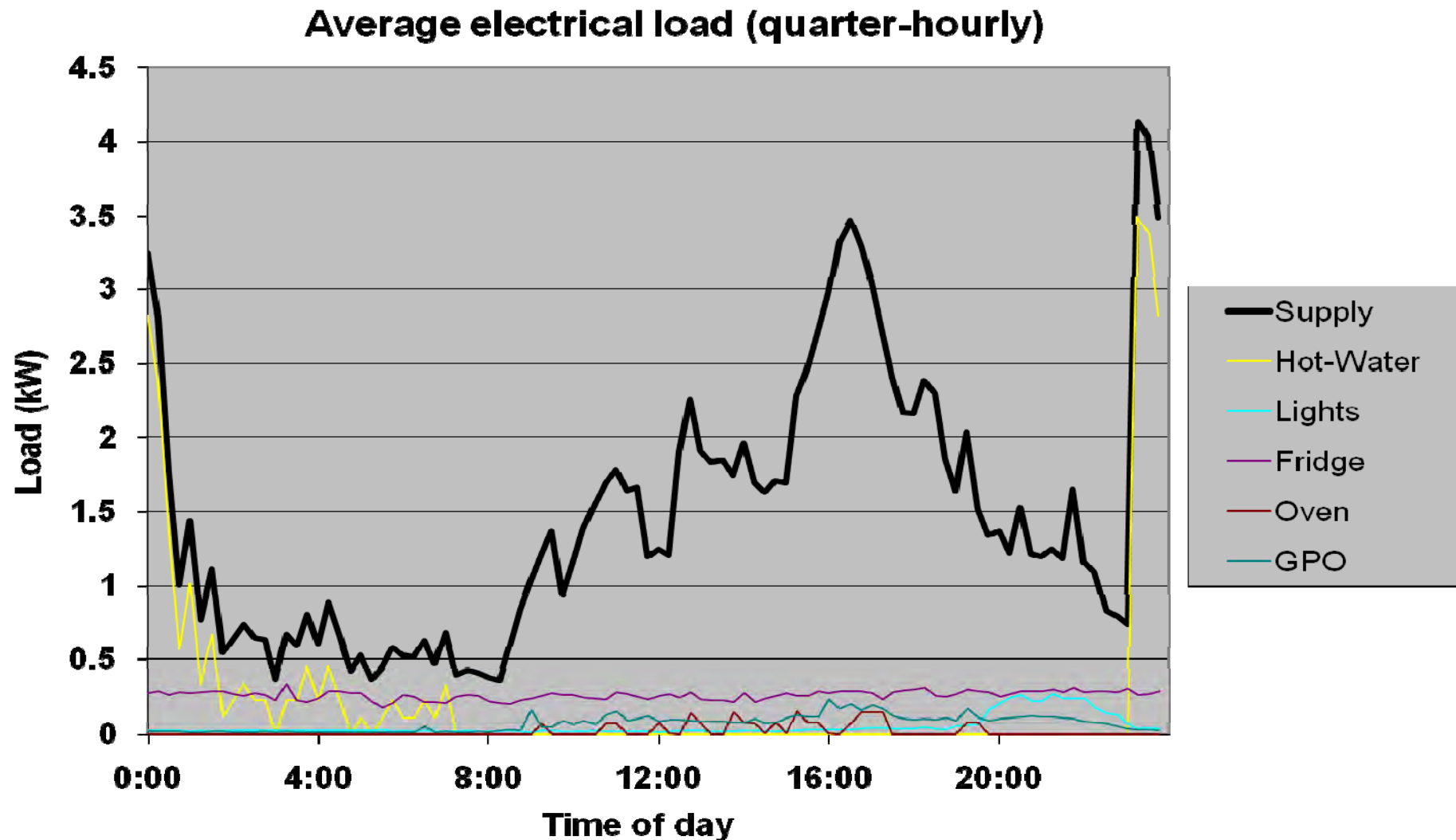
- Data Collection
 - Directly.....*e.g.* Monitoring



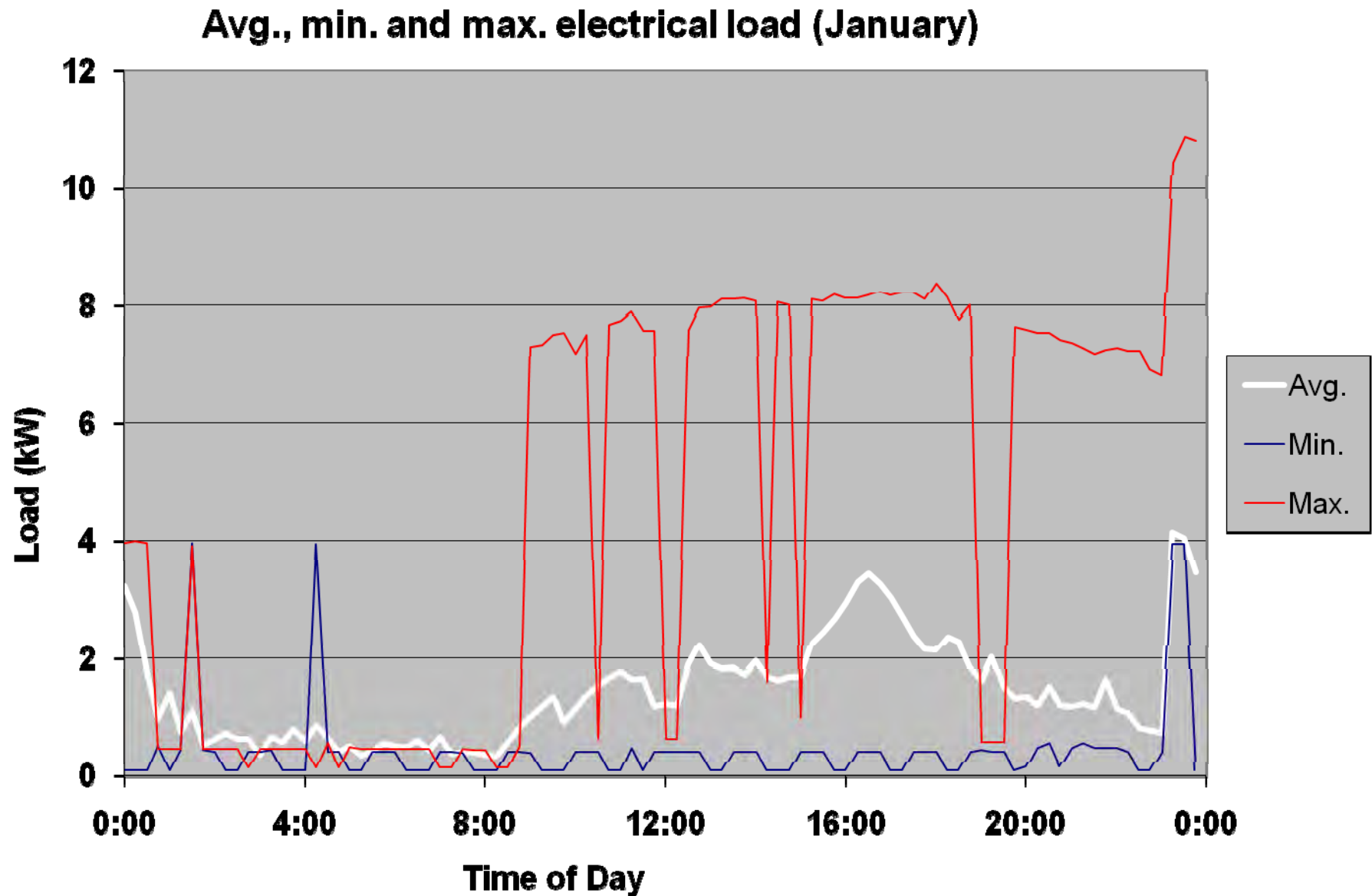
- Interval (e.g. 15-minute) energy monitoring
 - ‘Basic Monitoring’ at Lochiel Park



- Interval energy monitoring (e.g. 15-minute)
 - ‘Detailed Monitoring’ at Lochiel Park

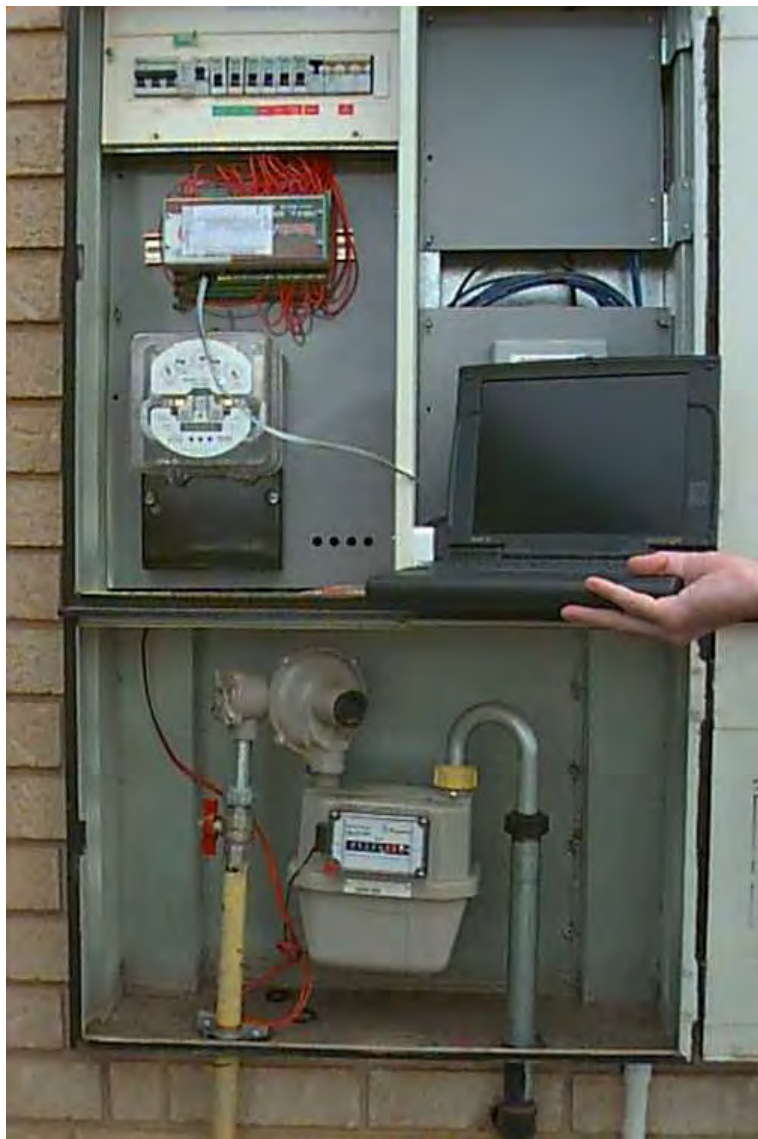


- Why monitor continuously over a long period?



- Electrical Billing Meters
 - FLEXIBLE, CHEAP, ROBUST, ACCURATE

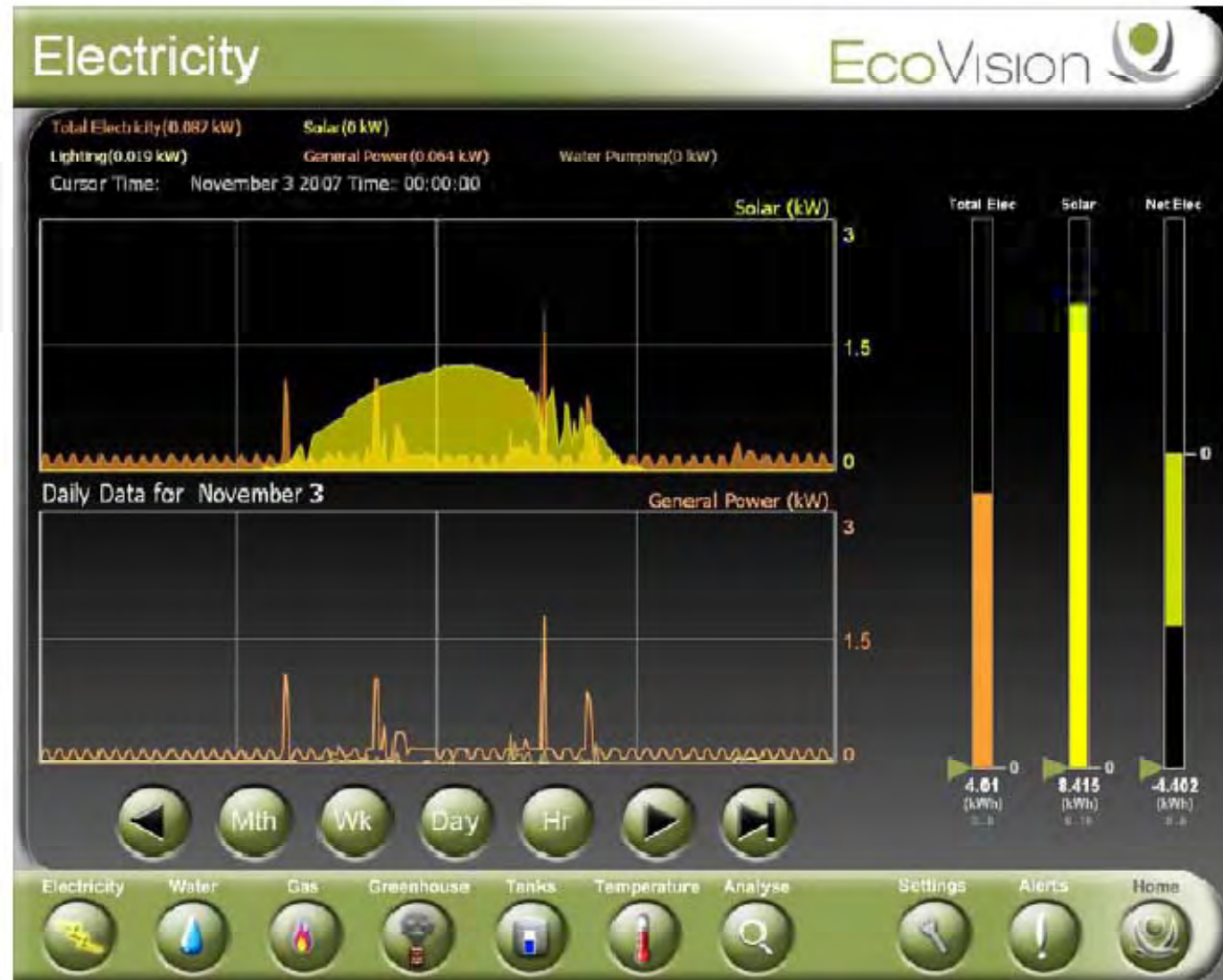




- Other available monitoring technology utilising PC based touch screens



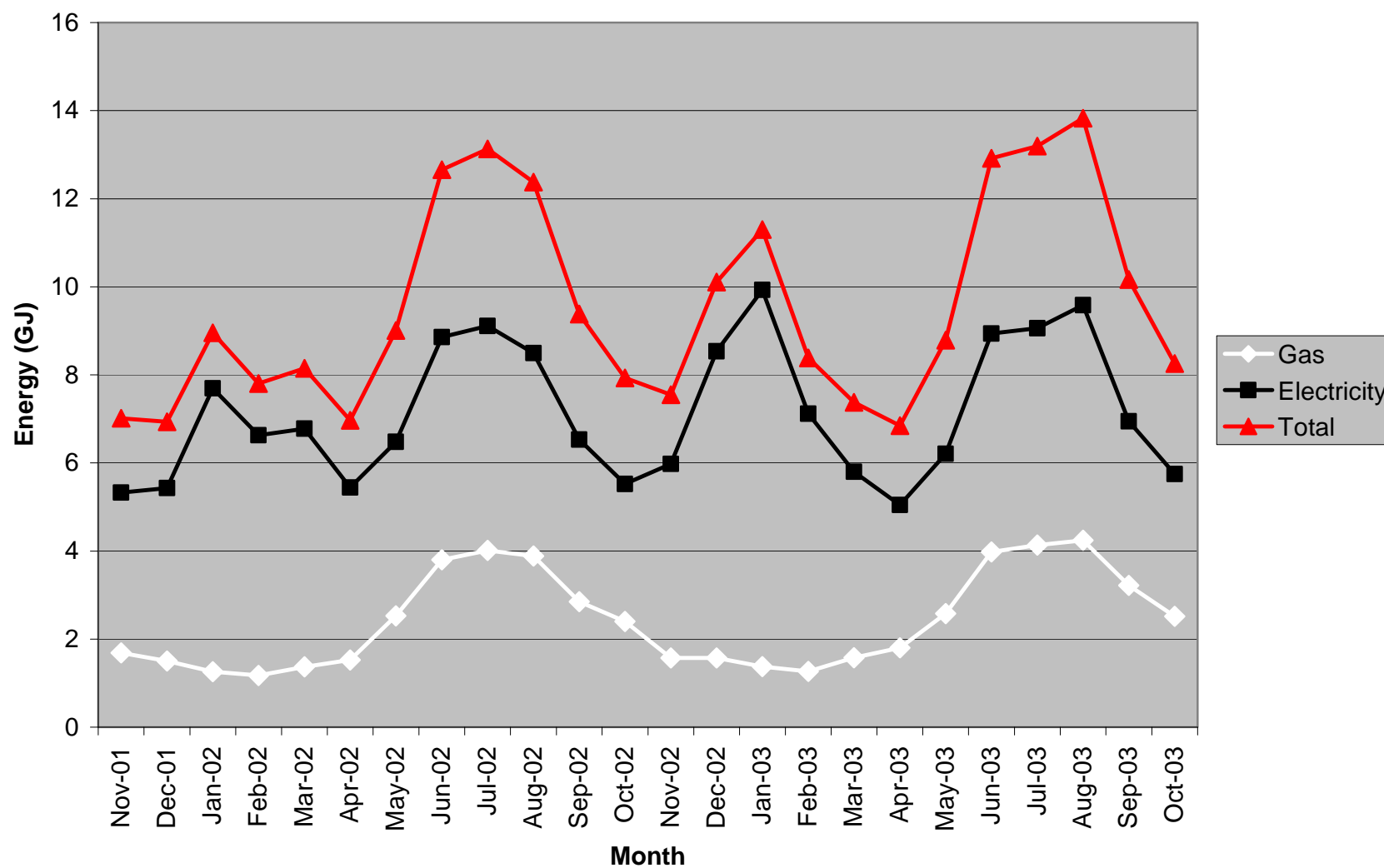
- Advanced monitoring technology
 - Ecovision (to be used at Lochiel Park)



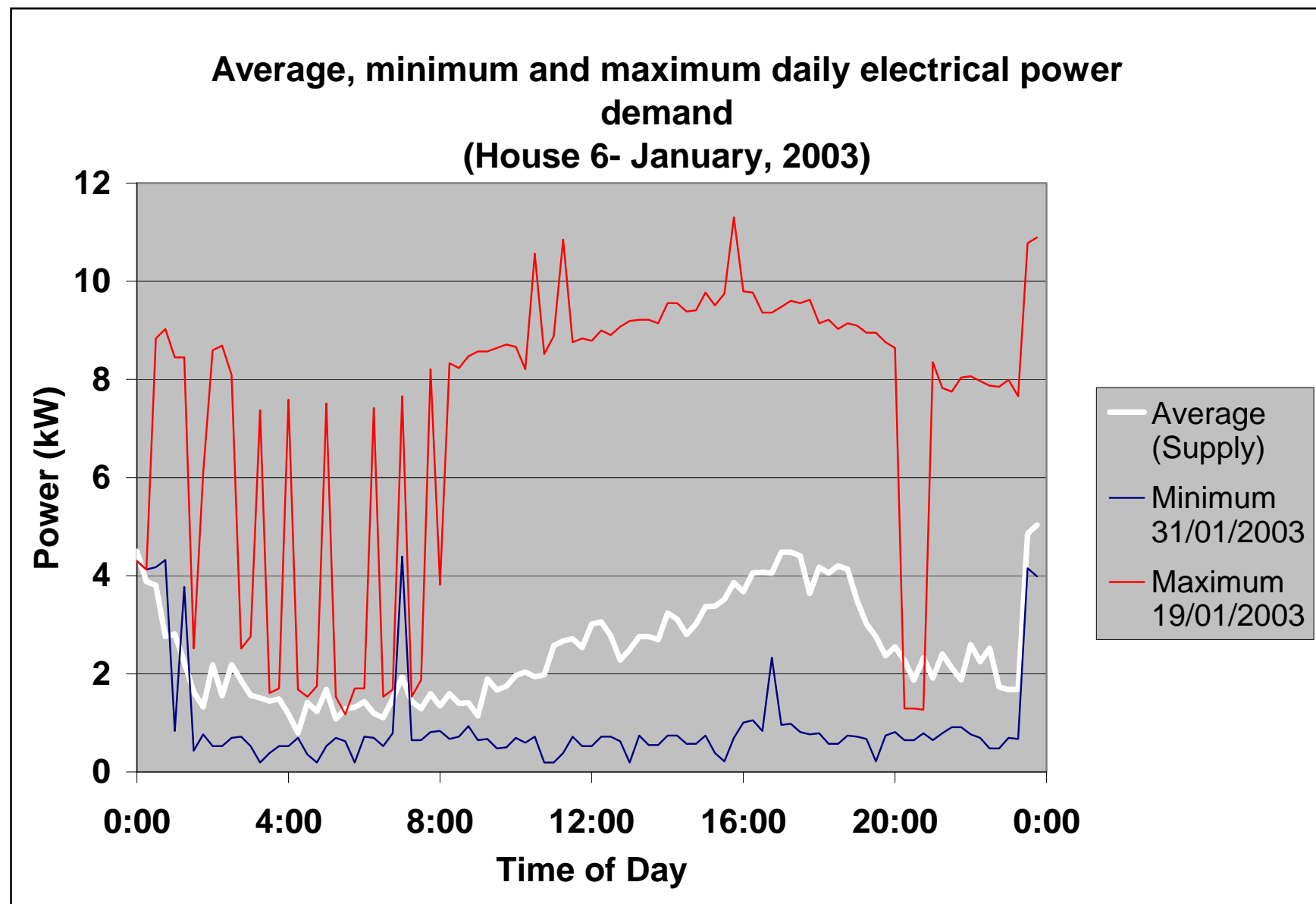
- Other available monitoring technology utilising PC based touch screens



Network primary energy consumption Nov. 2001 - Oct. 2003

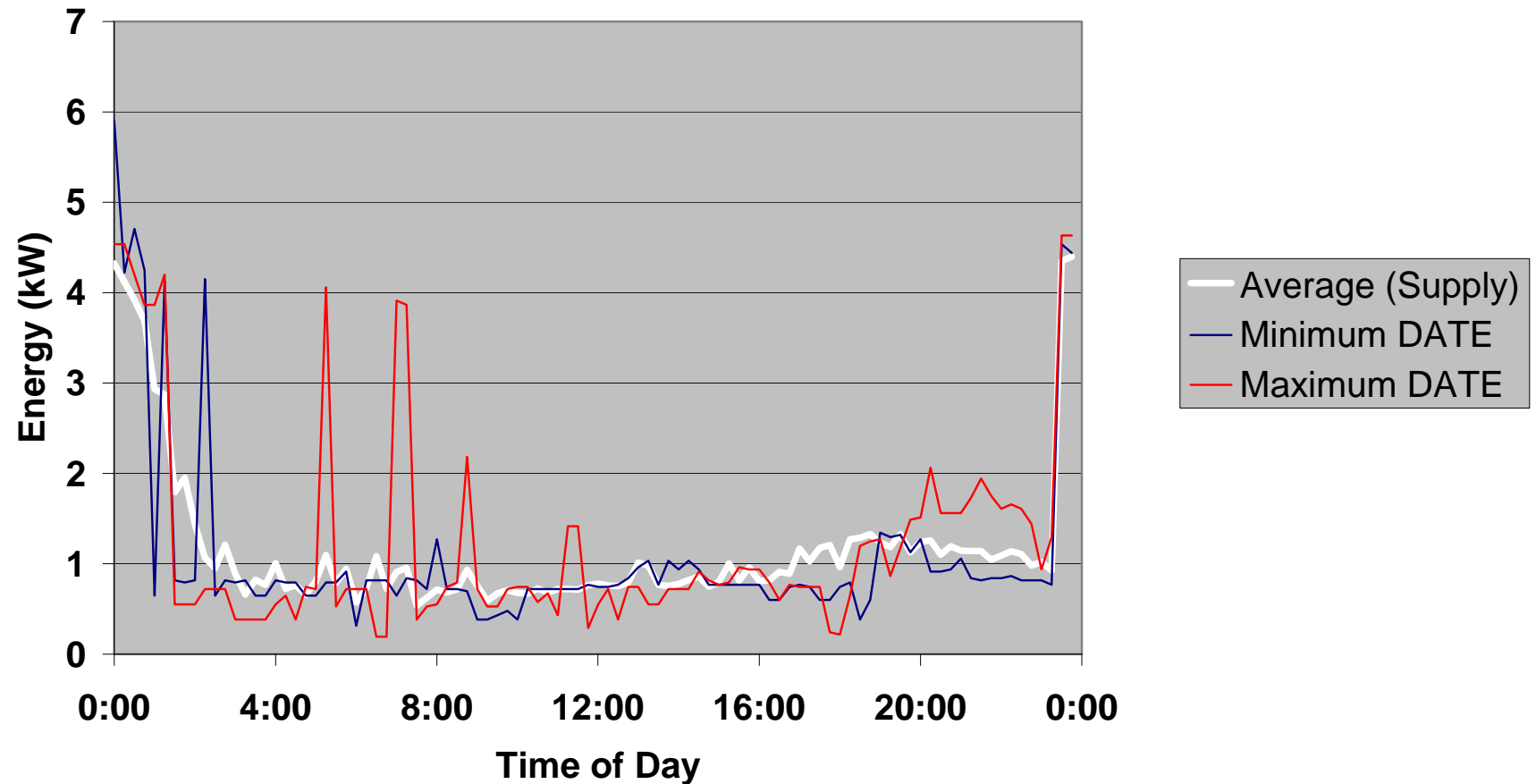


Summer Peak



Minimum Month

**Average, minimum and maximum daily electrical energy
consumption
(House 6- April, 2003)**



Winter Peak

**Average, minimum and maximum daily electrical energy
consumption
(House 6- June, 2003)**

