

After We Have Conquered Network Standby, Then What?

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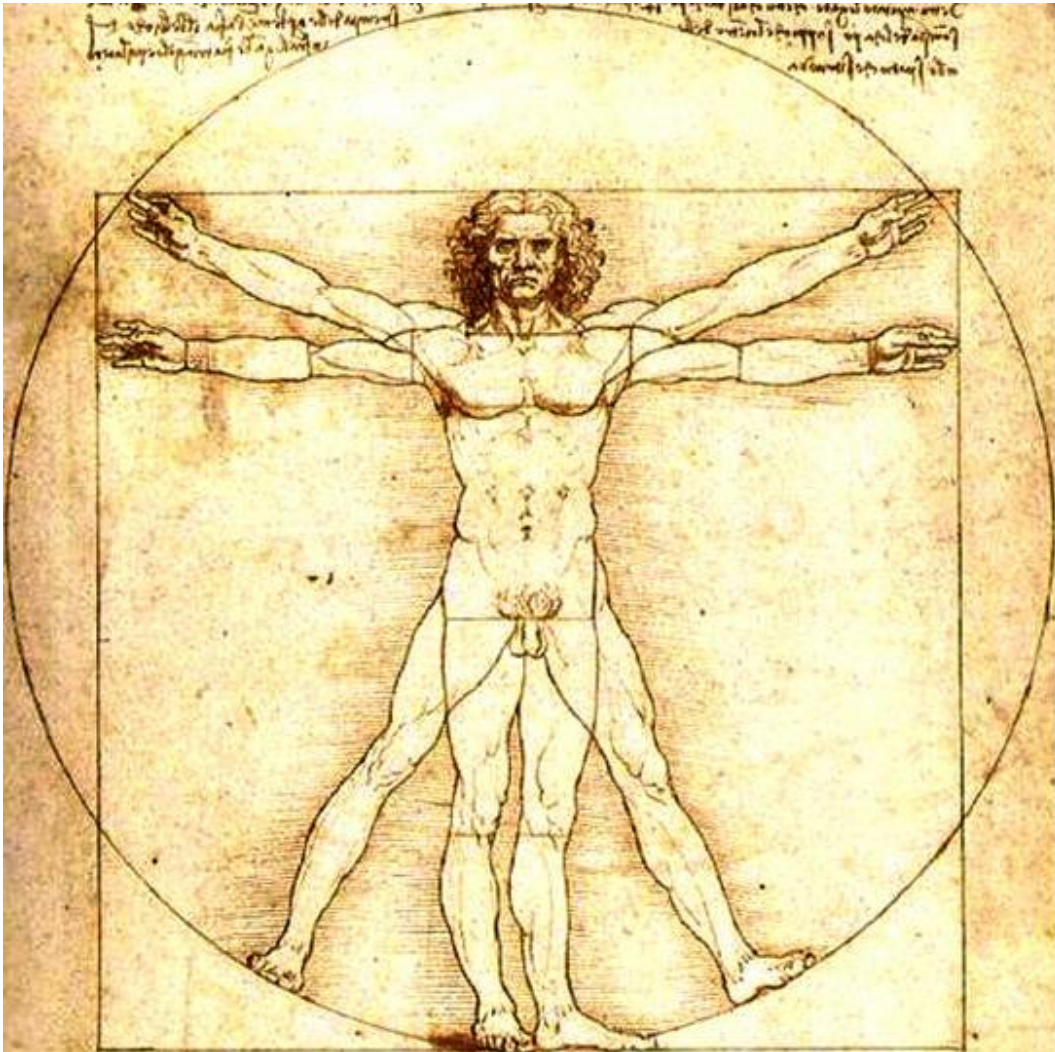
Options

- Declare victory and go home
- Do something else
- Reflect

The (really) old definition of standby:

“Energy used by a device while switched off or not performing its principal function”

If Humans Were Electronic Products

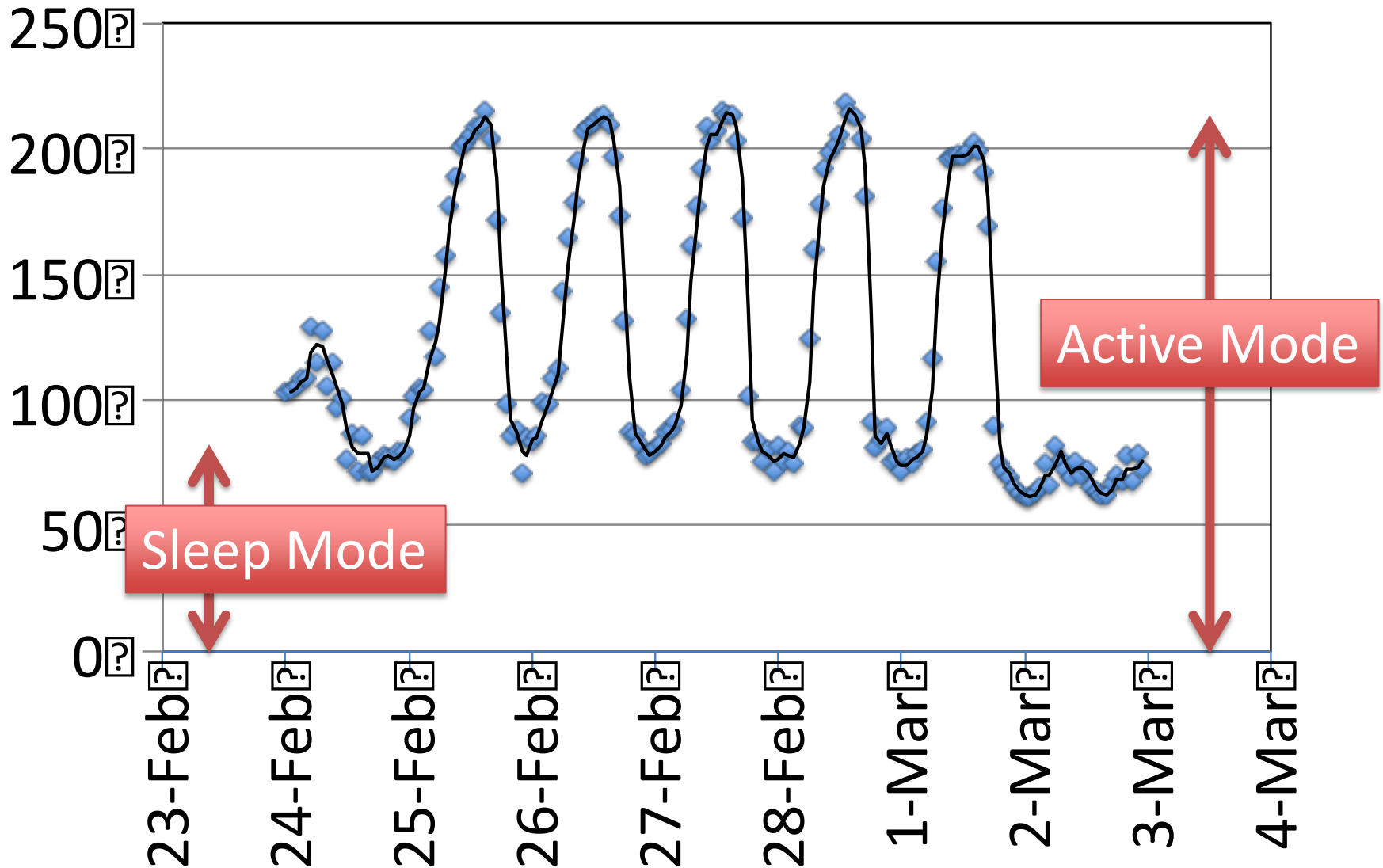


Active 3

Idle 1

Sleep 0.9

Electricity Use in Alan Meier's and Bruce Nordman's Office (in kW)



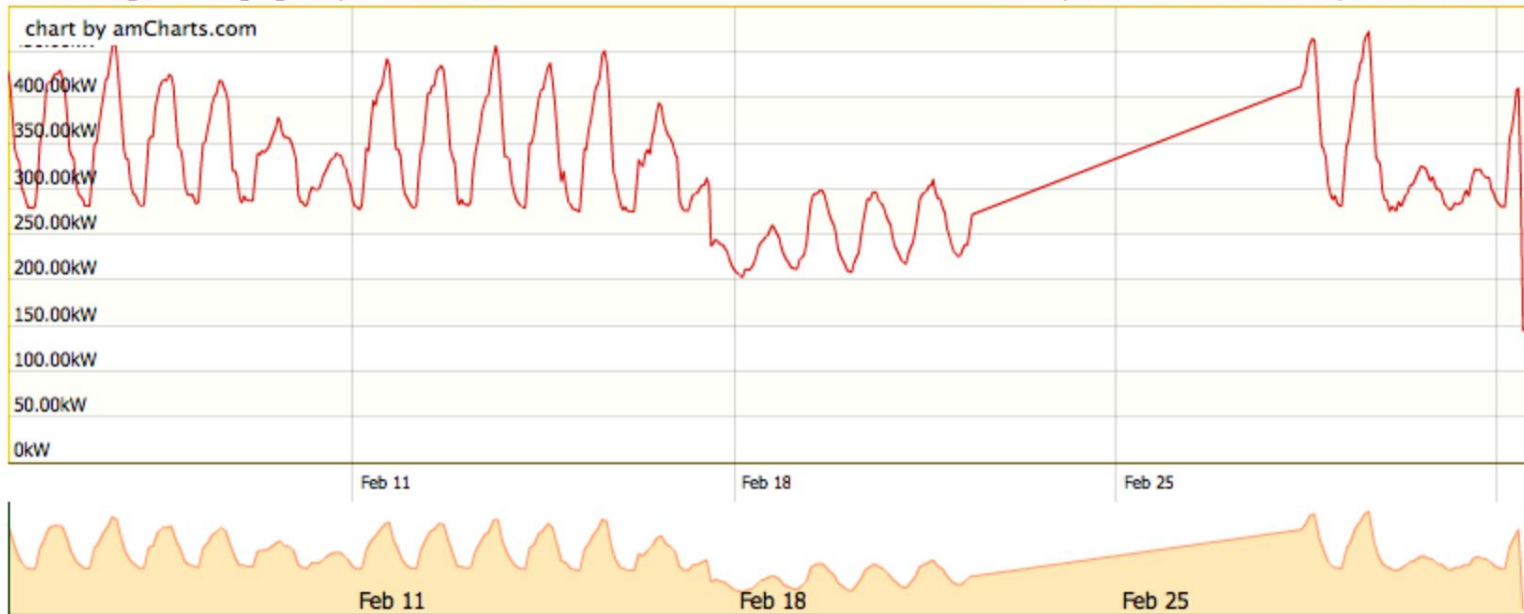
Another Office Building

Power consumption for EBU3B Total Power Usage

From: Feb, 02, 2013 12:00:00 AM **Resolution:** Every hour (averaged)
To: Mar, 07, 2013 12:00:00 AM **Timespan:** 33 days

● 1st Average kW in highlighted period: 320.29 kW

Feb 04, 2013 4:00:00 PM - Mar 04, 2013 1:00:00 PM



Zoom in this graph (for better data resolution, generate a new graph with a smaller time duration): 10D 1M YTD MAX



031 Lind Hall



Building Information

East Bank District
207 Church St. SE
Year Built: 1912
Gross Square Footage: 96,312
Building Type: Classrooms &
Administration

Real Time Energy Data

TOTAL ENERGY DEMAND

2.62 Btu/(hr*ft²)

Electrical Demand

74 KW

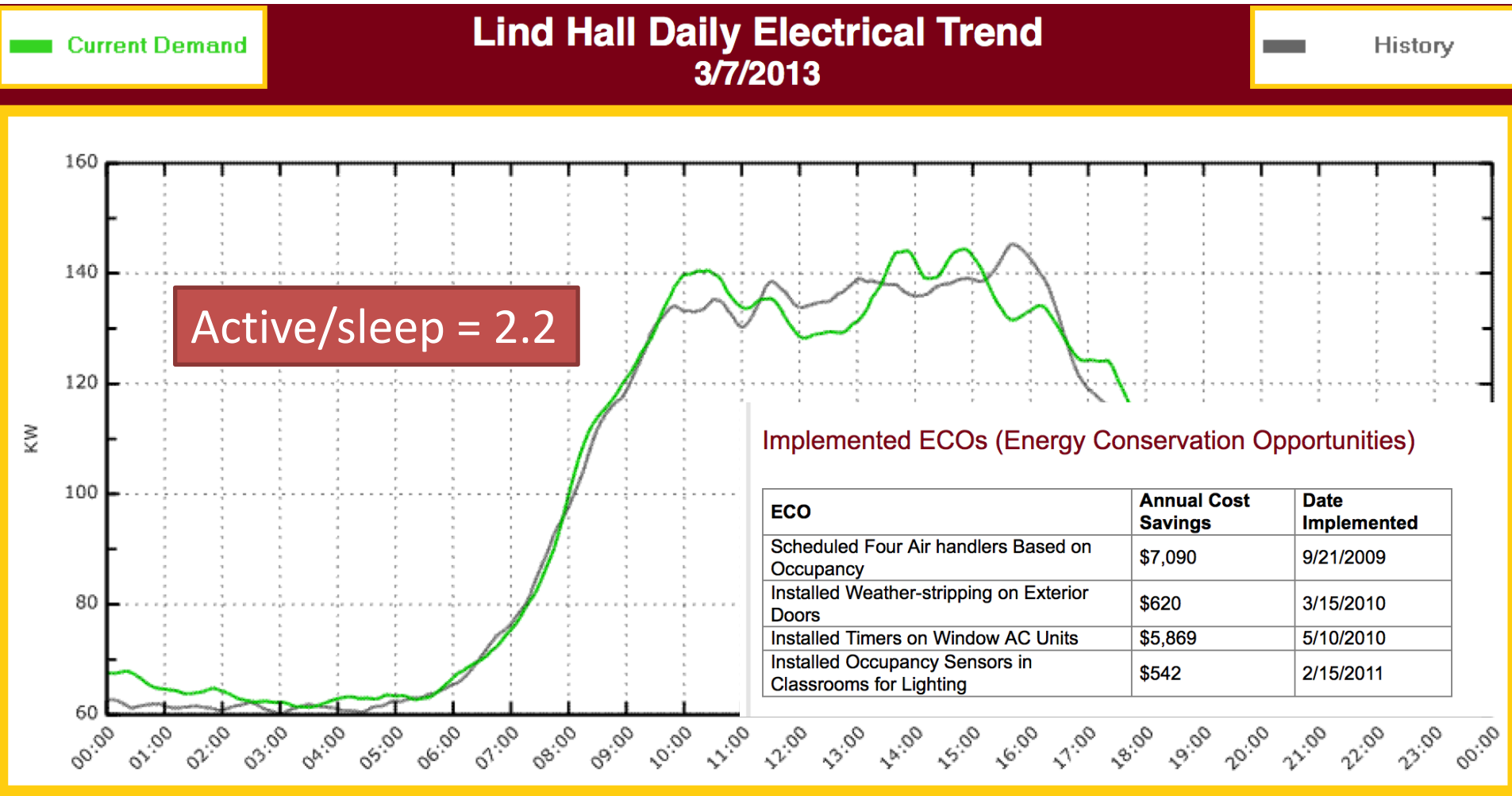
Steam Demand

0 Lbs/Hr

Chilled Water Demand

0 Tons

Lind Hall (Univ. of Minnesota)



Harvard University Dormitory



Total Electricity Consumption

Kilowatt-hours of electricity consumed today



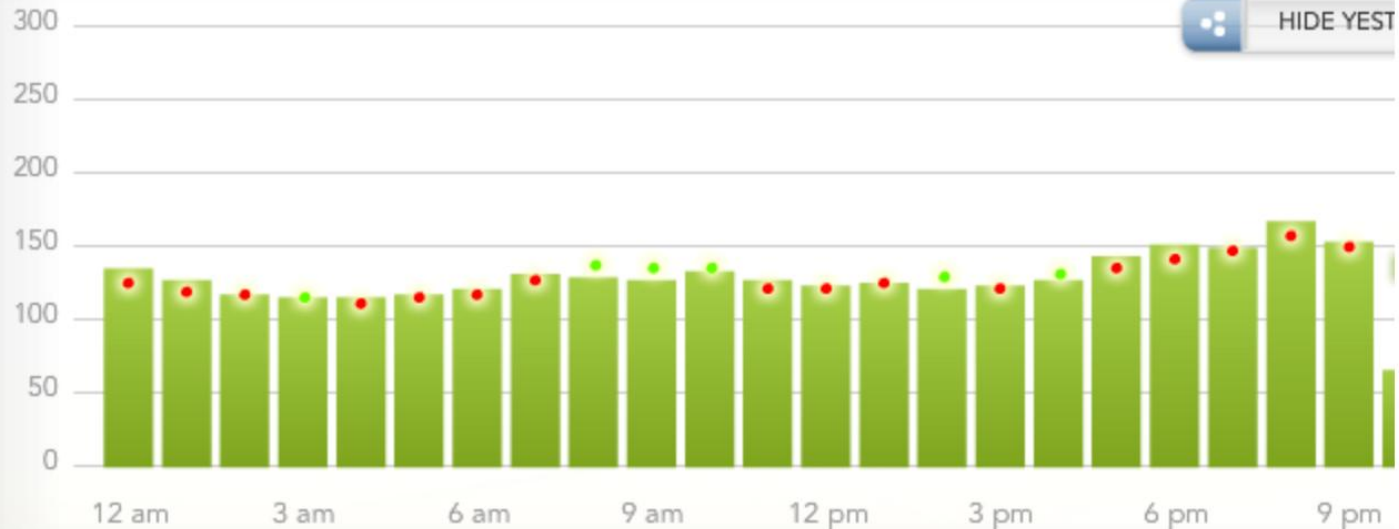
HARVARD
Campus S
HARVARD UNIVE

5 Cowperthwaite

276 occupants

2,967

Kilowatt-hours



Dialing Down Buildings

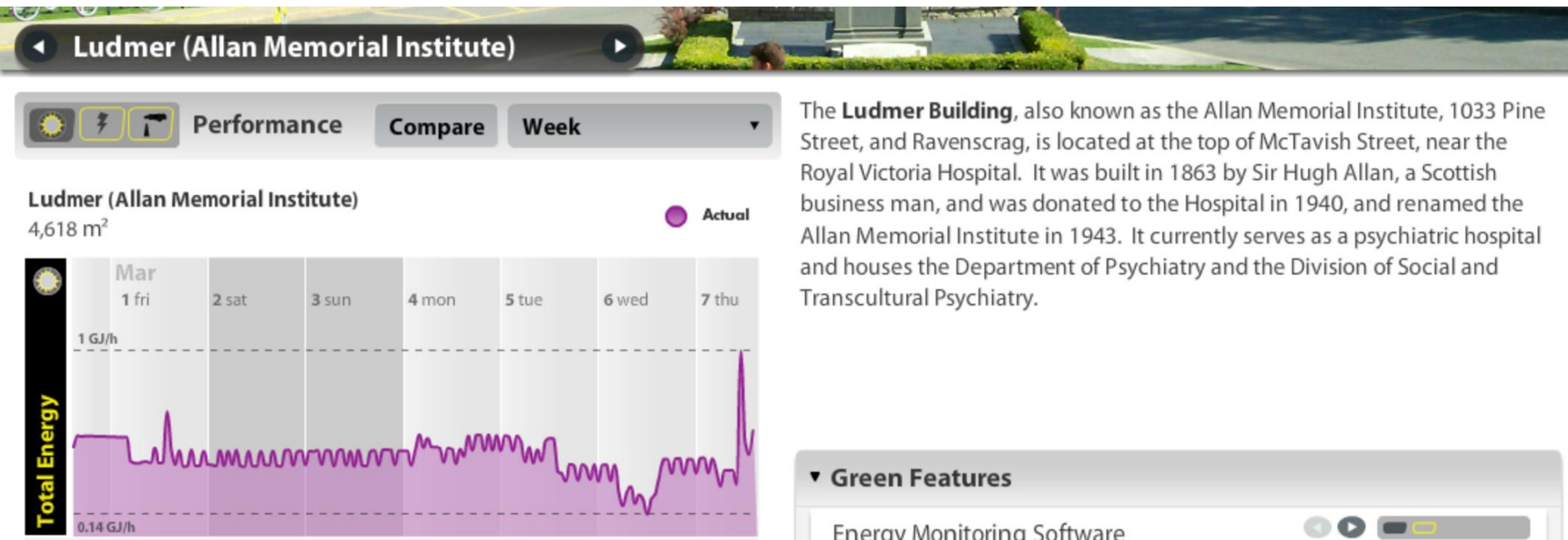
How To Accomplish?

1. Power-scale electronic equipment
2. Use networks to power-scale other building services

If this is the next big thing to save energy,
then what actions should we take?

- New networks?
- New logic?
- New concepts of “sleep”?

A Canadian Research Facility



The **Ludmer Building**, also known as the Allan Memorial Institute, 1033 Pine Street, and Ravenscrag, is located at the top of McTavish Street, near the Royal Victoria Hospital. It was built in 1863 by Sir Hugh Allan, a Scottish business man, and was donated to the Hospital in 1940, and renamed the Allan Memorial Institute in 1943. It currently serves as a psychiatric hospital and houses the Department of Psychiatry and the Division of Social and Transcultural Psychiatry.