

*An overview of the Energy Efficient
HPC Working Group:
2010 Best Practices Workshop on Power
Monitoring*

Prepared by Natalie Bates, EE HPC WG

With help from:

Wu Feng, Dale Sartor, William Tschudi, Otto VanGeet,
Anna Maria Bailey, Mariann Silviera, John Shalf, Erich
Strohmaier, and the support of the EE HPC WG
membership

Early in this decade

- In HPC, no one cares about power & cooling, and no one ever will



Awareness

- Power/cooling cost grabs attention
- Green movements originate
- Green marketing
- Green IT companies

Action (Today)

- Ours to help define
- Speak out to help move the technology

Energy Efficient HPC Working Group

EE HPC WG

- Drive energy conservation measures and energy efficient design in HPC
- Demonstrate leadership in energy efficiency as in computing performance
- Forum for sharing of information (peer-to-peer exchange) and collective action

<http://eehpcwg.lbl.gov>



EE HPC WG Priorities

HPC Energy Efficiency:

- Design guidelines, best practices, case studies, lessons learned and specifications
- Metrics and benchmarking
- Technical programs for key Conferences

<http://eehpcwg.lbl.gov>



EE HPC WG Recent Highlights

- Host Power & Cooling Roadmap Industry Webinar
- Promote and provide training for DCPro Suite
- Co-author Energy Re-use Metric with The Green Grid
- Collaborate with Top500, Green500, The Green Grid on standardizing energy compute metric(s)
- Present at SC'09, ISC, IGCC'10, GovEnergy
- Workshop and BoF planned for SC'10



<http://eehpcwg.lbl.gov>

