



Workshop Energy for Sustainable Science

Energy management for large-scale research infrastructures
13–14 October 2011 Lund, Sweden

Summary of the 1st Workshop

Three Partners

- Three organisations within research infrastructure in Europe had individually planned an energy workshop.
- Varying agendas
 - Marketing solutions
 - Finding collaborations
 - Understanding challenges



EUROPEAN
SPALLATION
SOURCE



Three Main Challenges

- Sustainability - Affects funding, acceptance
- Power quality - Affects operations
- Price volatility - Affects costs

The Sustainability Challenge: Cost/Benefit Balance of Science

Value of Science

- Knowledge
- Applications
- Externalities, e.g. tech clusters



Cost of Science

- Investment
- Operations
- Externalities, e.g. environmental impact

Energy for Sustainable Science Workshops



Workshop Energy for Sustainable Science

**Beatrix Vierkorn-Rudolph,
Federal Ministry of Education
and Research, Germany:**
“Increasing energy efficiency is a
major goal”

**Catherine Césarsky, Atomic
Energy and Alternative Energies
Commission:**

“The Research Infrastructures are
very appropriate tools for addressing
scientific issues to confront global
Climate and Energy challenges



Opportunities

- RIs are at the centre of science-driven innovation. RIs exist to enable research and innovation.
- Open exchange of best practices, more cooperation in joint projects and training offer mutual benefit, and benefit for society in general.
- RIs offer an opportunity for government, especially the EU, to develop energy management.
- RIs can train researchers, operators and managers to face the upcoming energy challenges.
- Several RIs are already well underway and can serve as examples.

Testbed

Hotbed

Incubator

Conclusions

- Challenges are real, vital, not specific to RI
- Research output is our most important contribution
- Because of our dedication to research, innovation and openness, RIs have a unique position to contribute solutions.



A Suggested Agenda

- Foster open exchange of best practices in our community.
- Encourage more cooperation in joint projects and training offer mutual benefit.
- Spread our science and science-driven innovation that addresses energy challenges.
- Together, offer an opportunity for government, especially the EU, to develop energy management.
- Jointly develop programs to train researchers, operators and managers to face the upcoming energy challenges.