Energy: Efficiency and Monitoring

Measurement, Analysis, Improvement, Validation
Fraunhofer IISB has demonstrated on a mid-sized plant a comprehensive energy monitoring system. This comprises mobile energy measurement, power distribution and efficiency analysis. The system utilizes the SIEMENS powermanager and additional mobile data acquisition has been performed. Fraunhofer IISB gathered data on energy distribution and consumption – covering thermal and electrical energy – and the resulting data has been analyzed in detail; various areas for optimization have been identified and improvements implemented. Improvements will be continuously evaluated.

For cooperation we offer detailed expertise in analyzing energy distribution load profiles and consumption in existing buildings to improve the total energy and infrastructure efficiency. Monitoring and analysis can go down to the machinery level.

**Fraunhofer Institute for Integrated Systems and Device Technology IISB**

Schottkystrasse 10
91058 Erlangen, Germany

Contact
Dr. Richard Öchsner
Tel.: +49 9131 761-116
Richard.oehsner@iisb.fraunhofer.de

Heinz Schmid
Tel.: +49 9131 761-137
Heinz.schmid@iisb.fraunhofer.de

www.energy-seeds.org
www.iisb.fraunhofer.de

---

**Services and Solutions**

- Monitoring of thermal power / energy and electrical power / energy consumption
- Analysis of energy supply load profiles and consumption on building or plant level
- Consultation for the implementation of energy monitoring systems inclusive measurement tools
- Support to improve energy efficiency and to reduce costs
- Optimizing system operation and resource efficiency based on monitoring

---

**Load profiles generated by energy monitoring system**

Mobile energy / power loggers (thermal and electrical) are used to acquire additional information about energy consumption or to verify measurements and improvements.