

# In Brief

■ California is a leader in developing climate-friendly technologies, and clean tech is the fastest-growing sector for venture capital investments. The combination of an environmentally far-sighted government, top universities, and an aggressive venture capital community, including companies such as Siemens that are financing start-ups, has triggered a boom in innovation. (p. 22)

■ China's dramatic economic growth is primarily fuelled by coal. In 2006 alone, 176 coal-fired power plants went on line — an average of one every two days. Thanks to new technologies from Siemens, however, power generation using coal is becoming increasingly efficient and sustainable — as shown by the Yuhuan plant, which achieves a world-record efficiency of 45 percent. (p. 19)

■ Siemens is developing 700-degree Celsius technology in order to further boost the efficiency of coal-fired power plants and thus cut CO<sub>2</sub> emissions. This higher steam temperature is expected to make it possible to achieve 50 percent efficiency. (p. 32)

■ Experts worldwide are working on concepts for generating power from coal without releasing CO<sub>2</sub> into the atmosphere. Siemens is investing in the IGCC process, which removes CO<sub>2</sub> before combustion, and flue-gas purification methods that separate CO<sub>2</sub> afterwards. Scientists based in Potsdam are studying how carbon dioxide can be sequestered underground and what happens to it there. (pp. 36, 40)

■ Buildings are responsible for around 40 percent of global energy consumption. Sophisticated energy-saving models and Siemens' high-efficiency building management systems can contribute to substantial savings in CO<sub>2</sub> emissions and energy. (p. 29)

■ Liquefied natural gas (LNG) is becoming a popular energy carrier. Siemens is establishing itself in this booming market with gigantic compressors and the world's largest electric motors, which will be used in the first all-electric LNG plant. (p. 46)

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## LINKS:

### Siemens Energy Sector:

[www.siemens.com/energy](http://www.siemens.com/energy)

### California Energy Commission:

[www.energy.ca.gov](http://www.energy.ca.gov)

**CITRIS California:** [www.citris-uc.org](http://www.citris-uc.org)

### Energy Agency IEA:

[www.iea.org](http://www.iea.org)

### EU project CO<sub>2</sub>SINK:

[www.co2sink.org](http://www.co2sink.org)

### World's first electric LNG plant:

[www.statoil.com/snohvit](http://www.statoil.com/snohvit)