



More from less has already become possible.

Efficiency is the key to getting more energy from fewer resources.

In addition to excellent availability and utmost reliability, efficiency is a key requirement when it comes to supplying energy for the world's steadily growing megacities. Basically, it's all about making the best use of all resources. We apply this principle across the entire energy conversion chain to take efficiency to totally new levels.

Our new 800 kV transformer, for example, makes possible the efficient transmission of electric energy in the gigawatt range over distances of 1,000 kilometers and more. And our new generation of gas turbines makes combined cycle power plants deliver a record-breaking efficiency of more than 60 percent.

Dear Reader,

Social networks require one thing above all: electricity. And the global hunger for energy is not only growing with the Internet. By 2030, the demand for electricity will have soared from the present 21,000 TWh to around 36,000 TWh. If we continue on the same course as in the past, we will ultimately endanger our social, ecological and economic future. It's easy to shake off responsibility and advise *others* to use less energy. But the appetite for energy can't be stilled, and the solution certainly can't be to let others have less. The solution lies in *more*. More efficiency and more exploitation of additional energy potential. First and foremost, changing our approach to energy demands a basic rethinking. And, in any case, it also demands record efforts and expenditures. Expressed in figures, the world will have to

invest around US\$20 trillion in the energy sector in the next 15 to 20 years.* In the face of such a monumental challenge, it's essential to provide a clear political framework to ensure that long-term investments of this magnitude are profitable. This issue of *Living Energy* focuses on where financial perspectives are appearing and on the hurdles that still have to be overcome. The technical framework conditions, in contrast, have already been set. In fact, based on available technologies, sustainable energy supplies would be feasible today. With fossil power generation, for example: The Irsching 4 combined cycle power plant built by Siemens demonstrates that even fossil-fired plants can achieve an efficiency of over 60 percent and make the target of limiting global warming to 2°C attainable.



Michael Suess,
Member of the Managing Board
of Siemens AG and
CEO of the Energy Sector

And energy consumption habits will also change. Why drive cars fueled by gasoline when electricity is more efficient and can be generated from renewable sources? The word is: electromobility. If we make the right choices, we can produce more energy while better conserving our resources and at the same time effectively fighting climate change. As the new CEO of the Siemens Energy Sector, I look forward to driving the energy revolution with the pioneering strength of Siemens.

Best regards,

*Source: IEA (Article: Investing in Future Generation)