

# Power Up!

**Twenty years from now, the whole world will be sharing electricity through one grid**

Some 30 years ago, Buckminster Fuller came up with a plan to plug all the world's continents into the same electrical grid. The idea was to let power flow between, say, Siberia and the northwestern US, or Norway and Laos. Energy companies dismissed the notion as pie in the sky – and then proceeded to build such a grid. To get the most use of their generation capacity and to maintain an emergency reserve, power companies found it efficient to connect their grids to their neighbor's, who then connected to their neighbor's.

The result, according to Peter Meisen of the Global Energy Network Institute, is that the electricity grids of all the nations of North and South America should be interconnected within the next 10 years. The Eastern Hemisphere could follow a decade later, as companies like Eskom, the largest energy firm in South Africa, plow ahead with plans to install high-capacity transmission lines across Africa and into Europe.

Once the grid is fully functional, the only excuse for power shortages will be greed. When demand is high in one region, it's almost certain to be low in another. By making electric power as easily transferrable as data, analysts expect a global grid to smooth the market spikes out of the world's most useful commodity.

– Patrick Di Justo



## Top 5 countries exporting electricity

Source of power (1 billion kilowatt hours): ■ Fossil fuel ■ Hydro ■ Nuclear ■ Other

**Russia** (net total: 835.6 billion)



**Canada** (576.2 billion)



**France** (513.9 billion)



**Norway** (141.2 billion)



**Poland** (135.2 billion)



SOURCES: ASEAN Centre for Energy; CIA Factbook 2002; Energy Information Administration, US Department of Energy; Economic Community of West African States; Eskom; Global Energy Network Institute; Greenpeace; Lao National Committee for Energy; National Grid; National Energy Board of Canada; Northern Ireland Electricity; Russian Joint-Stock Power and Electrification Company; Slovak Power Control Authority; Trade Partners UK; Transmission & Distribution World; United Nations Office for the Coordination of Humanitarian Affairs; US Department of Commerce; World Energy Council.

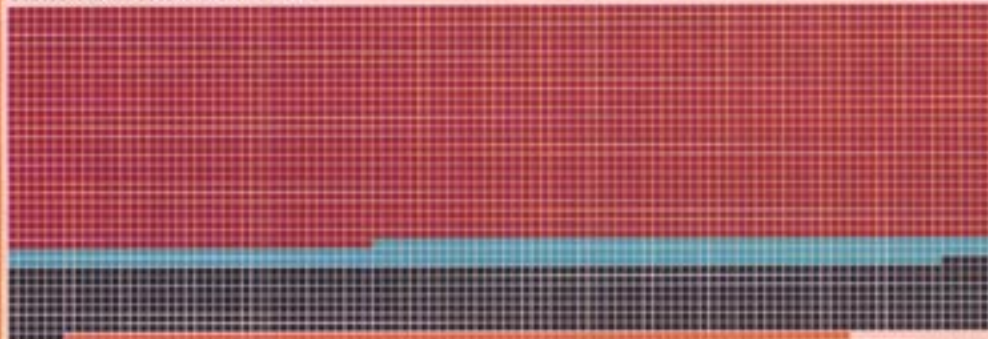




### Top 5 countries importing electricity

Source of power (1 billion kilowatt hours): ■ Fossil fuel ■ Hydro ■ Nuclear ■ Other

**United States** (net total: 3.8 trillion)



**United Kingdom** (355.8 billion)



**Brazil** (342.3 billion)



**Italy** (257.4 billion)



**Sweden** (144.6 billion)

