

POWERDOWN

Architectuur in Energienudd

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**architectuur
& stedenbouw**





Paraguay, 2009



New York, 2003



725

New York, 2003



India, 2001



Sao Paulo, 2007

SAFETY (noun)

1. the condition of being safe from undergoing or causing hurt, injury, or loss
2. a device (as on a weapon or a machine) designed to prevent inadvertent or hazardous operation

ENERGY

Our Electricity Deficit

The U.S. is barely generating enough electricity to meet current needs, and demand is expected to grow 26% over the next 20 years, according to the Energy Information Administration. A new report from the North American Electric Reliability Corporation, a national group that oversees

Many parts of the U.S. could soon face power shortages

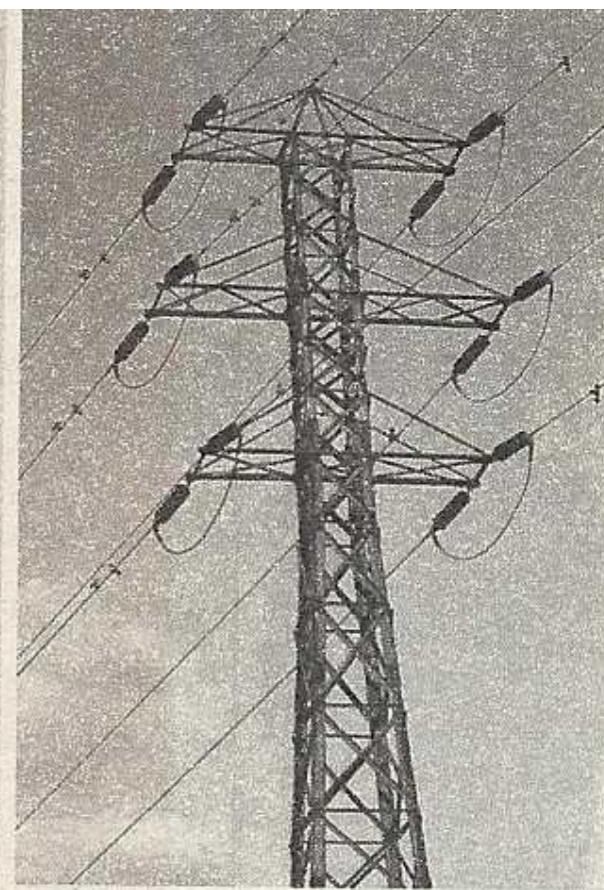
electrical-grid operators, predicts that power shortages will occur across the Northeast and West as well as in Texas within two years after the economy rebounds. Besides finding new sources to generate power, the U.S. must change how it is distributed—and

that could mean an overhaul of the national grid.

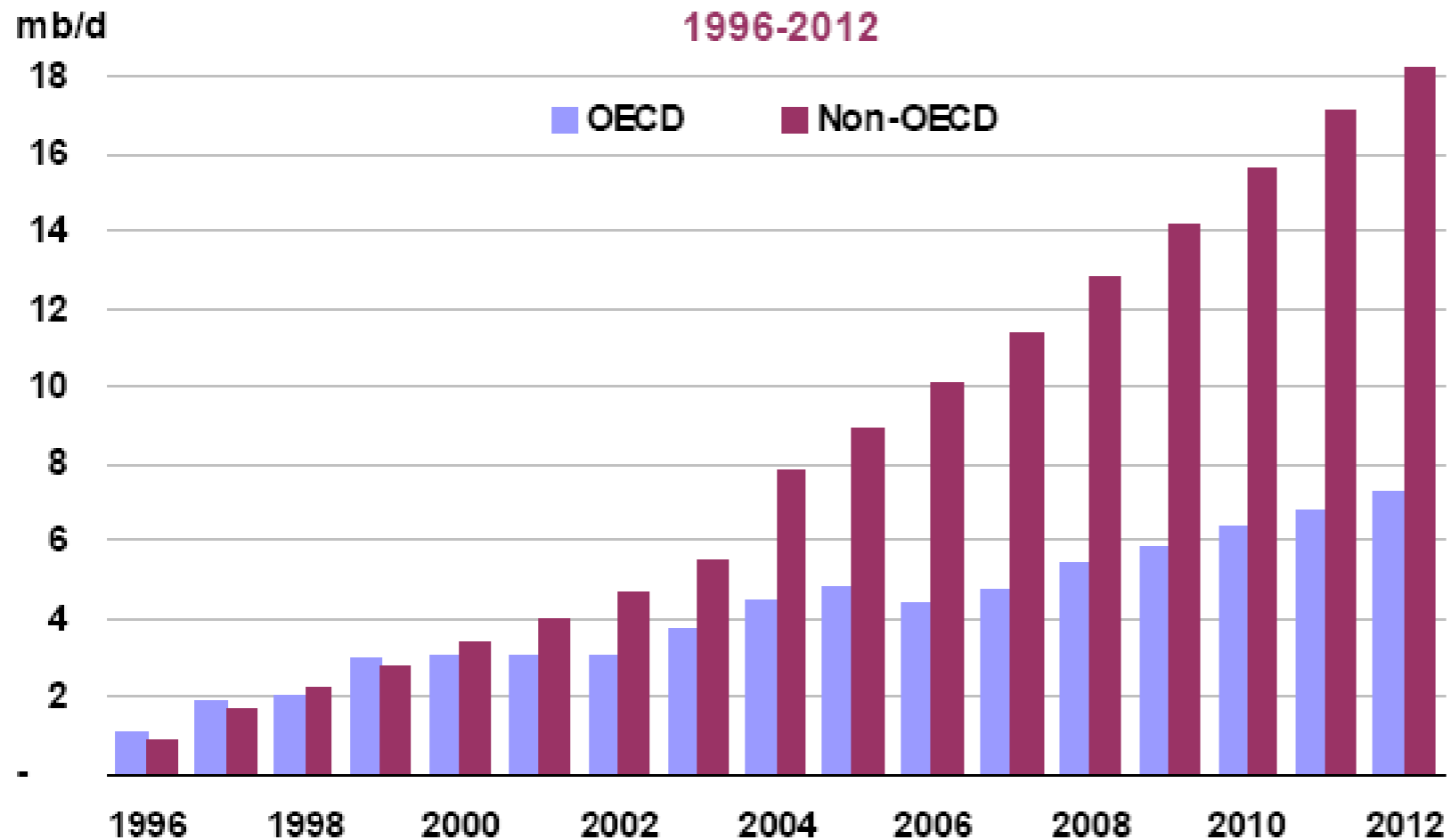
"Our electric grid was never designed to move power from one region to another," says Glenn English of the National Rural Electric Cooperative Association, which rep-

resents more than 900 utilities across the U.S. "It's overloaded and desperately needs to be expanded." Many experts believe that "smart-grid" technology could ease problems by allowing utility companies to better manage demand and enable consumers who

generate excess power (through solar panels, for example) to return it to the grid. Congress authorized some \$500 million for smart-grid development in 2007, and the stimulus package added \$5 billion. Leading the way is Austin, Tex., which began building a smart grid in 2003 and now has 270,000 devices online that regulate electricity use.



OECD vs. Non-OECD Cumulative Oil Demand Growth 1996-2012



Evolutie van de vraag naar Olie in de Oeso-landen en niet Oeso-landen 1996-2012



“we're going to need a good recession to avoid much higher energy prices over the next few years”

Tim Iacono
The Market Oracle
July 7, 2007

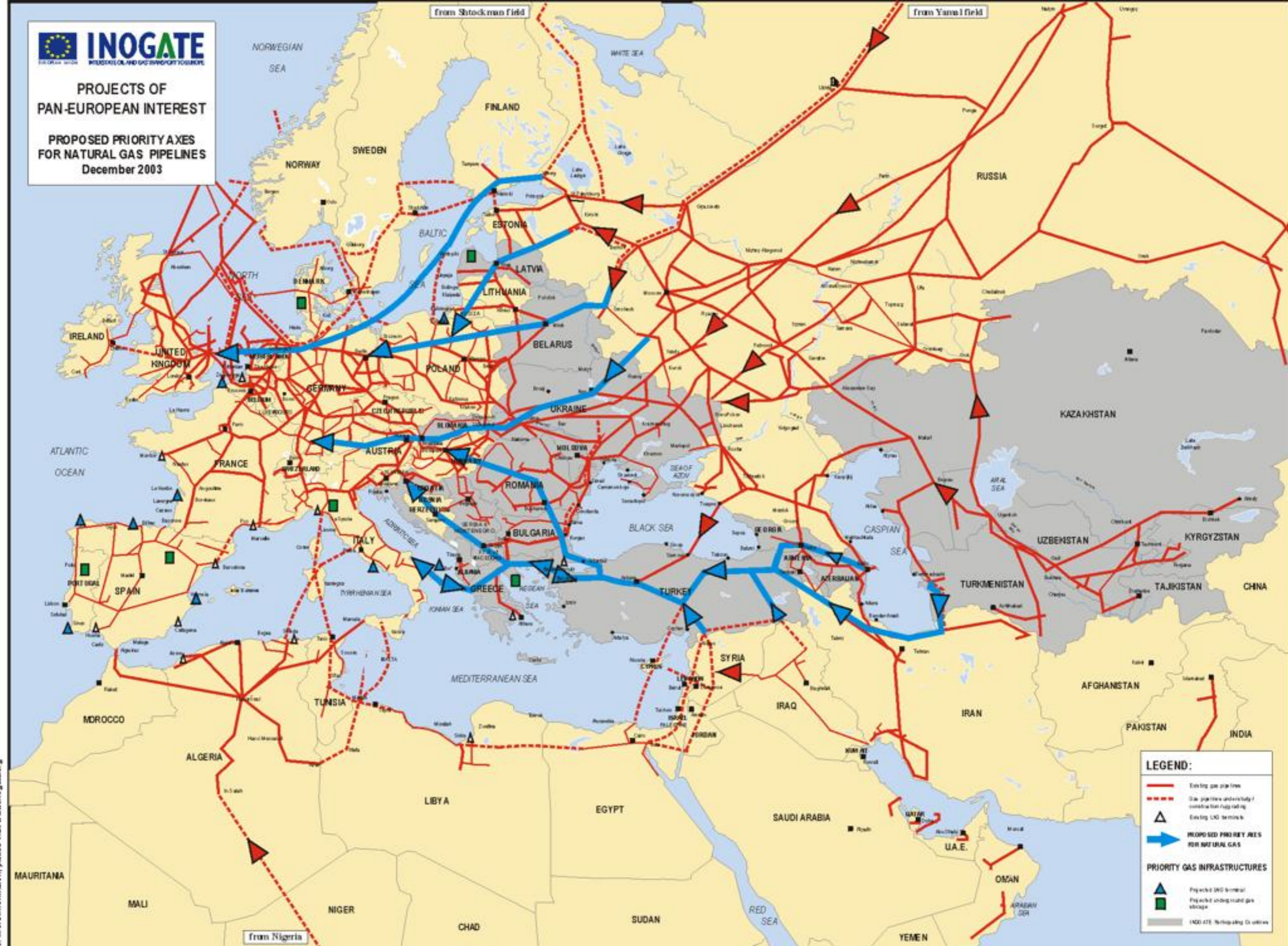
**PROJECTS OF
PAN-EUROPEAN INTEREST**

**PROPOSED PRIORITY AXES
FOR NATURAL GAS PIPELINES**
December 2003

from Shtokman field

from Yamal field

from Nigeria



LEGEND:

-  Existing gas pipelines
-  Gas pipelines under study / construction / fully calling
-  Existing LNG terminals
-  PROPOSED PRIORITY AXES FOR NATURAL GAS

PRIORITY GAS INFRASTRUCTURES

-  Proposed LNG terminal
-  Proposed underground gas storage
-  INOGATE Participating Countries



POWERDOWN

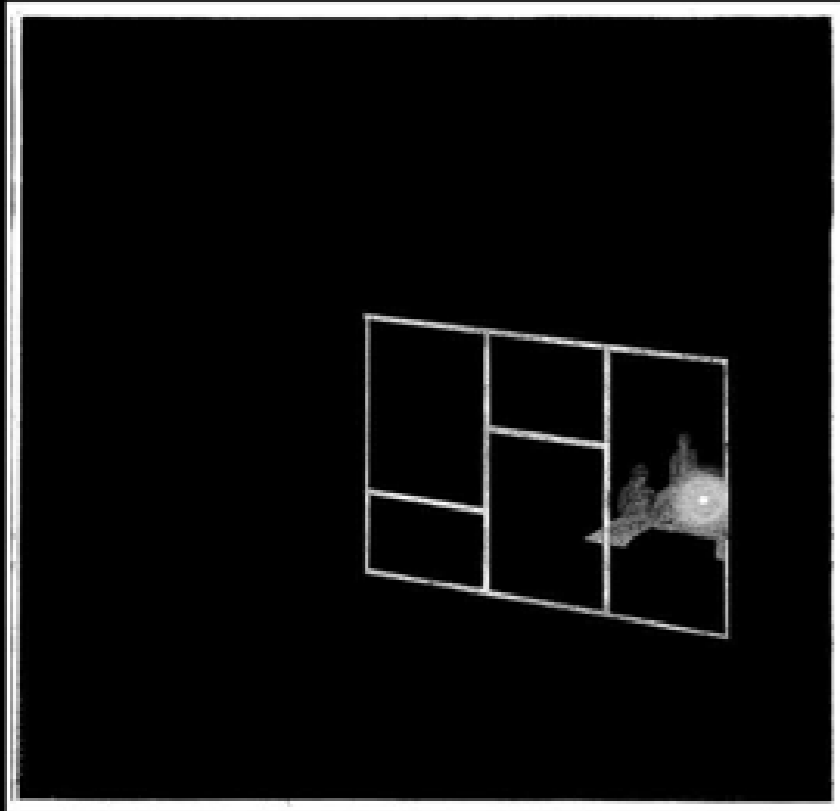
How the built environment behaves
when energy comes in short supply



vakken
**architectuur
& stedenbouw**
JOKERWEEK 2010
KICK-OFF
Maandag 29 maart, 09u00
UFO - aud. Leon de Meyer
www.architectuur.ugent.be/jokerweek

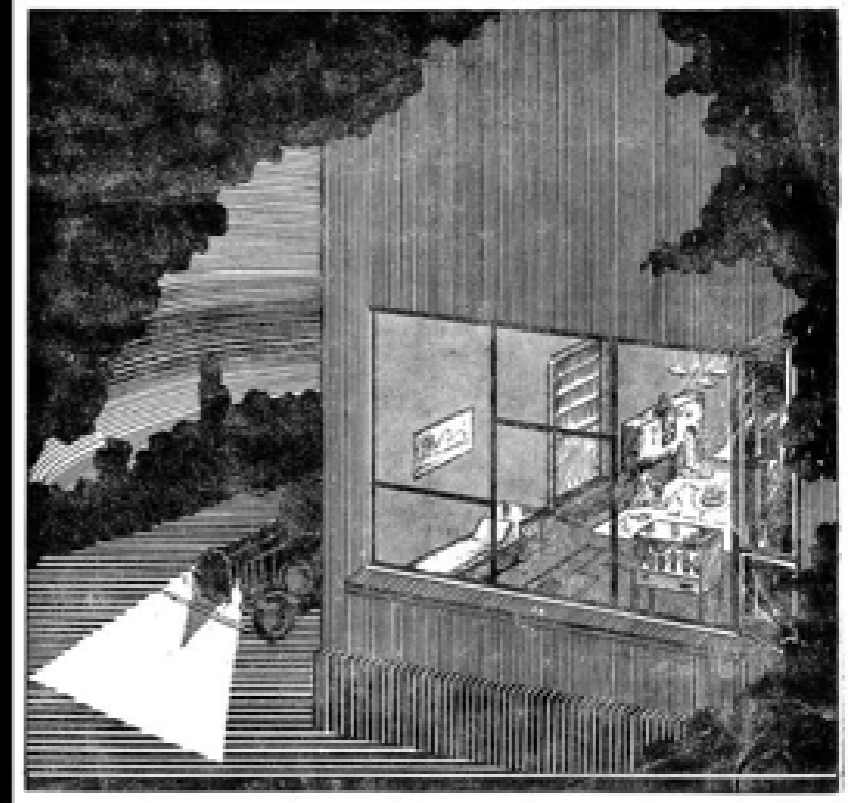


Weeklong Research- and Design Workshop at the Department
of Architecture and Urban Planning - Ghent University
Jokerweek 2010 March 29th - April 2nd



WHERE WERE YOU WHEN THE LIGHTS WENT OUT?

POWERDOWN



HOW THE BUILT ENVIRONMENT BEHAVES WHEN ENERGY COMES IN SHORT SUPPLY

POWERDOWN - JOKERWEEK APRIL 2010