



TV

# UNITED NATIONS NATIONS UNIES

U.N. IN ACTION

---

Week of 5 January 2004

Programme No. 886

Duration: 4'25"

## A NEW APPROACH TO CONSERVING INDUSTRIAL ENERGY IN CHINA

### VIDEO

AERIAL OF SHANGHAI IN  
SMOG (16")

BOAT/MOKE FROM FACTORY  
(10")

SHANGHAI OFFICE (7")

ENGINEERS CARRYING  
TOOLS INTO FACTORY (11")

### AUDIO

#### NARRATION

This is Shanghai on a typical day. From its tallest tower, the view is of a fast-growing city covered by persistent, unhealthy smog. China generates much of its electricity from coal. As a result, a fine mist of particles hangs in the air almost year round.

China, the world's second largest electricity consumer after the United States, is now trying a new approach to reduce industrial energy consumption.

A team of consultants in the Shanghai Energy Service Centre is ready to tackle this challenge.

Equipped with sophisticated measuring tools, these engineers visit factories. They use a new holistic approach to analyse complex industrial systems.

ENGINEERS EXAMINING  
PIPES (11")

NARRATION

Rather than focusing on individual pieces of equipment, they look at the entire system to determine how much energy is really needed to do the work at hand.

MOTOR (18")

Electric motors in factories consume 60 percent of the country's electricity. In 2002, the UN Industrial Development Organization, UNIDO, and the U.S. Department of Energy, initiated a programme to help industries reduce energy use.

ENGINEERS IN FACTORY WITH  
MCKANE (17")

Supported by the Chinese government through the China Energy Conservation Investment Corporation, their work could help save 20 to 50 percent of the energy used in a typical motor system. Aimee McKane is the Chief Technical Advisor of UNIDO.

AIMEE MCKANE ON CAMERA

MCKANE:

"Frequently what we find is that some of the motor-driven systems are generating fluid, or compressed air that isn't even needed and is wasted because of that. So we are looking at the efficiency of production of these systems."

ENGINEERS IN UNIDO  
TRAINING CLASS (18)

NARRATION

Instructor Wayne Perry gives a workshop on air compression systems. Funded by the UN Foundation of American entrepreneur Ted Turner, the programme is training twenty-two

NARRATION (cont'd)

engineers. The aim is to transfer the

knowledge and techniques needed for energy efficiency improvement.

NANJING INSTITUTE (10")

One of two centres participating is the Nanjing-Jiangsu Energy Conservation Centre. In addition to training, they need to build a clientele.

SHANGHAI CENTER (12")

Mr. Ye Wan-Biao, the Director of the Shanghai Energy Conservation Centre says it's a tough challenge.

YE WAN-BIAO ON-CAMERA(22")

WAN-BIAO: (in Chinese)

"One of our main difficulties is in developing a market in systems servicing. It's a new concept to our end users, the factories. They are not familiar with this idea of consultancy. We hope our government will give us support, and help us promote it."

NEW ASIATIC ASSEMBLY LINE (24")

NARRATION

Director Ye's first big client is the New Asiatic Pharmaceutical Plant. The factory produces 800,000 bottles of antibiotics a day. The project has helped them reduce the electricity consumption of its cooling systems by 62 percent in the past year

PEOPLE PACKING/COOLING TOWER

Major savings came from the discovery that only two pumps instead of four were needed to cycle water in the cooling tower.

COOLING TOWER/ENGINEERS

NARRATION

Total investment was 150,000 US dollars. It

AT ROOFTOP (10.5")	was financed by the Shanghai Centre, and it has already recovered half of this money within one year.
FIAT CAR ASSEMBLY LINE (9")	The Fiat Car Plant in Nanjing has recently requested the Nanjing centre, to review its compressed air system supply.
FIAT PLANT (8")	Fiat, like many industries in China, is under pressure to increase production while reducing energy consumption.
ENGINEERS (12")	By helping the pilot centres train a new generation of engineers, the UNIDO project hopes to help industries in China to conserve energy and reduce greenhouse gas emissions.
SHANGHAI CITY (11")	The work of the engineers may not solve China's pollution problems overnight, but they hope that their efforts will help eventually clear up some of the smog that lingers over Shanghai's modern skyline.
UN LOGO (20")	This report was prepared by Patricia Chan for the United Nations.