Energy and Environment Research at Tsinghua University

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May 5, 2007
Tsinghua at a Glance
Research on Energy
Research on Environment
International Collaborations
Next steps
Tsinghua at a Glance

- Tsinghua University
  - Established in 1911
  - Campus size (hectare): 395

- Faculty Members
  - Full professors: 1,291
  - Associate professors: 1,811
  - Research fellows: 1,380

- Students Population
  - Undergraduates: 13,788
  - Graduates: 13,547
Tsinghua at a Glance

Comprehensive
- 13 schools and 5 independent departments, covering
  - Sciences
  - Engineering
  - Humanities and social sciences
  - Management
  - Law
  - Arts and design
  - Medical science

Research-intensive
- $190 million research fund for year 2006
- 170 Labs and 6 National Engineering Research Centres

Open to World
- 182 international partner universities in 32 countries
- 33 international partner companies from top 100 companies in the world
- 57 international joint-labs and joint research centers
Tsinghua at a Glance

- **A Green University**
  - **Green curriculum**
    - Courses on technology, policy, and awareness-raising for environmental protection and sustainable development
  - **Green research**
    - Research on green technology and policy
  - **Green campus**
    - Promote energy-efficiency in campus buildings and build a clean and beautiful campus environment
    - For example, Ecological Garden and Friendship Garden
  - **Green community**
    - Faculty and student activities and Student Green Association
    - For example, tree planting on March 12 and campaigns to raise environmental awareness
Research on Energy

- Energy Technology
  - Renewable energy
  - Clean coal combustion and power generating technology
  - Advanced nuclear technology

- Energy Saving
  - Energy saving technology in buildings
  - Advanced power transmission and network safety

- Energy Policy
  - Energy strategy and policy research
Research on Energy

- Major Achievements
  - Nuclear energy

5MW Nuclear Heating Reactor

10MW High Temperature Gas-Cooled Reactor
Research on Energy

- Major Achievements
  - Energy Saving Demo Building
  - Fuel cell city bus
## Research on Environment

### Research Fields

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Research on Environment

Major Achievements

- Dianchi Non-point Pollution Control Project, Yunnan Province
- Environmental Impact Assessment for Leaky Protection with Membrane in Yuanming Yuan Park Project

The first Non-point Pollution Control Project in China!
Research on Environment

■ Major Achievements
  - Pollution Control Measures Identification against Songhua River Pollution Incident
International Collaborations

■ Joint Institutes
  - Sino-Japan Institute of Energy, Environment and Economics
  - Tsinghua-BP Education and Research Center for Clean Energy
  - Center for Industrial Development and Environmental Governance (Tsinghua-Toyota collaboration)

■ Joint Projects
  - Tsinghua-Yale Environment and Sustainable Development Leadership Program (ESDLP)
  - Energy-saving Building -- Joint project supported by Italian government and Tsinghua University
Next Steps

- To Promote
  - Interdisciplinary research on regional and global environment and energy-related issues

- To Strive
  - To become a knowledge hub for international cooperation on the environment and sustainable development

- To Establish
  - A national platform for fundamental and applied research
  - R & D joint centers in collaboration with government and industry
Thank you!

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