

# Discovering the Altran Foundation for Innovation



**“11 years of innovation for human benefit”**

"Man, by his **selfishness** too focused on its own interests, by its tendency to enjoy everything that is available to him, in short by his recklessness for the future and for his fellow human beings, seems to work for the **destruction on its own species...** "

**Lamarck – 1820**

## Discover the Altran Foundation



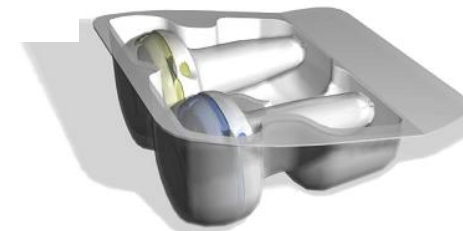
- **A mission:** to support and promote technological Innovation for human benefit
- **An award:** an international award given each year on a specific topic.
- **A grant:** one year of scientific and technological consultancy offered by the Altran Group



*The Altran Foundation for Innovation has been awarded twice at the ADMICAL Oscars. It has received the special Jury Award in 2002 and the Fondation de France Award in 2006.*

# Discover the Altran Foundation

- **A rigorous selection:** an international panel of specialists independent from the Altran Group
- **An annual Award Winner:**
  - 2005, a brain-powered remote control for computers,
  - 2003, a test patch for detection of allergies,
  - 2001, a decontamination process for soil using bioremediation



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# Altran Foundation for Innovation's topics



**1997: Memory & heritage**



**1998: Fighting against pain**



**1999: Water quality**



**2000: Food safety**



**2001: Improving urban life**



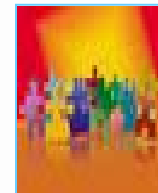
**2002: Developing countries**



**2003: Early childhood**



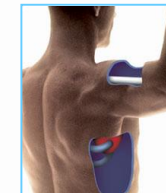
**2004: Discovering, understanding & enjoying science**



**2005: Overcoming social exclusion**



**2006: Energy**



**2007: Mending the human body**

## BCI: A Brain-Powered Remote Control For Paralyzed People

- Laboratory of Nervous System Disorders of the Wadsworth Center
- USA



*This new HMI records brain waves from the scalp and then decodes them. This radically new system allows people to **move a cursor up and down and left and right, to spell words, and even to control a robotic arm.***

*The system is based on mutual learning: people learn to generate signals that contain messages and the system learns to decode these messages.*



**2008 Award**

**Reducing CO2  
levels in the  
atmosphere:**

**our technological  
challenge!**

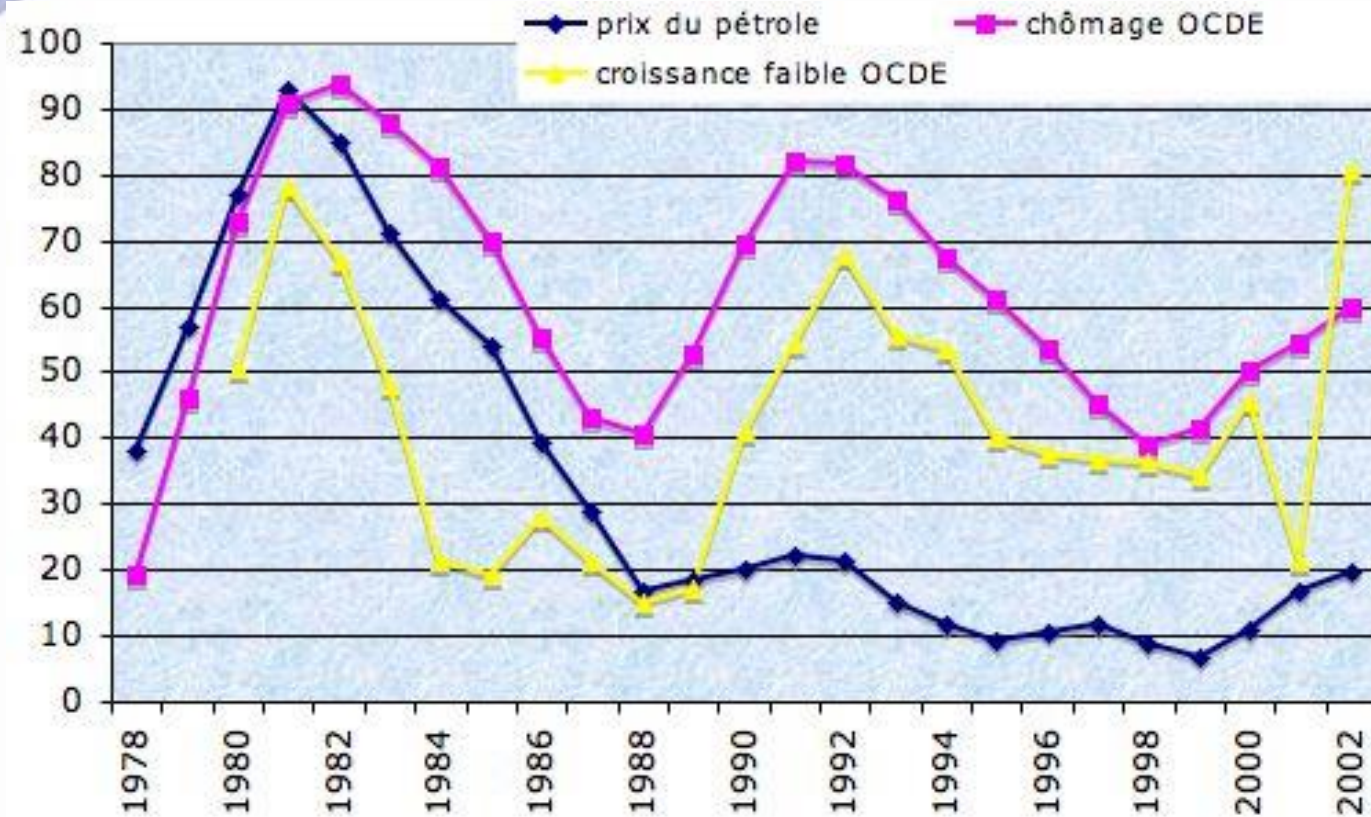


# Energy crisis in sight



Don't Boil the frog

## A puzzling correlation



Normalized variations  
barrel price in 79 : 40€

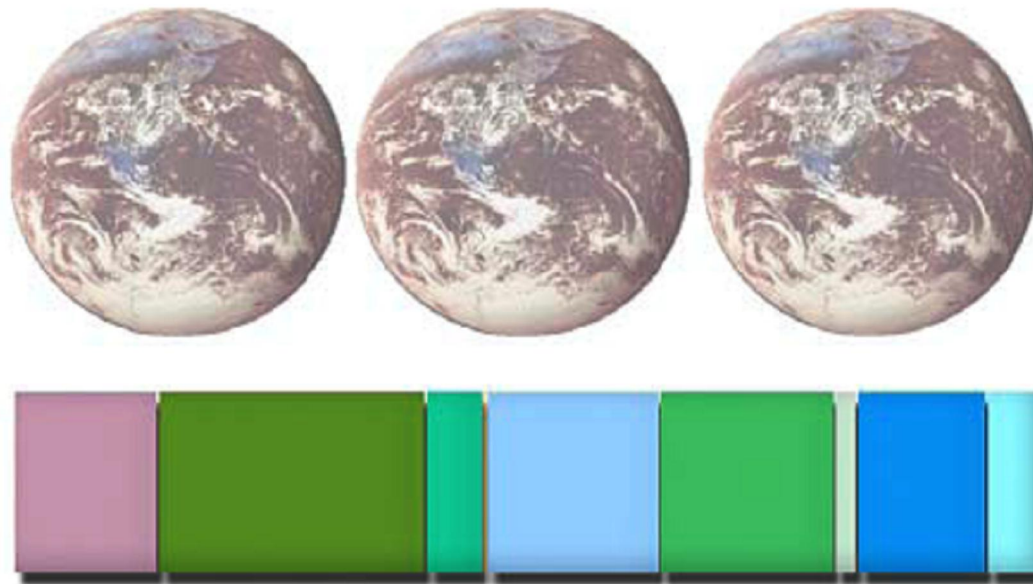
Source : BP  
Statistical Review  
2005

Correlation between fuel price variation and economic recession

# An organized plundering



**Don't Boil the frog**



- SERVICES
- FOOD
- BUILT LAND
- WATER
- WASTE + CONSUMER ITEMS
- INFRASTRUCTURE (shared)
- INFRASTRUCTURE (house)
- TRANSPORT
- ENERGY

*Ecological Footprint of a 'typical' UK resident living in a new home built to 2002 Building Regulations*  
© 2003 BioRegional

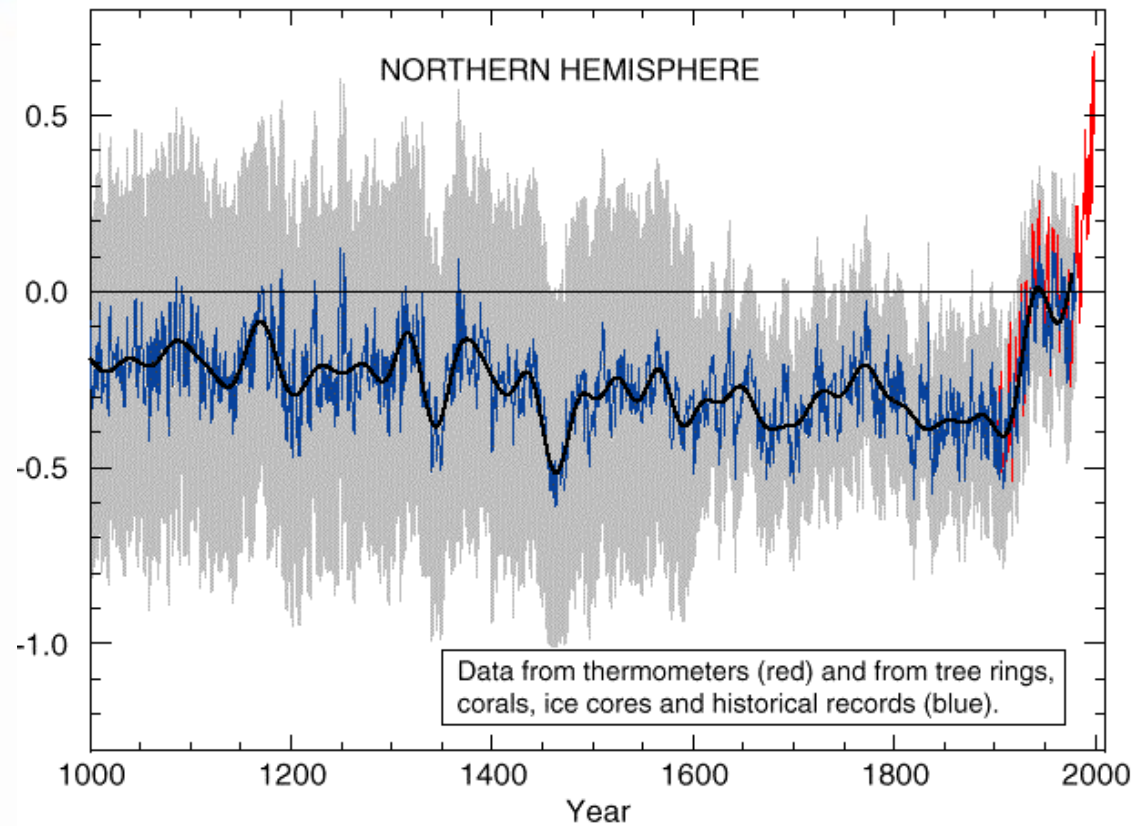
**Current need : 3 planets**

# The climate point of view



**Don't Boil the frog**

**Global average temperature is changing, since the beginning of the industrial age and is accompanied by a preoccupant changing climate**



Climate Change, the scientific basis, GIEC, 2001

# The end of the oil era



- In 45 years

## End of oil production on earth

(Based on current evolution of consumption and existing fields and known reserves)

- In 15 years

**120\$ – 150\$ / barrel**

- Within 15 years, China's energy need will be equalent to USA (21 Mbarrels/d). Supply will then be insufficient.

To reduce the fuel demand by 8% in 2015, it would be necessary to multiply the real price of oil by 6,9. Therefore the OECD countries won't be able to absorb the market variations any more. The reaction of the market will then be strong and lead to a barrel price of 120-150 \$.

# A return to energy with high environmental impact

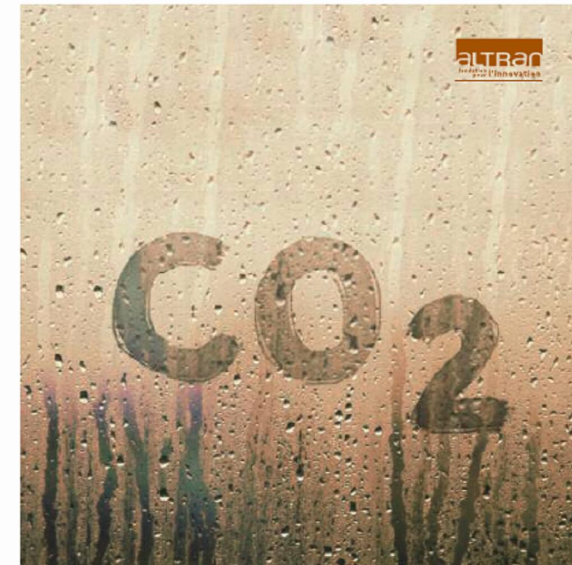
- Coal
- Low quality oil

**Will lead to huge environment impact**

**Need of applied innovations market ready  
focused on**

**Reducing CO<sub>2</sub> levels in the atmosphere**

**our technological challenge!**



## The 2008 Schedule

- **October, 1st 2007:** Official launch of the Prize  
Application File available on the Web site
- **April, 7th 2008:** Prize Closure
- **June 2008:** Consultants week-end - first selection of 40 projects
- **September 2008:** First meeting of the Jury - selection of the 6 finalists
- **October 2008:** Grand Oral - Selection by the jury of the laureate
- **December 2008:** Ceremony

# Thank you for your attention



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