

# **GREEN NEW DEAL NATURAL REFRIGERANTS**

#### **ATMOSPHERE 2009**

Brussels, 19 Oct 2009



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#### Why UNSG visits NO-MAN's LAND

#### when there are urgent conflicts ON CROWDED LAND?







Why UNSG visits no-man land near to the most rich and peaceful countries

when there are urgent poverty and war like situations elsewhere?



#### Al Gore and IPCC win 2007 Nobel **Peace** Prize





Why PEACE Prize for the ENVIRONMENT Cause

### "IPCC expresses surprise and gratitude at announcement"



INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE





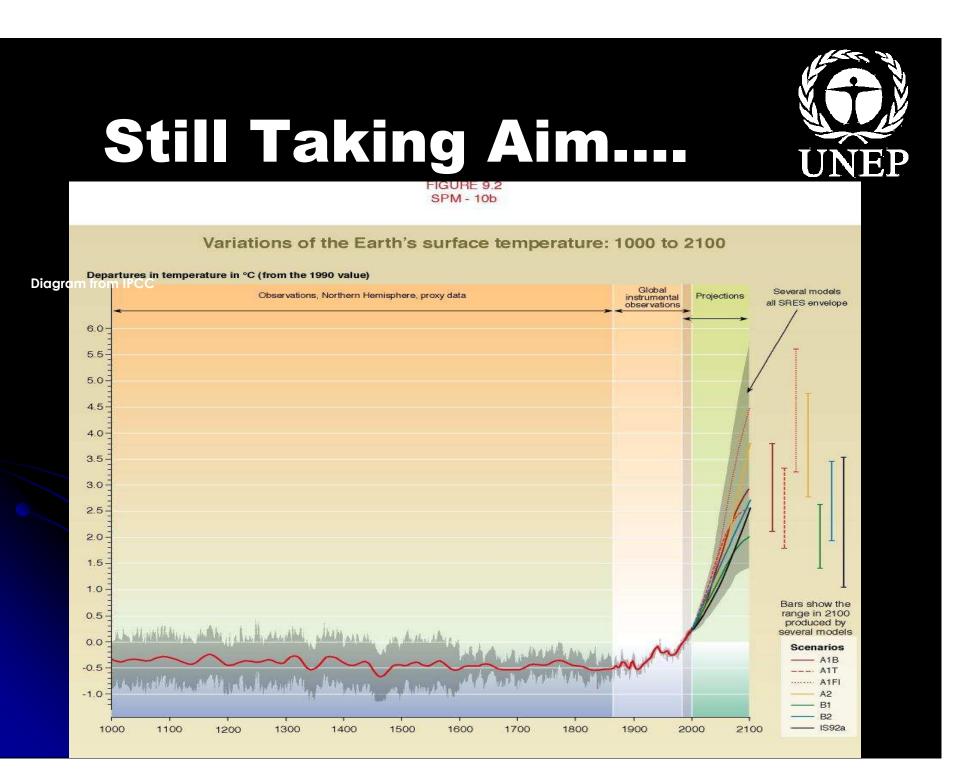


### 70 days from now...

### ... World Leadres agreement on Climate Change ????

# ... CFCs and Halons assigned to the history books!!!!

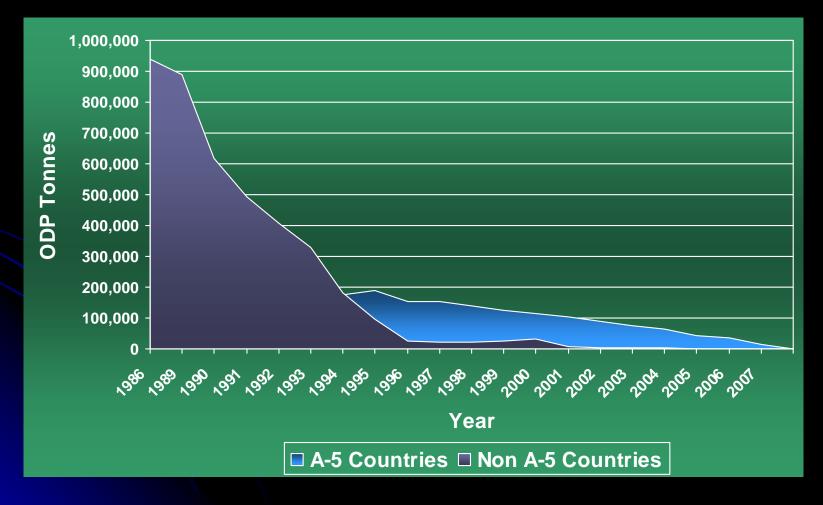




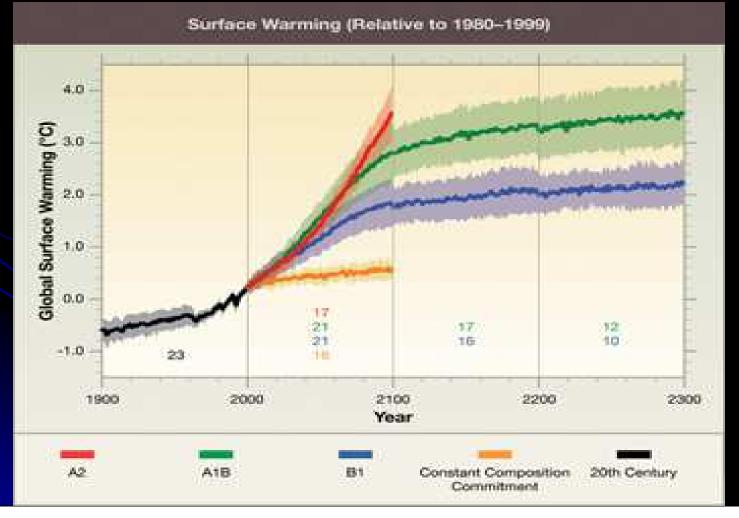
#### **Target Achieved.....**



UNEP

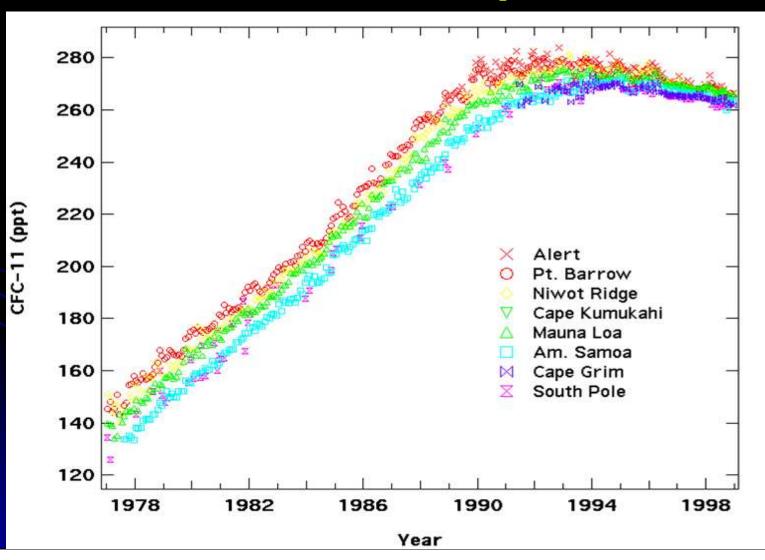


#### UNEP Changing the Goal Posts...



#### **Goal Scored CFCs in Stratosphere**

**UNEP** 

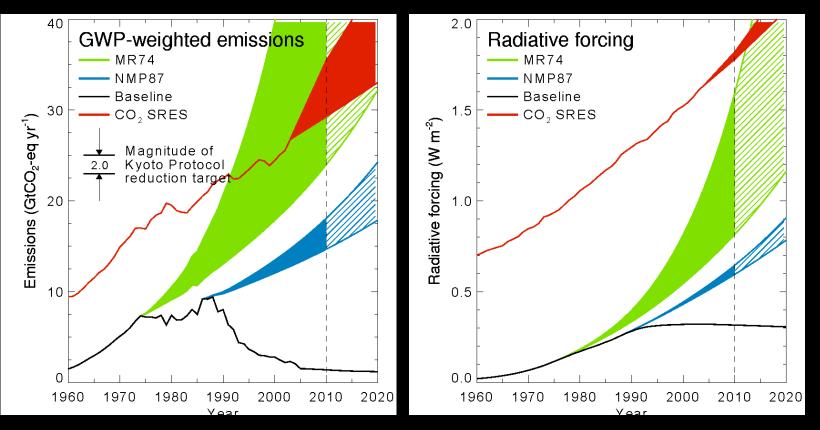




#### ...Strong partnerships and sound policies lead to extraordinary progress in protecting the ozone layer

#### Millenium Development Goals ...*Report of United Nations* 2009

### **Effect of MP on Climate change**



- Without Molina/Rowland: ODS emissions as important as CO<sub>2</sub>
- Without Montreal Protocol: ODS emissions half of CO<sub>2</sub>

## Bail out by the Montreal Protocol...

→ 5 to 6 times the emissions reduction target under the Kyoto Protocol



#### ENERGY EFFICIENCY IMPROVEMENT

**Domestic Refrigerators** KwH • **550** • 375 Year



### Two Decades of Noisy Wait Vs Two Decades Quiet Revolution



# I am trying to find the boundaries of two apparent infinite things:

### **Universe and Human Stupidity !**

I am sure to find the first one but not sure of second....





### **Dynamic RAC Industry**

### Major Contributor Major Innovator

Only Constant is: CHANGE

#### **TECHNOLOGICAL REVOLUTION** in the REFRIGERATION SECTOR



– NIK

- Natural Refrigenrants<sup>-</sup>
- Hydrocarbons
- HFCs
  - HCFCs
    - Conservation, R&R CFCs

NIK Vacuum/Nature HFCs/LCD Cyclopentane HCFCs Conservation CFCs

REFRIGERATION

FOAM



### **300 days ago**...

# ...multiple crises have overshadowed our success and prospects

Food, Fuel, Finance, Flue....F Gases



# Bail out and Stimulus package...

### $\rightarrow$ US\$ 3 trillion



### Bail out and Stimulus package...

### →20% will be invested in <u>Green Energy</u>

## Fifth Fuel...



#### ¤No negative impacts, no uncertainties, no trade offs

≈ 20% reduction in energy demand by 2020 with existing technology



### Fifth Fuel. . needs NGOs

 $\bowtie$  making appliances efficient

 $\bowtie$  applying efficient use

## Historic Opportunity for **196 Governments** ... ...Low hanging climate benefits

HCFC phase out Destruction of ODS Banks



### Challenges And Opportunities Green Economy

HFC substitutes-Low and zero GWP
Smart designs
Energy Efficiency
Bank Management

# HCFC phase out & climate benefits

Cumulative Emission $\Rightarrow$ 12-16 Gt of  $CO_2$  equivalentReduction

**Cumulative Benefits**  $\Rightarrow$  40 Gt of CO<sub>2</sub> equivalent





### END

### www.unep.fr/ozonaction