



US-China Focus for Peace Environmental Security

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The Millennium Project**



Climate Change

Working Group on Climate Change

Established April 13, 2013

In 1963 most believed landing a man on the moon within the decade was impossible

In 2014 most believe turning around climate change in ten years is impossible

US-China Implementation Plan Agreement Feb. 2014



1. Emission Reductions from Heavy-Duty and Other Vehicles
2. Smart Grids
3. Carbon Capture, Utilization, and Storage
4. Energy Efficiency in Buildings and Industry
5. Collecting and Managing Greenhouse Gas Emissions Data

Progress Report: July, 2014



- US and China are comparing standards, visiting each other's programs, and holding workshops.
- ALL quite incremental, **not** on the scale needed to turn around climate change.
- Full US-China Working Group progress report available at: <http://www.state.gov/r/pa/prs/ps/2014/07/229308.htm>
- 2 billion more people in just 35 years
- What was US & China's economic-environmental impact 35 years ago? What is it today? And likely in 35 years?
- More people will be more wealthy than every before: Internet - the new means of production - is being distributed to all, with capacities beyond imagination

The Future is slipping through our fingers



Nature
does not
care...

about what
is politically
feasible...

or Equitable

We need a far more serious goal





1/11/11 Chinese President Hu Jintao in meeting with Defense Secretary Robert Gates urged the two militaries to deepen strategic trust.

Environmental Security should be the focus of that strategic trust.

Environmental Security is the environment's viability for life support.

Half the World Continues to be Potentially Unstable



International Alert in the U.K. lists 102 such vulnerable countries. The Center for Naval Analyses (U.S.) identifies 46 countries (2.7 bill. people) at high risk of armed conflict, and an additional 56 states (1.2 bill. people) at risk of political instability

1. Food Crisis (increasing prices, scarcity, shrinking food reserves, decreasing water)
 2. Water Crisis (falling water tables, scarcity, and pollution)
 3. Energy supply/demand
 4. Ocean acidification and dead zones (which kills some species affecting the food chain)
 5. Increasing Natural Disasters
 6. Population concentrations (livestock waste, water pollution, etc.)
 7. Desertification
 8. Failed States and internal wars
 9. The Race for Natural Resources
 10. World youth population explosion and high percent of youth are unemployed
- Without major changes, items 1-10 will increase the number of refugees (political, economic, and environmental) further reducing environmental security
 - The number of countries with most acute vulnerability may increase from 17 in 2010 to 48 in 2030 (Climate Vulnerability Monitor 2010)

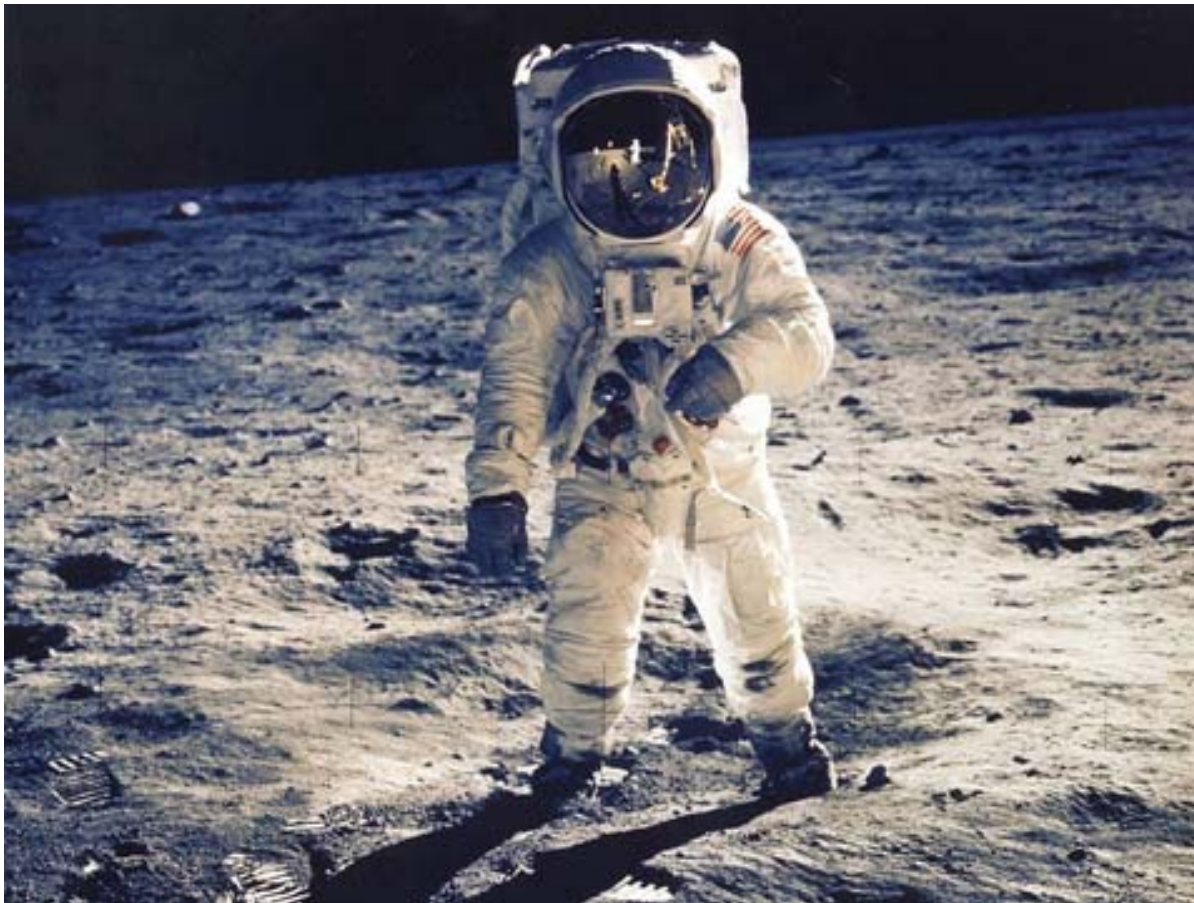
Hence, we are not yet winning the battle for environmental security

China and the United States together can win that battle and make history!

US-China 10-year Goal



US–China Apollo-like goal to begin to turn around climate change by reducing CO₂ from 400ppm to 350ppm in 10 years...



with a NASA-like
global R&D
program
that others can join

US-China 10-year Goal



- US–China Apollo-like 10-year goal to turn around global environmental security indicators such as CO2 ppm from 400 to 350.
- With NASA-like global R&D strategy to turn around climate change and insure
- Focusing on new technologies like:
 - Desalination and water purification
 - Carbon capture, utilization, and storage
 - Saltwater agriculture... electric cars... maglev trains
 - Growing pure meat without growing animals
 - Solar power satellites
 - Urban systems ecology
 - Climate change collective intelligence system

Urban Systems Ecology





We have
to think
Big...

Vertical
Farming,
Carbon
Sink, Art

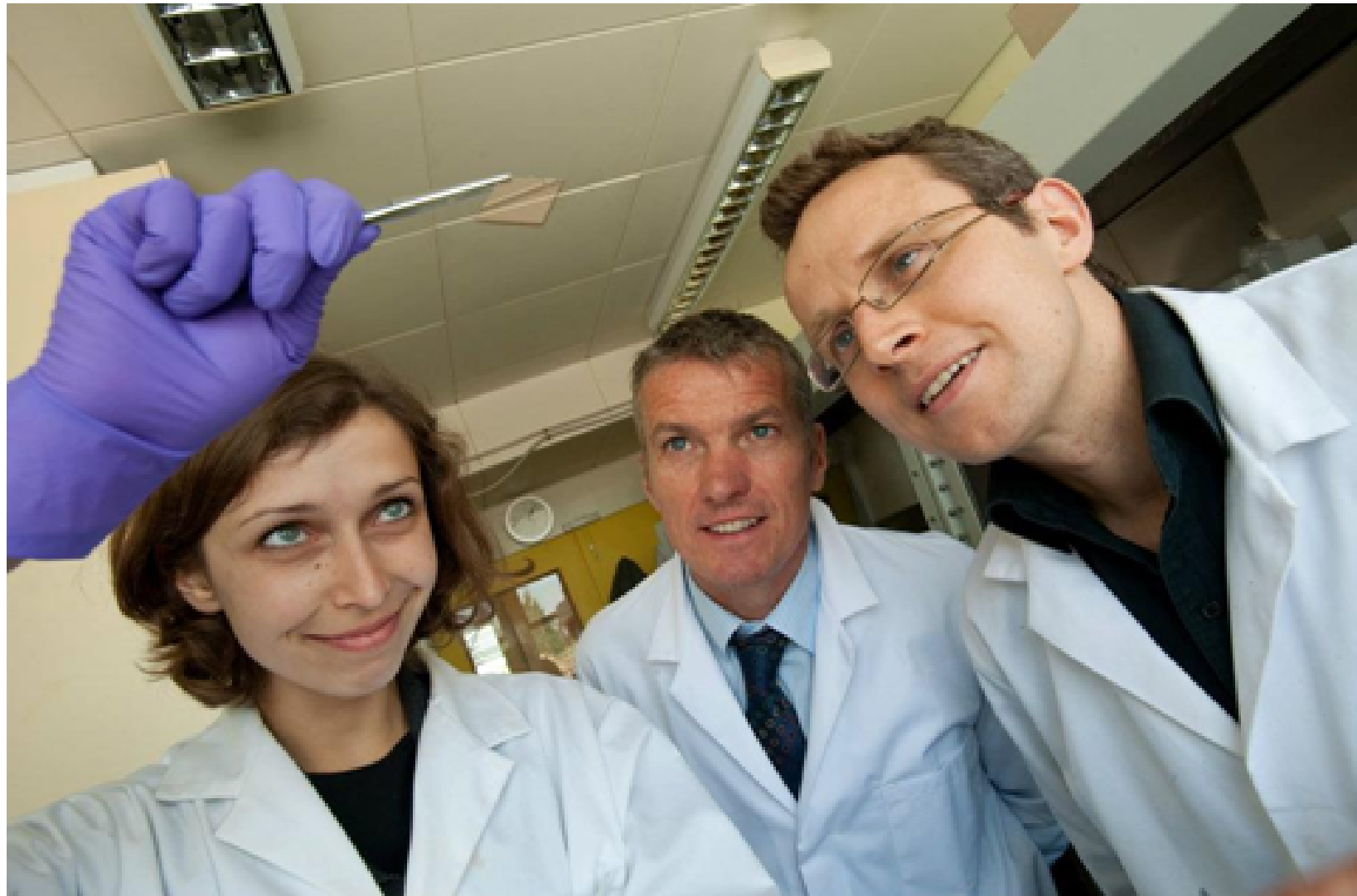
Pure meat without animals



- Winston Churchill in Strand Magazine (1931): one day we will “escape the absurdity of growing a whole chicken in order to eat the breast or wing”.
- First Patent in 1999 Willem van Eelen, a Dutch doctor High quality global journalism requires investment. Please share this article with others using the link below, do not cut & paste the article. See our Ts&Cs and Copyright Policy for more detail. Email ftsales.support@ft.com to buy additional rights.
<http://www.ft.com/cms/s/2/87bf2654-89b3-11e1-85af-00144feab49a.html#ixzz1sn8ausF3>
- Financial Times (April 20, 2012): Environmental Science & Technology journal (July 2011) article “found that lab meat can produce up to 96% lower greenhouse gas emissions than its conventional equivalent. Scientists at the universities of Oxford and Amsterdam found it would also take between 7 per cent and 45 per cent less energy to produce than the same volume of pork, sheep or beef, as well as requiring 99% less land use.
- It costs the US \$50 billion per year in food-borne illness , much related from meat from animals.



UCLA's Solar Cell Windows



We will get a future like this...



And this...

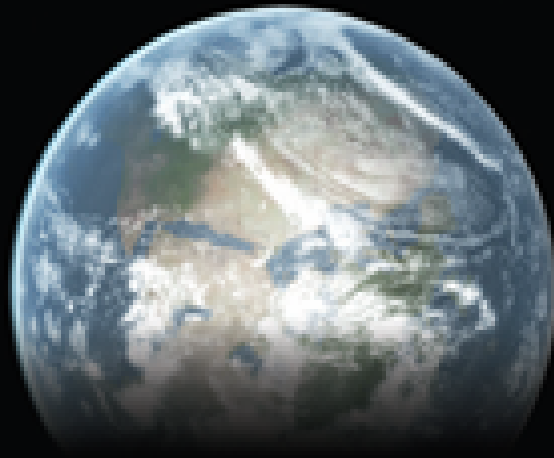


Unless we get serious about a US-China Goal



- 350 parts per million CO₂ equivalent measured in 2025... anything less may not matter in the long run.
- Otherwise some oceans will get to Zero Degrees Celsius producing micro organisms that produce Hydrogen Sulfide which eventually will eventually kill all of us.
- That is the scientific data, the rest is politics.

US-China Focus for Peace



Turn Around Climate Change
Reduce CO₂ 400ppm to 350 ppm in 10 years
With a NASA-Like R&D Program
that the world can join.