Paris Climate Conference: What climate agreement will we get?

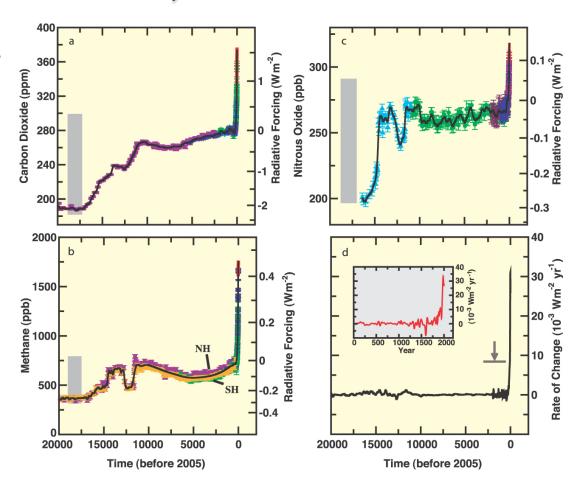
NGO Committee on Sustainable Development Oct. 2015

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Science: Recent Global Warming exists (last decade hottest), is due to us - CO2...

20,000 years of data; CO2 spike is recent, continuing.

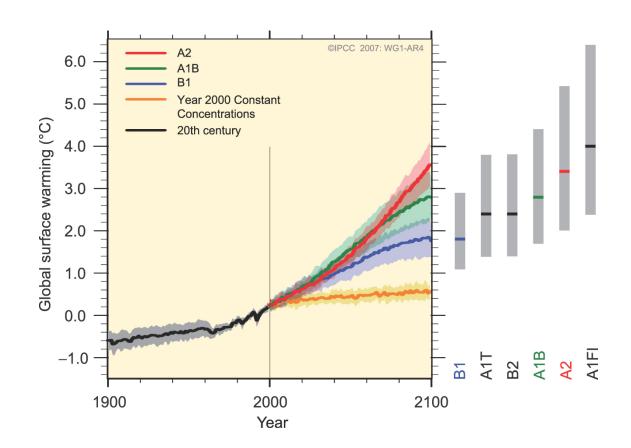
IPCC 2007 Science Vol I



What will happen? – Warming depends on Human Behavior (Scenarios)

IPCC 2007 Science Vol I

Now appear conservative



Climate Impacts (Review)

- We humans are causing global warming
- We are seeing bad impacts NOW
- Impacts FAR WORSE if we do not act (BAU)
- No place to hide under BAU
- Disasters worse due to Climate Change: Increased conflict (wars/national insecurity), water shortages, crop failures, intense fires, droughts, flooding, species extermination, disease increase, extreme weather, sea level rise, heat waves, precipitation changed, AND economic/finance disruption (breakdown) ...

Climate Ethics

 Climate justice: Poor have the smallest effect on climate – hurt the worst

- BUT NO PLACE TO HIDE
 - U.S. will be hit very hard if no climate action
- Intergenerational ethics: Our descendants
 - More humane and cheaper for preventive action now rather than disaster adaptive action by our descendants in the future

2/13/13

Sustainable Development Goals – All are tied to Climate Change

- Sustainable Development Goals
- Goal I. End poverty in all its forms everywhere
- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3. Ensure healthy lives and promote well-being for all at all ages
- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5. Achieve gender equality and empower all women and girls
- Goal 6. Ensure availability and sustainable management of water and sanitation for all
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10. Reduce inequality within and among countries
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12. Ensure sustainable consumption and production patterns
- Goal 13.Take urgent action to combat climate change and its impacts*
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

What can happen - scenarios

2100 Values **Global Emissions** Atmospheric Temp. Increase Over CO2 Preindustrial (90% C.I.) 150 **Business** as 4.5°C (2.6°C-5.9°C) 910 ppm Usual 8.1°F (4.8°F-10.5°F) Billion tons CO₂e per year 685 ppm 100 3.5°C (2.1°C-4.6°C) **INDCs Strict** (3.7°F-8.4°F) 650 ppm **INDCs Continue** 3.3°C (1.9°C-4.4°C) (3.5°F-7.9°F) (1.1°C-2.7°C) 475 ppm 2 Degree Path (1.9°F-4.9°F)

2100

28 September 2015, ©2015 Climate Interactive - ClimateScoreboard.org

2040

2060

2080

0

2000

2020

That's the potentially bad news

- Here's the good news
- We can solve the climate problem with current resources, given the will

Climate Action: We CAN mitigate Climate Change / Global Warming:

- Recognize/acknowledge problem extent
- Climate Change Risk Management
 - Long term solution vs. short term expediency
 - Need Change: All Deliberate Speed to renewables
 - Obstacles: Disinformation / Political Obstruction, Economic issues, Psychological...
- Action: All levels from local to global needed
 - No "silver bullet" solution exists
 - Individuals, NGOs, business, cities, governments
 - International climate agreement: this talk =>

2015 Paris Climate Change Conference



Road to a climate agreement

- ... Copenhagen ... Paris ...
- Goal: "FAB" climate agreement
 - "FAB" = Fair Ambitious Binding
 - Copenhagen Accord (2009) + Steady slow progress: Cancun, Durban, Doha, Warsaw, Lima
 - Commitment finalize accord in Paris (2015)
- Then implement the agreement...
- That's the plan (agreed to in Durban)
- What are the details? What are the problems?

Negotiation Issues

- CARBON BUDGET: ESSENTIAL PROBLEM
 - Can't burn all carbon and have livable world
- Cumulative CO₂ vs. Current CO₂
 - Economic growth developing countries.
 - "Energy parity" vs. CO₂ emissions.
- Legal status (agreement binding?)
- Who pays for what? When?
 - Technology Assistance
 - Support for Adaptation (Green Fund)
 - Reparations: Loss + Damage (Warsaw)

Last conference 2014: Lima

- Document "Lima Call for Climate Action"
- Contentious process, last minute as usual
- What is in the Lima agreement?
 - Keeps goal global warming below 2°C (1.5°C)
 - Net-zero global GHG emissions by 2050
- These are good

Further progress at Geneva (2015)

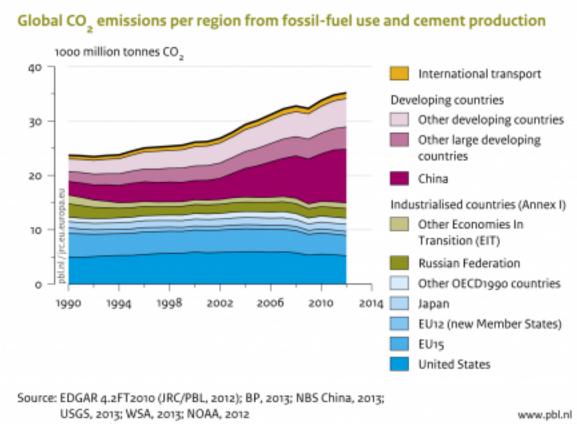
- Draft Agreement text approved. "Kitchen sink" – all proposals included
 - Too complicated, too long.
 - Revisions at Bonn intermediate conference

Issues: Summary

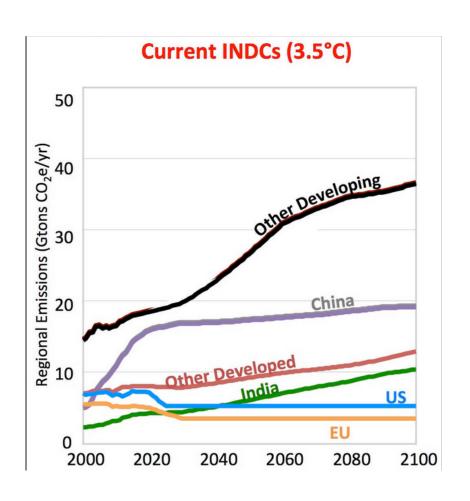
- INDCs (Intended Nationally Determined Contributions):
 - US INDC: Cut emissions by 26-28% below 2005 levels by 2025
 - China, Europe, Brazil, South Africa ...
 - India dilemma. No emissions cuts in INDC.
- MRV (Measurement, Reporting,
 Verification) must be in the agreement
- CBDR (Common but Differentiated Responsibility): In or out?

Cumulative CO2 problem

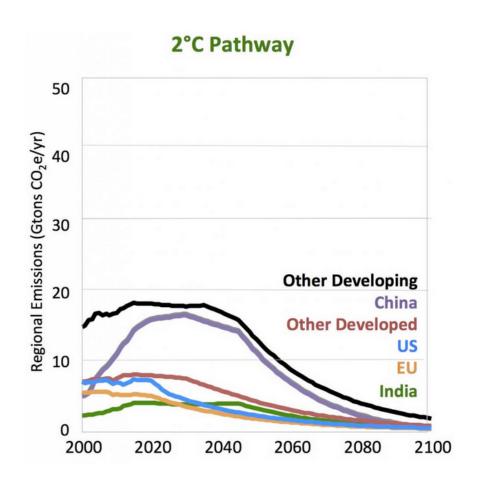
• EMISSIONS: US, EU 57%, China 7% in 2000 (developing nations cumulative CO2 = over 50% of total by 2020)



Current INDCs if +3.5°C by 2100



Emissions if +2°C by 2100



Summary: What hasn't happened?

- Not enough climate risk management international action consistent with increasingly serious climate impacts
 - On track for 2.7 degrees C raise by 2100
- Only mild steps for emissions cuts
 - No target "Price On Carbon" but possible
- Legal status? / enforcement? TBD
- \$100B/year to developing countries for adaptation (by 2020; now \$62B)

China – US Climate Agreement

- Better chance of good Paris agreement
- "FACT SHEET: The United States and China Issue Joint Presidential Statement on Climate Change"
- Also bilateral US India agreement for renewable energies

NGOCSD Climate Paper

- Issued since 2009 Copenhagen Conf.
- Paris 2015 paper sent email list
- Sent to Todd Stern (chief US negotiator) in letter from President of UUA
- Anybody on the ground at Paris can hand out the NGOCSD paper
 - Copenhagen: PM of Denmark, Lisa Jackson/ Gina McCarthy (EPA), Jonathan Pershing (US negotiator)...

Details on the Climate Portal

climate.uu-uno.org

CLIMATE PORTAL

We have a moral, ethical, and survival imperative to learn about climate change / global warming, and to act appropriately and decisively. This imperative derives from people living today and all those who will follow us. We must not have future generations say, of us: "They refused to learn" or "they knew but did not act."



C What's the Climate Problem? What can We Do?

Global warming, the upward **climate change** trend of average global temperatures notably since 1975 **exists**, is due to us humans, and in the absence of substantial action will increase. Climate change / global warming impacts are seen now, and will be increasingly harmful to lives, peace, and justice, worldwide - if we do not act sufficiently. Without action there will be no safe haven, not even for the U.S. The preservation of a livable world for all, justice (the poor and vulnerable will get hit hardest), and intergenerational equity (our grandchildren will suffer) are at stake. Lasting solutions to issues of great concern, from food to water to immigration to women's rights to national security to species extinctions all require climate action, because climate is interconnected with all these issues.

It is **not** too late to **mitigate** global warming/climate change. The worst climate impacts can be avoided if we act now, responsibly and vigorously. It is cheaper and more humane to act now, relieving fellow citizens of the earth now and our descendants later by reducing destructive climate impacts. There are many positive opportunities. We can move into a new era transitioning to non-fossil energies, stimulating economies and creating jobs with better technology, reducing harmful climate impacts due to burning fossil fuels. Some adaptation will also be necessary. The framework being increasingly adopted is Climate Risk Management. Success means implementing a portfolio of actions. There is no silver bullet.

Many people of conscience are indeed standing up for climate action.

Bottom Line Climate: big problem, we can solve it

- Humans now causing global warming
- Climate impacts bad, getting worse
- Powerful opponents exist to climate action
- We CAN prevent worst climate impacts
- NEED International climate agreement
- We must be optimistic (no alternative)
 - You can help

Thank You



Appendix: Contrarian Obstruction Who is this and why is he a risk?



Climate Science Deniers / Contrarians / Faux Skeptics

- Obstruction = Main Risk for Climate
 Agreement, Renewable Energy Development.
- "We Have No Climate Risk" 4 trenches:
 - Deny global warming
 - 2. Deny human influence on climate
 - 3. Minimize climate impact risk
 - 4. Exaggerate cost of climate action mitigation
 - Create doubt = tobacco tactic
 - "Science can't prove so we shouldn't act"
 - Fallacies: "Cherry picking", flimsy arguments

Stranded Carbon Assets = key



Who Supports Contrarian Deniers?

- Historically, Fossil Fuel Co. FFC [Exxon]
 FFCs want to be able to burn all carbon
 - Otherwise STRANDED ASSETS
 - Would reduce FFC \$wealth, \$stock price
- Libertarians: Tea Party, Koch, Faux News...
 - Basically oppose all government action
 - But governments must act to mitigate climate
 - So libertarians "kill the message / messenger"
- Answer to riddle: C. Monckton