

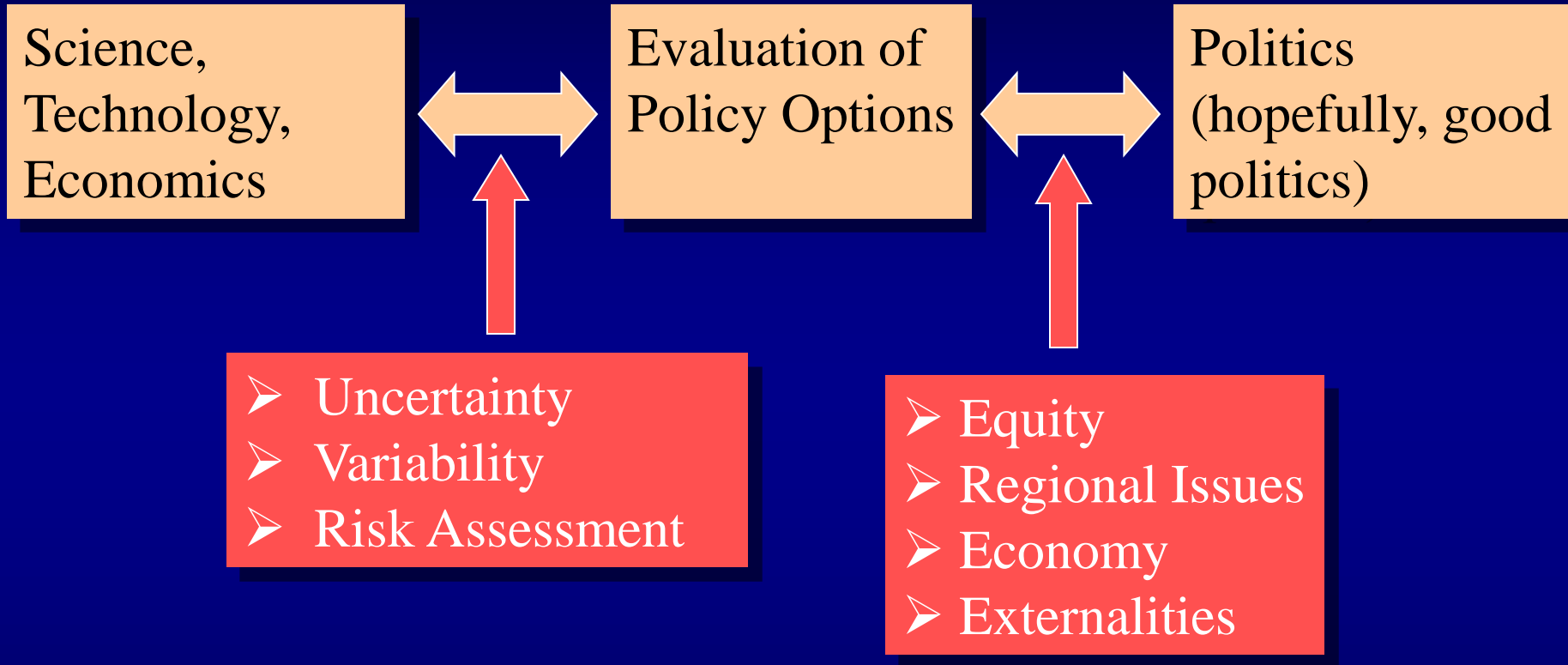
Eighteenth Annual MIT-NESCAUM Endicott House Symposium

***Policy Instruments for a New Economic Era:
Energy, Environmental and
Climate Change Challenges***

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August 23-25, 2010

Where Does Endicott Symposium Fit ?



“We will restore science to its rightful place.”

~President Obama’s Inaugural Address

THE
LONDON, EDINBURGH, AND DUBLIN
PHILOSOPHICAL MAGAZINE
AND
JOURNAL OF SCIENCE.

[FIFTH SERIES.]

APRIL 1896.

XXXI. *On the Influence of Carbonic Acid in the Air upon the Temperature of the Ground.* By Prof. SVANTE ARRHENIUS*.

I. *Introduction: Observations of Langley on Atmospheric Absorption.*

A GREAT deal has been written on the influence of the absorption of the atmosphere upon the climate. Tyndall† in particular has pointed out the enormous importance of this question. To him it was chiefly the diurnal and annual variations of the temperature that were lessened by this circumstance. Another side of the question, that has long attracted the attention of physicists, is this: Is the mean temperature of the ground in any way influenced by the presence of heat-absorbing gases in the atmosphere? Fourier‡ maintained that the atmosphere acts like the glass of a hot-house, because it lets through the light rays of the sun but retains the dark rays from the ground. This idea was elaborated by Pouillet§; and Langley was by some of his researches led to the view, that "the temperature of the earth under direct sunshine, even though our atmosphere were present as now, would probably fall to -200° C., if that atmosphere did not possess the quality of selective

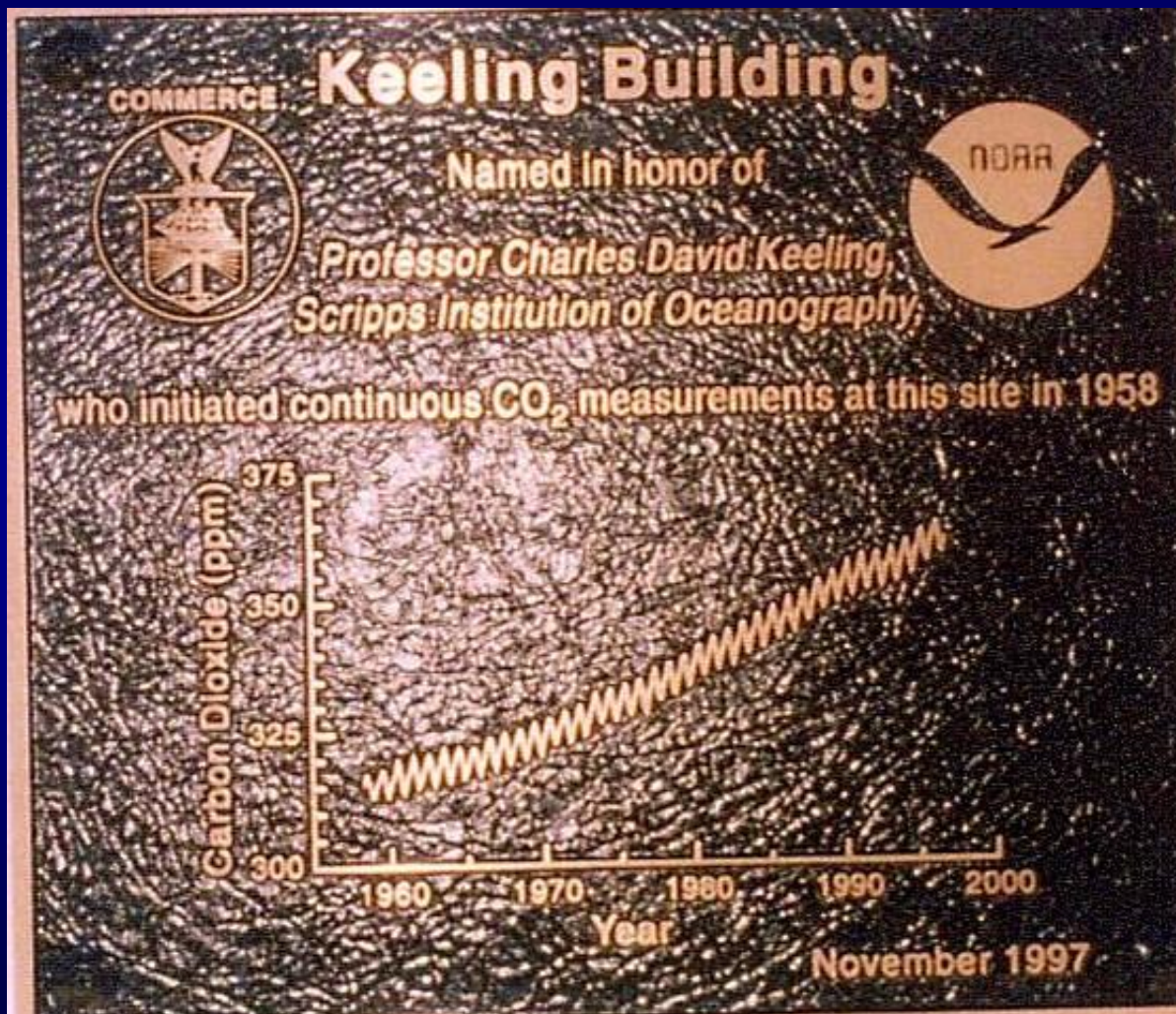
* Extract from a paper presented to the Royal Swedish Academy of Sciences, 11th December, 1895. Communicated by the Author.

† 'Heat and Mode of Motion,' 2nd ed. p. 405 (Lond., 1865).

‡ *Mém. de l'Ac. R. d. Sci. de l'Inst. de France*, t. vii. 1827.

§ *Comptes rendus*, t. vii. p. 41 (1838).

**Keeling Curve at Keeling Building (11,000 feet, Mauna Loa, Hawaii):
316 ppm in 1959, 379 ppm in 2005, 389 ppm in 2010; (500 ppm expected
in mid-century (exceeds by far the natural range
over the last 650,000 years (180 to 300 ppm)))**



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STORMS OF MY GRANDCHILDREN

THE TRUTH ABOUT THE
COMING CLIMATE CATASTROPHE
AND OUR LAST CHANCE TO
SAVE HUMANITY

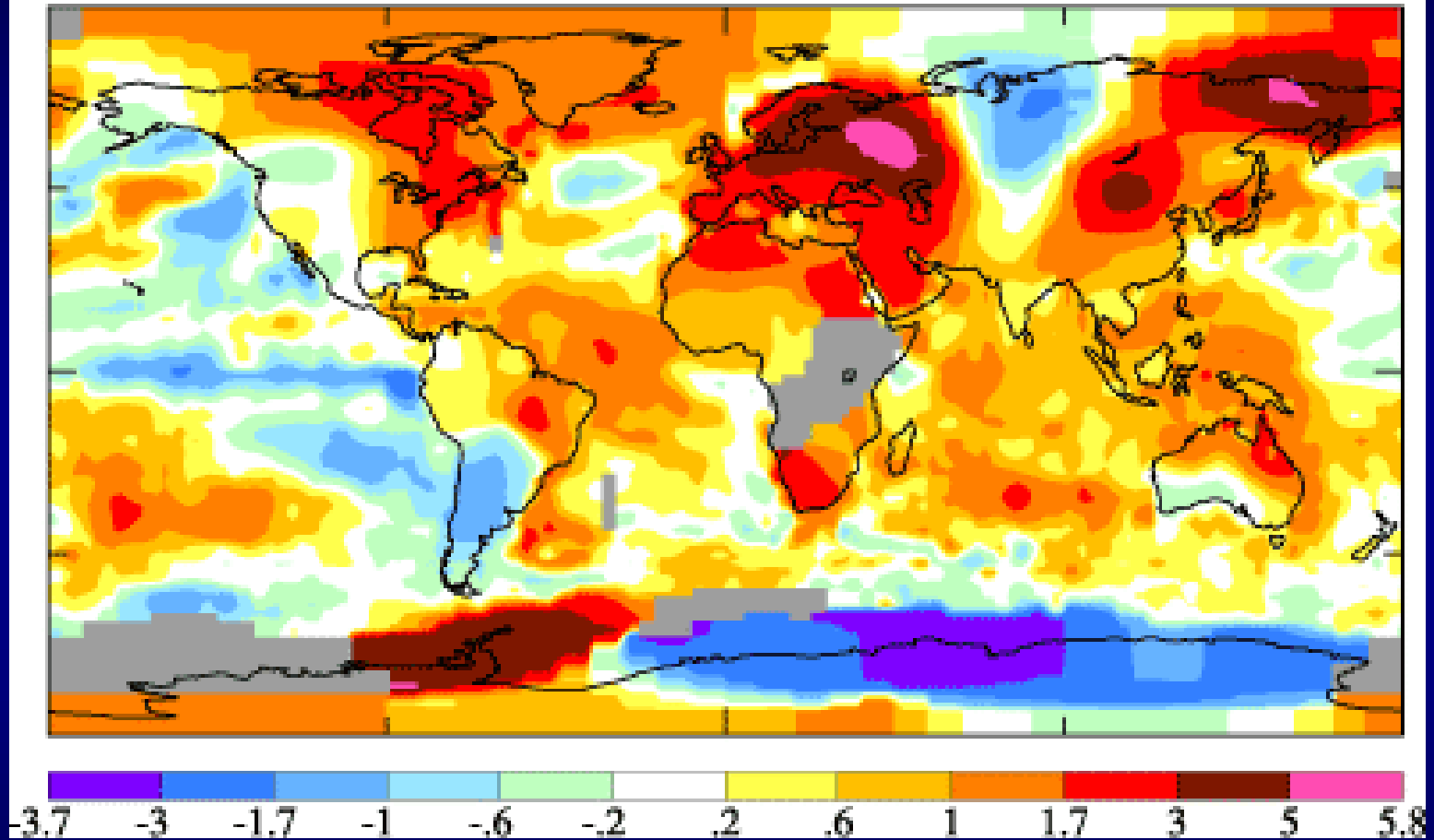
JAMES HANSEN

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July 2010 Surface Temperature Anomaly (°C)

[Base Period: 1951-1980]

.55



Source: NASA GISS

And then, just three weeks ago:

- A letter, dated August 2, 2010, from the State of Texas to the EPA Administrator, Ms. Lisa Jackson, jointly signed by the Attorney General of Texas and the Chairman of Texas Commission on Environmental Quality, regarding the potential control of CO₂ emissions from industrial sources, states:
- “...Notably absent from your rules is any evidence that they would achieve specific results; in fact, you assiduously (and correctly) avoid ascribing what environmental benefit may be achieved by mandating permits to emit a uniformly distributed, trace constituent of clean air, vital to all life, that is emitted by all productive activities on Earth.”

Our Two Keynote Speakers

- Dr. John Deutch, Institute Professor, Massachusetts Institute of Technology
 - *“Directions in Energy Policy for the United States”*
- Ms. Mary Nichols, Chair, California Air Resources Board
 - *“AB32, The California Global Warming Solutions Act: A New Set of Policy Tools for Addressing Difficult Environmental, Energy, and Transportation Problems”*