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INTER-OFFICE CORRESPONDENCE

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TO	REFERENCE
Dr. E. E. David, Jr.	SUBJECT
FROM	
Henry Shaw	CO_2 Position Statement

In case the issue comes up at the San Francisco Symposium, attached is a brief summary of our current position on the CO_2 Greenhouse effect.

HS:ksc
Attachment

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PRELIMINARY STATEMENT OF EXXON'S POSITION ON THE GROWTH OF ATMOSPHERIC CARBON DIOXIDE

Position:

There is sufficient time to study the problem before corrective action is required.

- An indication of the average global temperature increase due to CO_2 will not be measurable above normal climatic fluctuations (noise) until about 2000.
- Effective energy conservation and high price for fossil fuels over the last few years have now delayed the projected doubling time of CO_2. We estimate now that the doubling time is about 100 years.
- This permits time for an orderly transition to non-fossil fuel technologies should restrictions on fossil fuel use be deemed necessary.

Synthetics Impact:

There is no reason to stifle or halt development of synthetics industry.

- Impact of synthetics on doubling time is very small (4%/yr average synthetics growth rate reduces doubling time by only 5 years = 15 MB/D synthetics in 2010).
- Coal liquids contribute about 100% more CO_2 than burning coal directly; shale oil about 50% more.

Background:

- Average atmospheric CO_2 increased 7% since 1957 (315 to 338 ppm). We project CO_2 will reach about 380 ppm by 2000.
- Atmospheric CO_2 will double in 100 years if fossil fuels grow at 1.4%/a.
- $3^{o}C$ global average temperature rise and $10^{o}C$ at poles if CO_2 doubles.
  - Major shifts in rainfall/agriculture
  - Polar ice may melt
- U. S. Government conducting 10-year study at 10M$/a to reduce large scientific uncertainties and recommend appropriate energy policy.
- ER&E contributing to the research effort by monitoring atmospheric and oceanic CO_2 from a tanker.