

1999 - ~\$10/b

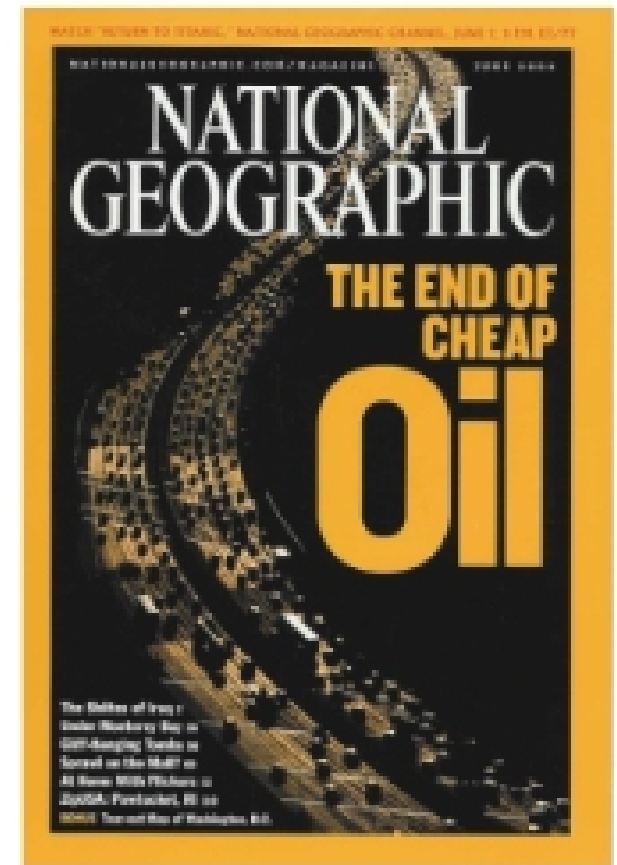
# Peak Oil and Climate Change

AS222d

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2008 - ~\$147/b

## IEA World Energy Outlook - Nov 2008 (NEW)

“The world’s energy system is at a crossroads. Current global trends in energy supply and consumption are patently unsustainable — environmentally, economically, socially. What is needed is nothing short of an energy revolution.”

with special acknowledgement to David Rutledge (Cal Tech)

## Conclusions

Evidence is strong suggesting that we are reaching the time when the supply of fossil fuel energy (oil + gas + coal) will not meet the demand.

Peak Oil has occurred or will occur soon.

Why? existing oil fields are declining at ~5-7%  
New discoveries are not keeping up.

Coal Reserves may be significantly less than assumed by the IPCC.

Implication - For the way we live (The End of Suburbia)  
- For CO<sub>2</sub> Production and Global Warming

We know enough to see that Resource Limitation  
needs to be an IPCC Scenario

## Background geology:

Source rocks (Marine Carbon - plankton),  
Migration from source rocks to reservoir rocks  
Oil and Gas Traps

