analogy, according to Shrader, suggests that "science fares best and the chances for progress are greatest" when society nurtures a broad range of research efforts and allows them to stand or fall on their merits.

RESOURCES & ENVIRONMENT

Energy Taxes at Cross Purposes

"Nonneutral Features of Energy Taxation" by William E. Morgan and Dennis Olson, in *Natural Resources Journal* (Oct. 1980), School of Law, University of New Mexico, Albuquerque, N.M. 87131.

Washington and the states seem to be working at cross purposes on energy matters. The federal government gives oil, natural gas, coal, and uranium producers tax breaks that are the envy of other industries, in order to speed domestic energy production. But most states levy special charges for fuel extraction, report Morgan and Olson, economists at the University of Wyoming and Texas Tech, respectively.

Federal tax incentives to domestic energy firms vary. A percentage depletion allowance exempts from taxation a portion of the resource extracted. Though the major oil companies lost their percentage depletion break in 1976, the independent oil producers (with a 22 percent allowance limited to 1,200 barrels a day) and miners of coal (with 10 percent), shale oil (15 percent), and uranium (22 percent) still qualify. A second exemption, the cost depletion allowance, is available to all extractors and is based on the ratio of fuel withdrawn to retrievable reserves left. (Eligible companies may choose between percentage and cost depletion.) Other federal tax benefits in the energy field include the writing off of "intangible" oil and gas drilling costs (e.g., lease payments) and of hard mineral exploration and development costs.

But state governments heavily tax extraction at the wellhead and mine mouth, primarily to raise revenue. Fifteen states impose "severance" fees on coal, ranging from 2 cents per ton in Arkansas to 85 cents per ton in North Dakota. Montana demands a steep 30 percent of gross value. State coal taxes added up to $192 million, nationwide, in 1978. By contrast, the 25 states that tax oil and gas raked in $2 billion that year. Oil tax rates varied from a penny per barrel in Idaho to 45 cents per barrel in New Mexico. Louisiana takes the highest share of gross value—12.5 percent. State natural gas taxes range from 2 to 10 percent of gross value.

Washington is abandoning its "live and let live" posture. The federal government has successfully challenged Louisiana's "first use" tax of 7 cents per thousand cubic feet on natural gas sold outside the state and is suing Montana, charging that its 30 percent coal tax represents unconstitutional interference in interstate commerce.