

the U.S. Department of Energy sponsored this report on gas minimization and utilization. In this report, the following waste gases are reviewed: toluene, xylene, ammonia, methanol and methane. For each gas its production, industrial and consumer end-use, emissions, market factors and current and potential R&D efforts are discussed.

The five gases discussed in this report are high-volume industrial products with an annual production of approximately 750 billion pounds. Waste gas emissions occur for numerous sources with end-use accounting for most emissions. Energy losses via emissions approaches 325 trillion BTU in 1987 through emissions of 14 billion pounds of gases. The major factors (the report states) that will affect future emissions are changing regulations and the outlook for end-use. The report contains a plethora of data on the above-noted areas with almost 40 tables and charts.

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*Energy and the Environment*, by J. Dunderdale (Ed.), Royal Society of Chemistry, Cambridge, UK, 1990, ISBN 0-85186-647-6, 322 pp., £47.50.

This book contains 18 papers presented in an April 1990 symposium held at the University of Leeds (UK) under the aspects of the Royal Society of Chemistry. Global warming, acid deposition and the impact of nuclear power production were paramount themes in the conference.

The opening paper discusses energy production and its relation to global warming. The potential contribution of renewable resources (wind, sun, tide) vis-à-vis current (fossil) and future potential (nuclear) power are discussed. Education of the public is stressed, with the view of shifting public acceptance to nuclear energy production.

The other papers fall into several groups:

1. Chemical interaction of gaseous and vaporous emissions from all energy producing and using processes in the atmosphere and biosphere (papers 2-5)
2. Pollutants arising and control measures adopted at each stage in the production of nuclear power from mining to generation, including waste disposal, fuel reprocessing accidental release and decommissioning (papers 6-10)
3. Fossil fuel processes (papers 11-12)
4. European environmental legislation governing energy production and use (papers 14-16)
5. Conservation with alternative energy sources (papers 17 and 18)

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