NOTE	POPULATION
NOTE	
A	POP.K*CLIP(POP2,POP1.K,TIME.K,2PGT)
A	POP1.K=POPI*EXP(GC*(TIME.K-1900))
c	POPI=1,65E9
č	GC=,012
c	POP 2=4E9
C	ZP(7T=2500
NOTE	25.01-2000
	INDUSTRIAL CAPITAL
MOTE	INDUSTRIAL CAPTIAL
NOTE	IC.K=IC.J+(DT)(ICIR.JK-ICDR.JK)
L	IC.K=IC.J+(DT)(ICIR.JA-ICDR.JA) IC=ICI
14	
C	ICI=2.1E11 ICIR.KL=(IO.K) (1-FIOAA-FIOAS-FIOAC)
R	PIOAA*, 12
C	FIGAS=.12
c	
	FIGAC=.43 ICDR.KL=IC.K/ALIC
R	
C	ALIC=14
NOTE	
NOTE	INDUSTRIAL OUTPUT
NOTE	
A	IO.K=(IC.K) (1-PCAOR.K)/ICOR
C	ICOR=3
A	IOPC.K=IO.K/POP.K
NOTE	
NOTE	CONTROL CARDS
NOTE	
N	TIME=1900
C	PYEAR=1975
SPEC	DT=1/PLTPER=5/LENGTH=2100
PLOT	NRFR=N,FCAOR=F(0,1)/IC=C(0,4E13)/
X	IO=O(0,1E13)/POP=P(0,1.6E10)
NOTE	
NOTE	PARAMETER CHANGES FOR THE RESOURCE SECTOR RUNS
NOTE	
RUN	FIGURE 5-25: RESOURCE SECTOR STANDARD RUN
C	NRI=2E12
RUN	FIGURE 5-26: DOUBLE RESERVES
7	PCAOR2T=1/.3/.1/.065/.06/.055/.05/.05/.05/.05/.05
RUN	FIGURE 5-28: COST-REDUCING TECHNOLOGIES
C	NRUF2=.25
RUN	FIGURE 5-29: RESOURCE-CONSERVING TECHNOLOGIES
C	2PGT=1975
T	PCAOR2T=1/.3/.1/.065/.06/.055/.05/.05/.05/.05/.05/.05
c	NRUF2=.25
RUN	FIGURE 5-30: 2PG AND NEW TECHNOLOGIES
21000	

Ayres and Kneese 1971	Ayres, R. U., and A. V. Kneese. "Economic and Ecological Effects of a Stationary Economy." Annual Review of Ecology and Systematics 2 (1971).
Barnett and Morse 1963	Barnett, H. J., and C. F. Morse. Scarcity and Growth. Baltimore: Johns Hopkins University Press for Resources for the

	Future, 1963.				
Behrens 1971	Behrens, William W. "The Dynamics of Natural Resource Utilization." Paper presented at the 1971 Summer Computer				

irooks 1967	Simulation Conference, July 1971, Boston, Mass., sponsored by the Board of Simulation Conferences, Denver, Colorado.
	Brooks, D. B. "The Lead-Zinc Anomaly." Society of Mining

	Engineering Transactions, June 1967.
Bureau of Mines 1970	U.S. Bureau of Mines. Mineral Facts and Problems, 1970.
	Washington, D.C.: Government Printing Office, 1970.

Cloud 1969	Cloud, Preston. "Mineral Resources from the Sea." In CRAM 1969.
CD 434 1060	Processes and Many 4 Study and Recommendations by the

RAM 1969	Resources and Man: A Study and Recommendations by the
	Committee on Resources and Man of the Division of Earth Sci
	ences, National Academy of Sciences-National Research Coun
	cil, with the cooperation of the Division of Biology and Agricul

	ture. San Francisco: W. H. Freeman, 1969.					
ergy Study Group 1965	United States. Energy Study Group. Energy Research and D velopment and National Progress. Washington, D.C., 1965.					

Forrester 1971	Forrester, J. W. World Dynamics. Cambridge, Mass.: Wright Allen Press, 1971.

Hubbert 1967	Hubbert, M. K. "Degree of Advancement of Petroleum Explo
	ration in the United States." Bulletin of the American Associa
	tion of Petroleum Geologists 51 (1967).

Lansberg et al.	1963	Lansberg,	H.	L.,	et	al.	Resources	in	America's	Future
Daniel B.		Raltimore:	Lohn	e Ho	mkir	ns I	Iniversity P	ress.	1963.	

Lovering 1969	Lovering, T. S. CRAM 1969.	"Mineral	Resources	from	the	Land."	1

Materials Policy	Commission 1952	Materials	Policy	Commission	. Resources	for	Freedom
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Washington	, D.C.:	Government	Printing Office,	1952	

Meadows 1970	Meadows, D. L. The Dynamics of Commodity Production Cy-
	cles. Cambridge, Mass.: Wright-Allen Press, 1970.

Minerals Yearbook 1970	United States, Bureau of Mines, Minerals Fearbook,
	Washington, D.C.: Government Printing Office, 1970 (and pre-

aill 1973	Naill, R. F. "Discovery Life Cycle of a Finite Resource: A
	Case Study of U.S. Natural Gas." In Toward Global Equilib-
	rium: Collected Papers, edited by Dennis L. Meadows and
	Donalla H. Mandoner Cambridge Mass - Wright, Allen Press

	1973.						
NCMP 1972	United States, National Commission on Materials	Policy.					

NCMP 1972	Towards a National Materials Policy: Basic Data and Issues.
	Interim report. Washington, D.C : Government Printing Office,

	April 1272.	
NPC 1971	National Petroleum Council Committee on U.S. Energy Out	

NPC 1971	National Petroleum Council Committee on C.S. Energy Co
1410 1771	look. U.S. Energy Outlook: An Initial Appraisal, 1971-1985
	Vol. 1. Washington, D.C.: National Petroleum Council, 1971.
	Vol. 1. Washington, D.C., National Ledoleum Council, 1971.

REFERENCES

Adelman, M. A. "Economics of Exploration for Petroleum and Adelman 1970 Other Minerals." Geoexploration 8:131-150.

American Gas Association. Gas Facts, 1970. New York, 1970. AGA 1970 Annual.

American Metal Market Co. Metal Statistics 1970. New York: AMM 1970

Fairchild Publications, Inc., 1970. API 1967 American Petroleum Institute, Independent Petroleum Associa-

tion of America, Mid-Continent Oil and Gas Association. Joint Association Survey of Industry Drilling Costs. 1959-1967 eds.