

Contents

Acknowledgement	vii
Conservation Commission	ix
Study Groups	xi
Acknowledgements	xiii
World energy perspective	1
1 Digest	5
Scope of Commission Report	7
Availability of primary energy resources	8
Energy demand	11
Energy conservation	17
Strategies	20
2 Energy resources	29
Summary	29
Oil resources	35
Gas resources	50
Coal resources	65
Uranium resources	85
Hydraulic resources	101
Unconventional energy resources	111
3 Energy conservation	135
Defining energy conservation	135
Ways and means	136
Problems and limits	144
The future conservation potential	145
Conclusions	148
4 Research, development and demonstration	151
Knowledge, the basic resource	151
R, D & D, an organized pursuit of knowledge	152
R, D & D and this Report	153
Fossil fuels	158

Nuclear energy	166
Renewable resources	175
Wiser use of energy	178
Conclusion	187
5 Energy demand	189
Forecasting energy demand	192
Trend extrapolation	193
Models	195
The Cavendish report	197
Discussion	203
An Alternative Scenario	206
Appendices 1–4	211
6 Supply strategies	221
The problem: rising demand, declining production of oil and natural gas	223
Energy demand and conservation	223
Primary-energy production	226
Environmental constraints	228
Oil demand and inter-fuel substitution	229
Secondary energy — synthetic fuels and electricity	233
Energy supply — a matter of time	234
Energy economics	241
Towards a sensible energy policy	244
Appendices 1–3	247
Glossary of terms and abbreviations	253
Conversion factors	260
Index	263

