

Contents

Introduction	5
1. Nature and Environment	7
1.1 Nature	7
1.2 Environment	11
1.3 Getting Knowledge about Nature and Environment	17
2. Nature, the Environment and Their Protection as a Problem of Economic Analysis	23
2.1 Introducing Key Terms	23
2.2 Natural Goods and Property Rights	30
2.3 Human Environmental Needs, Values and Interests and their Economic and Political Consequences	35
2.4 Approaches to Analytical Evaluation of Environmental Quality	40
3. Economic Damage from Environmental Degradation	48
3.1 Understanding Economic Damage that Results from Environmental Degradation	48
3.2 Importance of Quantification of Economic Damage from Environmental Degradation	53
3.3 Path of Understanding and Quantification Economic Damage from Environmental Degradation	57
3.4 Methods of Quantification of Economic Damage from Environmental Degradation	63
4. Environmental Protection Costs and Expenditures and Their Effectiveness	78
4.1 Technological Solutions and Projects in Environmental Protection	78
4.2 Environmental Protection Costs and Expenditures	81
4.3 Concept of Gross and Net Control Costs	86
4.4 The Effectiveness of Environmental Protection Projects	92
5. Multicriteria Analysis of Total Environmental Quality	106
5.1 Stages of Multicriteria Environmental Quality Analysis	107
5.2 Multicriteria Evaluation of Quality of Living in a City – Teaching Case	116
6. Economically Optimal Behavior of a Single Polluter and Types of Environmental Policy Tools	128
6.1 Economically Optimal Behavior of Single Polluter	129
6.2 Types of Tools of Environmental Policy for a Single Polluter	136

7. Tools of Environmental Policy	143
7.1 Long-term Administrative Tools of Environmental Policy	145
7.2 Mid-term and Short-term Administrative Tools of Environmental Policy	149
7.3 Coase's Idea and Other Private Solutions to Environmental Problems	151
7.4 Pollution Permit Trading	156
7.5 Environmental Taxes, Charges and Financial Support	161
7.6 Voluntary Approaches and Agreements in Environmental Policy	166
7.7 Negotiations Between the Authority and Polluters Under Information Asymmetry Using Economic Tools	171
8. Macroeconomic Consequences of Environmental Problems	178
8.1 Economic Indicators of Environmental Problems on Macroeconomic Level	178
8.2 Model of Optimal Environmental Quality on the Macroeconomic Level	181
8.3 Environmental Quality and Economic Development	190
8.4 Macroeconomic Impacts of Environmental Policies	192
9. History of Czech Environmental Policy	196
9.1 A Brief Introduction to the History of the Czech Nation	196
9.2 Initial Pro-environmental Steps on Modern-day Czech Territory	198
9.3 The Independent Czechoslovak State and its Resource and Environmental Policy Between the First and Second World Wars	199
9.4 Communist Period of Government in Former Czechoslovakia – Domestic and International Environmental Policies	201
9.5 Development of Environmental Policy After 1989	203
Conclusion	207
Notes	208
List of pictures	209
List of tables	211
Index	212
References and other selected literature	218