Table of Contents 9

TABLE OF CONTENTS

1 INTRODUCTION	19
2 SWOT ANALYSES	23
2.1 THE CZECH REPUBLIC	26
2.1.1 Basic Information	27
2.1.2 Natural Gas Supplies and the Most Important	
Companies in the Gas Sector	31
2.1.3 Underground Natural Gas Storage	35
2.1.4 Natural Gas Transit Position of the Country	38
2.1.5 Under Construction and Planned Transit Projects	38
2.1.6 Regulatory Framework of the Gas Industry	
2.1.7 2020 Demand Forecast	
2.1.8 Conclusion	47
2.1.8.1 Evaluation of the Position of Natural Gas	
in the Czech Republic	
2.1.8.2 Evaluation of National Characteristics	
2.1.8.3 SWOT Analysis of the Czech Gas Sector	
2.2 SLOVAKIA	52
2.2.1 Basic Information	53
2.2.2 Natural Gas Supplies and the Most Important	
Companies in the Gas Sector	
2.2.3 Underground Natural Gas Storage	
2.2.4 Transit Position of the Country	
2.2.5 Under Construction and Planned Transit Projects	
2.2.6 Regulatory Framework of the Gas Sector	
2.2.7 Demand Forecast for 2020	
2.2.8 Conclusion	
2.2.8.1 Evaluation of the Position of Natural Gas in Slovakia	
2.2.8.2 Evaluation of National Characteristics	
2.2.8.3 SWOT Analysis of the Gas Sector in Slovakia	71

2.3 POLAND	
2.3.1 Basic Information	73
2.3.2 Natural Gas Supplies and the Most Important	
Companies of the Gas Sector	
2.3.3 Underground Natural Gas Storage Facilities	
2.3.4 Transit Position of the Country	
2.3.5 Under Construction and Planned Transit Projects	
2.3.6 Regulatory Framework of the Polish Gas Sector	
2.3.7 Demand Forecast for 2020	93
2.3.8 Conclusion	
2.3.8.1 Evaluation of the Position of Natural Gas in Poland	
2.3.8.2 Evaluation of National Characteristics	95
2.3.8.3 SWOT Analysis of the Polish Gas Sector	97
2.4 HUNGARY	98
2.4.1 Basic Information	99
2.4.2 Natural Gas Supplies and the Most Important	
Companies of the Gas Sector	101
2.4.3 Underground Storage Facilities	107
2.4.4 Country's Position in the Gas Transit	108
2.4.5 Under Construction and Planned Transit Projects	109
2.4.6 Demand Forecast for 2020	113
2.4.7 Conclusion	113
2.4.7.1 Evaluation of the Position of Natural Gas in Hungary	113
2.4.7.2 SWOT Analysis of the Hungarian Gas Sector	
3 SCENARIOS OF TRANSIT INFRASTRUCTURE AND	
ANALYSIS OF THEIR IMPACTS ON THE V4 COUNTRIES	117
3.1 Current Situation on the European Gas Market	118
3.2 Main Trends on the European Natural Gas Market	119
3.3 Production Areas: Current State and Perspectives	122
3.3.1 EU and Norway	
3.3.2 Russia (PNG)	123
3.3.3 North Africa (PNG)	131
3.3.4 Central Asia (and Irag)	136

Table of Contents 11

3.3.5 LNG	138
3.3.6 The Central European Gas Hub in Baumgarten (CEGH)	145
3.4 The Methodology of MEOS	147
3.5 Methodology of Indexes	150
3.6 Supply Scenarios (2020)	152
3.7 Demand Scenarios (baseline and high demand)	154
3.8 Infrastructure Scenarios	154
3.8.1 Characteristics of Trans-Regional Infrastructure	
for the Reference Scenario (1)	156
3.8.2 Characteristics of the Trans-Regional Infrastructure	
for Scenarios 2-5	162
3.8.2.1 Nord Stream	
3.8.2.2 Nabucco	
3.8.2.3 South Stream	174
3.8.3 Characteristics of Trans-Regional Infrastructure for	
Scenario 6: Low-price LNG and North-South Gas Corric	dor 177
3.9 Outcomes of the Analysis: MEOS Simulation	
and Index Evaluation	
3.9.1 Infrastructure Scenario 2: Nord Stream	189
3.9.1.1 MEOS Simulation	
3.9.1.2 Evaluation of Indexes	
3.9.2 Infrastructure Scenario 3: Nord Stream and Nabucco	194
3.9.2.1 MEOS Simulation	
3.9.2.2 Evaluation of Indexes	
3.9.3 Infrastructure Scenario 4: Nord Stream and South Stream	
3.9.3.1 MEOS Simulation	
3.9.3.2 Evaluation of Indexes	203
3.9.4 Infrastructure Scenario 5: Nord Stream, Nabucco	
and South Stream	
3.9.4.1 MEOS Simulation	
3.9.4.2 Evaluation of Indexes	210
3.9.5 Infrastructure Scenario 6: Low-price LNG	
and the North-South Gas Corridor	
3.9.5.1 MEOS Simulation	212

3.9.5.2 Evaluation of Indexes	215
3.9.6 Comparison of All Scenarios	217
3.9.6.1 Comparison of the Indexes for All Scenarios	217
3.9.6.2 Conclusion	220
3.9.6.3 Evaluation of Scenarios: Indexes	222
3.10 Conlusion	223
4 THE EU AND REPRESENTATION OF CZECH ENERGY INTER	RESTS 225
4.1 Transit Projects and Their Influence on the Interests	
and Positions of the EU	225
4.2 European Energy Policy (EEP)	233
4.2.1 Dimension of the Common Energy Market	233
4.2.2 Environmental Dimension of the EEP	237
4.2.3 External Dimension of the Energy Policy	240
4.3 EU Energy Policy after the Treaty of Lisbon	245
4.3.1 Previous Energy Arrangements at the EU Level	
4.3.2 Energy in the Treaty of Lisbon	247
4.3.3 Conclusion	249
4.4 Current Development in the EEP	250
4.4.1 ENERGY 2020 – A Strategy for Competitive,	
Sustainable and Secure Energy	251
4.4.2 Legislation Related to Construction and Financing	
of the Networks	
4.4.3 Financial Perspective 2014 – 2020	257
4.5 Furthering Czech Energy Interests	257
4.5.1 Czech Energy Interests	258
4.5.2 European Dimension of Czech Energy Interests	260
4.6 Efficiency of the Representation of Czech Interests	
at EU Level	263
4.6.1 Structure of Bodies Furthering Czech Energy	
Interests in the EU	264
4.7 Conclusion	266

Table of Contents 13

5 CONCLUSION TO THE RESULTS OF THE STUDY AND FINAL RECOMMENDATIONS	269
5.1 Scenarios. Their Impact on the Czech Republic (V4) and their Ability to be Pushed Through within the EU 5.1.1 Evaluation of the Scenarios: Economically Rational Gas Flows Through the V4 (In 2020) 5.1.2 Evaluation of Scenarios: Indexes	272
5.2 The Dimension of the European Union and Its Energy Policy	280
SUMMARY	283
BIBLIOGRAPHY	287
Swot Analysis	
Czech Republic	287
Slovakia	
Poland	297
Poland Hungary	297
Poland Hungary Scenarios of Transit Infrastructure and Analysis	297 298
Poland Hungary Scenarios of Transit Infrastructure and Analysis of their Impacts on the V4 Countries	297 298 300
Poland Hungary Scenarios of Transit Infrastructure and Analysis	297 298 300