

# **Environmental, Land, Community and Social Overview**

**Baku-Tbilisi-Ceyhan Pipeline Project  
May 2003**

A summary of all of the actions that have been taken and are planned, in relation to the environmental, land, community and social issues faced by the pipeline project.



**Prepared by csr network**

# CONTENTS

## Page No

### GLOSSARY

1.0	The BTC Project	1 - 3
1.1	Project synopsis	1
1.1.1	The pipeline project	1
1.1.2	Why build a pipeline?	2
1.2	Equity participation in the project	2
1.3	Purpose and structure of this document	3
2.0	Purpose and Benefits of the Project	8
	<i>Summary</i>	8
2.1	Regional socio-economic background	9
2.1.1	The economies of Azerbaijan, Georgia and Turkey	9
2.1.1.1	Overview	9
2.1.1.2	Foreign Direct Investment	9
2.1.1.3	The role of International Financing Institutions	10
2.1.2	Society	10
2.1.2.1	Overview	10
2.1.2.2	Poverty and vulnerability	11
2.2	Purpose of the project	11
2.3	Economic and social benefits	12
2.3.1	Overview	12
2.3.2	Oil and gas revenues	12
2.3.2.1	Alleviation of poverty	13
2.3.3	Employment and procurement	13
2.3.4	Additional benefits	14
3.0	Challenges to Developing Caspian Oil	15
	<i>Summary</i>	15
3.1	Environmental	17
3.1.1	Geography and geohazards	17
3.1.2	Biodiversity	17
3.1.2.1	Habitats at risk	17
3.1.2.2	Legacy of Environmental Degradation	17
3.1.3	Global warming	18
3.1.4	Cultural Heritage at risk	18

# CONTENTS (continued)

	<b>Page No</b>
3.2 Community	18
3.2.1 Affected communities	18
3.2.1.1 Poor existing services	19
3.2.1.2 Managing expectations	19
3.2.1.3 Previous experiences of pipeline construction	19
3.2.1.4 Domestic energy	19
3.3 Social/economic	20
3.2.1 Regional conflict	20
3.2.1.4 Politics	20
3.2.2 Oil Wealth	20
3.2.3 Corruption	21
3.2.4 Human Rights	21
3.3.4.1 Security	21
3.2.5 Legal Framework	22
4.0 Project alternatives	23
<i>Summary</i>	23
4.1 Conceptual development	24
4.1.1 The 'no development' option	24
4.1.2 Development of the concept	25
4.2 The selected pipeline option	28
4.3 Project description	30
4.3.1 Overview	30
4.3.2 Construction	33
4.3.3 Reinstatement	34
4.3.4 Hydrostatic testing	35
4.3.5 Pre-commissioning	35
4.3.6 Commissioning	36
4.3.7 Operations and maintenance	36
4.3.8 Decommissioning and abandonment	37

# CONTENTS (continued)

	<b>Page No</b>
5.0 Environmental, Land, Community and Social Issues Faced by the Project	39
<i>Summary</i>	39
5.1 Environmental issues	41
5.1.1 Introduction	41
5.1.2 Natural habitats and biodiversity	41
5.1.2.1 Habitats crossed by the pipeline	41
5.1.2.2 The most sensitive habitat resources	46
5.1.3 Protected areas	47
5.1.4 Hydrology and surface water quality	52
5.1.5 Groundwater resources	56
5.1.6 Landscape	58
5.1.7 Cultural heritage	59
5.2 Land and community issues	63
5.2.1 Introduction	63
5.2.2 Expectations and concerns of project affected communities	63
5.2.3 Management of employment expectations	66
5.2.4 Land issues	66
5.2.4.1 Land use along the pipeline route	67
5.2.4.2 Impact of the project	69
5.2.4.3 Operations Activities Potentially Affecting Land Owners and Users	71
5.2.4.4 Restrictions of use	72
5.2.5 Infrastructure and services	72
5.2.5.1 Upgrading of infrastructure	73
5.2.5.2 Increased load on existing structure	73
5.2.5.3 Unplanned disruptions to infrastructure and services provision	73
5.2.5.4 Unmet expectation of better access to energy	73
5.2.6 Health and safety of local communities	74
5.2.6.1 Accidents involving community members	74
5.2.6.2 Health impacts of construction camps	74
5.2.7 Interactions with local communities	74
5.2.7.1 Cultural issues	74
5.2.8 Nuisance from noise	74
5.2.8.1 Potential impacts	74

# CONTENTS (continued)

	<b>Page No</b>
5.3 Social economic issues	75
5.3.1 Introduction	75
5.3.2 Employment and procurement	75
5.3.2.1 Effect of the project	76
5.3.3 Community and social investment	77
5.3.4 Domestic energy	77
5.3.5 Ethical performance	78
5.3.6 Human rights	78
5.3.6.1 Vulnerable groups	78
6.0 Managing Environmental, Land, Community and Social Issues	81
<i>Summary</i>	81
6.1 Policy and governance	82
6.1.1 Introduction to legal and policy framework	82
6.1.2 National legislation	82
6.1.3 International agreements, protocols and conventions	84
6.1.4 IFI policies and guidelines	85
6.1.5 BP corporate policies	90
6.1.6 Project environmental and social goals and objectives	91
6.2 Process	92
6.2.1 Introduction	92
6.2.2 The ESIA's	93
6.2.3 Public consultation and disclosure	97
6.2.3.1 BP/BTC consultation objectives	97
6.2.3.2 HGA and IFI requirements	97
6.2.3.3 PCDPs and RAPs	98
6.2.3.4 Consultation activities	99
6.2.3.6 Disclosure activities	99
6.2.4 Responding to stakeholders	101
6.2.4.1 National governments	101
6.2.4.2 Lenders	101
6.2.5 On-going consultation	102
6.3 Performance	103
6.3.1 Design approach	103
6.3.1.1 Pipeline specifications and supporting infrastructure	105

# CONTENTS (continued)

	Page No
6.3.1.2 Marine loading facility	110
6.3.1.3 Construction materials supply	110
6.3.1.4 Construction camps, pipe yards and associated access roads	111
6.3.2 National and local-level routing	111
6.3.2.1 The unique challenge of routing in Georgia	112
6.3.2.2 Borjomi Groundwater – a site of particular vulnerability	114
6.3.3 Residual impacts and mitigation	116
6.3.3.1 Environmental	117
6.3.3.2 Soils	120
6.3.3.3 Landscape	124
6.3.3.4 Land and community	126
6.3.3.5 Social and economic impacts	133
6.3.3.6 Cultural heritage	137
6.3.4 Cumulative impacts	137
6.3.4.1 Introduction	137
6.3.4.2 Project activity	139
6.3.4.3 Projects with potentially significant interactions with BTC	143
6.3.4.4 Mitigation of cumulative impacts	149
6.3.5 Environmental risk assessment and oil spill response planning	149
6.3.5.1 Pipeline risk assessment	150
6.3.5.2 Marine terminal oil risk assessment	157
6.3.5.3 Oil spill response planning	161
6.3.6 Environmental and social management	165
6.3.6.1 Overview	165
6.3.6.2 Contractor Control Plans	166
7.0 Environmental and community investment programmes	171
<i>Summary</i>	171
7.1 Introduction	172
7.2 Project Environmental Investment Plan	172
7.2.1 Policy	172
7.2.2 Objectives and strategy	174
7.2.3 PEIP process	175
7.2.3.1 Stakeholder consultation	177
7.2.3.2 Priority biodiversity themes	177

# CONTENTS (continued)

	<b>Page No</b>
7.2.3.3 Partner and project selection	179
7.2.3.4 Management and reporting	181
7.2.3.5 Monitoring and evaluation	181
7.2.4 Transition to operations	181
7.3 Project Community Investment Plan	182
7.3.1 Policy	182
7.3.2 Objectives and strategy	182
7.3.3 PCIP process	183
7.3.3.1 Stakeholder consultation	185
7.3.3.2 Priority CI themes	185
7.3.3.3 Partner and project selection	187
7.3.3.4 Variations between countries	189
7.3.3.5 Management and reporting	189
7.3.3.6 Monitoring and evaluation	189
7.3.4 PCIP budget	190
7.3.5 Transition to operations	190
8.0 Conclusions	191
8.1 Outcomes	192
8.2 Key benefits from the project	192
8.2.1 Oil revenue	192
8.2.1 Employment and procurement	193
8.2.1 Transparency and good governance	193
8.2.1 Development of increased knowledge base	193
8.2.1 Environmental and community investment	194
8.3 Key residual issues for the project	194
8.2.1 Significant environmental impacts	
8.2.1.1 Biodiversity	194
8.2.1.2 Seismic risk	195
8.2.1.3 Landscape impacts	195
8.2.1.4 Cultural heritage	196
8.2.2 Impacts on communities	196
8.2.1.1 Disturbance	196
8.2.1.2 Land-take and compensation	196
8.2.1.3 Infrastructure	197

# CONTENTS (continued)

	<b>Page No</b>
8.2.1.4 Unmet expectations	197
8.2.3 Social and economic impacts	197
8.2.3.1 Regional conflict	197
8.2.3.2 Oil wealth	197
8.2.3.3 Corruption	
8.2.3.4 Human Rights	
8.2.3.5 Legal Framework	
8.4 The way forward	198
8.4.1 Environmental and social management during the life of the project	199
8.5 Conclusion	200
REFERENCES	201
ADDENDUM 1	202