The Baku-Tbilisi-Ceyhan Pipeline:
Oil Window to the West

Edited by
S. Frederick Starr &
Svante E. Cornell

Central Asia- Caucasus Institute
Silk Road Studies Program

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1. The Baku-Tbilisi-Ceyhan Pipeline: School of Modernity

S. Frederick Starr

More Than Engineering

Amidst the backlash caused by the Jacobins' brutality during the French Revolution, a heretofore little noticed aristocrat, the Comte Henri de Saint-Simon (1760-1825), made a breathtakingly visionary announcement. Henceforth, he declared, it would be engineers, not politicians, who would change the world. His disciples quickly proved him right. One of them, the great engineer Ferdinand de Lessups, designed and built the Suez Canal, which brought far more change to the Middle East than Napoleon's vaunted expedition to Egypt and the Holy Land. Others transformed the world from the Americas to Asia.

Since Saint-Simon's time the image of the heroic engineer, conceiving and constructing giant power dams that bring electricity to impoverished regions, linking continents with bridges, and devising communications technologies that obliterate distance, has become a commonplace in virtually all cultures of the world.

The image is powerful, but very much in need of revision as a new millennium dawns. The completion of the pipeline linking the Caspian and Mediterranean provides the perfect opportunity to update it. Not that the Baku-Tblisi-Ceyhan (BTC) Pipeline is anything less than a grand achievement of engineering. Extending for 1,760 kilometers across extremely rugged terrain, it traverses wildly divergent climatic and geological zones, many of them notable for their seismic instability. Techniques and chemical coatings that worked perfectly in one region had to be modified to suit others. Pumping stations have to lift the oil hundreds of meters and then control its descent once more to sea level. Yet most of these bold processes had been devised and mastered elsewhere. Even the vast scale of this three billion dollar project has precedents on several continents.

What sets the BTC pipeline apart is not its technology, impressive though it is, but two sets of relationships that endured from the germination of the idea to its final

completion. First, one must speak of the close correspondence that existed at all stages of the pipeline's development between the politicians, businessmen, and economists who defined the project's ends and the engineers and builders who devised the means by which those ends could be achieved. Second, and no less important, one must stress the intimate working relationship that was established between the international experts in business and technology and the three countries traversed by the pipeline and the myriad communities and millions of citizens affected by it. These relationships turned an ambitious undertaking in the hermetic worlds of business, politics and engineering into an innovative initiative in the sphere of economic, social, and civic development.

Getting to the Starting Line: BTC and Public Policy

The BTC pipeline is a child of urgent public policy imperatives, all of which were expressed initially in the subjunctive, that is, in terms of "ifs." Thus, *if* a pipeline could be built that could transport Caspian energy resources to the West it would create a critical new source of supply to vast regions that are ever more hungry for oil. Even though the total reserves of the Caspian basin pale by comparison with those of the Persian Gulf region, they are hugely important. North Sea oil gave a timely boost to the economies of northern Europe just as demand was soaring and production lagged elsewhere. Caspian oil held promise of doing the same.

Further, it was understood that *if* such a pipeline could be constructed, it would provide the newly independent states of the Caucasus and Central Asia a degree of control over the export of their most valuable commodity that they would not otherwise have. The alternative was to leave this vital export in the sole hands of the successor to the USSR, the Russian Republic, and its state-controlled monopoly, Transneft. In the post-imperial era, when many Russian politicians still dreamed of reviving their country's dominion in the Caspian basin, this would be an invitation to mischief. It would place the fragile new sovereignties under constant threat, and divert their energies from building viable independent states and free societies to non-productive geopolitical concerns.

Finally, *if* such a pipeline could run clear to the Mediterranean, it would avert what was almost universally agreed was a looming ecological disaster posed by the burgeoning transit of huge tankers through the narrow and winding Bosporus, the very heart of Istanbul.

These three "ifs" were not merely rhetorical. When the BTC was conceived, the burden of proof lay firmly on the side of anyone proposing that such a pipeline could be built. Experts in many countries garnered seemingly conclusive evidence that the cost of the project would be prohibitive, which would in turn raise the cost

of oil passing through it to exorbitant levels. Russian politicians in the Yeltsin era vehemently denounced the notion of a direct east-west pipeline independent of their control as an unwarranted curtailment of their natural rights in the South Caucasus. And some ecologists argued that the dangers arising from a large-diameter pipeline passing through the geologically unstable zones of eastern Anatolia would surpass even the threat of a tanker wreck in the Bosporus. Others, concerned with global warming, argued that the world should be curtailing the burning of hydrocarbons, not increasing it.

These concerns created a climate of profound doubt about the entire enterprise among many in both Europe and America. Then, to complicate things still further, the government of the United States, which had been approached to extend large credits to help finance the pipeline, announced that it would not support the project until it was proven that it could be built and managed in a way that made good business sense. Never mind the mounting pressure on world oil supplies, ecological dangers in the Bosporus, or concerns over the new sovereignties of some of the potential beneficiary states – Azerbaijan, Georgia, Kazakhstan, and Turkmenistan. None of these could be addressed with a new pipeline unless the venture would be profitable.

There was great wisdom in this decision, but in the short run it complicated the project. Skeptics regrouped to warn that huge overruns of construction costs would be inevitable, and that even if construction was miraculously completed within budget, there would not be enough oil to keep the big tube filled.

Thanks to these concerns, widely aired in the media, the project became a favorite target for scoffers. Critics in all the sponsoring countries attacked their leaders for wasting taxpayers' money to finance it, and within the region for not driving a hard enough bargain. Shareholders of BP and other participating firms denounced their companies' officers for being obsessed with unrealistic and naïve "pipeline dreams." As governments changed in Azerbaijan, Georgia, and Turkey, and also in Great Britain, the United States, and Norway, the pipeline could be dismissed as an ill-advised enthusiasm of the outgoing leaders. In Azerbaijan some oppositionists saw it as President Heydar Aliyev's irrational infatuation, and in Georgia it was dismissed as the pet project of former President Shevardnadze. Little by little the project was reduced to the status of an abstraction, a symbol of dubious decision-making.

During August 2000, in an effort to refocus world attention on the reality of the proposed pipeline, a group of twenty-four Americans, Azerbaijanis, British, Georgians, Swedes, and Turks under the leadership of the intrepid American journalist-writer Thomas Goltz, traveled the entire route in order to deliver the

first oil from the Caspian to the Mediterranean port of Ceyhan – by motorcycle. As they bounced along dirt roads through three countries and traversed many more linguistic and cultural zones, they captured the drama that is the essence of all great undertakings. Televised interviews with citizens of the remote towns and villages they visited revealed something that the skeptics failed to include in their dyspeptic view of the project: that those most directly affected by Baku-Tbilisi-Ceyhan welcomed it and prayed that it would be a success, not only for its sponsors but for the people of the entire region.

After several years of careful research, the international team of engineers and economists working under the consortium "BTC Pipeline Company" determined that the project could be accomplished in a manner consistent with sound business principles and with minimal environmental risk. As to Russia's concerns, all the governments involved insisted that they relied upon and welcomed the continued export of Caspian oil through Russia. They also pointed out to Moscow that Russia's own project for a pipeline from the Caspian across southern Russia to the Black Sea port of Novorossiisk was being built with the participation of western firms, notably Exxon (later ExxonMobil). In short, the BTC pipeline was not against anyone. And it was discovered that there would be enough oil for both it and Russia's project to thrive.

Such were the kinds of concerns that had to be addressed before work on the BTC pipeline could commence. At no point was the project advanced as a heroic engineering scheme a la Saint-Simon, needing no defense beyond the assertion of its visionary character. The engineers (and also the economists) were less drivers than facilitators. In the end, BTC was launched because it made good sense from the perspective of public policy in all the participating countries. Had it been otherwise, it would never have gained the strong support from all sides of the political spectrum that it achieved in both Europe and America.

"It's About More Than Oil."

It goes without saying that the Baku-Tblisi-Ceyhan pipeline is, and should be, "all about oil," as critics charge. But it is, equally, about economic, social, and civic development, not only within the individual participating countries but among them, and also between this western-most zone of Asia and the Euro-Atlantic world. This important dimension of the project was not implanted from the top down. Rather, it arose from the close working relationships that arose between the international experts in business and technology and thousands of key men and women in the three countries traversed by the pipeline. This in turn shaped the project's relation to the myriad communities and millions of citizens affected by it.

Together, these relationships broadened the project's focus far beyond the delivery of oil to include the entire sphere of economic, social, and civic development.

Development issues have loomed far larger in the BTC project than in most other such undertakings. Their centrality has meant that the *process* of designing, constructing and managing the pipeline has been no less important to the pipeline's success than the mere putting in place of the steel tube. The heart of this process has been an intensive process of consultation that has already run to several thousand meetings. Virtually anyone affected by the work has been given an opportunity to register his or her concerns. Anyone confused about how and where to do so could consult the *Citizens Guide* that BP issued and disseminated widely. An international board of experts, the "Caspian Development Advisory Panel" introduced further dimensions into the wide-ranging discussion.

In Turkey alone the project affected some three hundred villages, nearly all in the relatively backward eastern and south-central zones of Anatolia. There, as well as in Georgia and Azerbaijan, communities were not sufficiently organized to interact effectively with a large international enterprise. Therefore, the Consortium mounted a "Community Investment Program" that included assistance to villages in organizing themselves to take advantage of jobs and opportunities in everything from provisioning to sanitation.

In recent years the word "sustainable" has become a mantra of international development banks, national development agencies, and NGOs. In the process, it has lost much of its meaning. However, the need for the BTC project to meet the austere demands of the free market has imposed practical pressures on every aspect of the associated development efforts that might otherwise have been absent. Thanks to these, the changes fostered by BTC show every sign of becoming permanent. Such changes can be grouped under the following nine headings. Each pertains directly to the overall processes of development and regional integration in the South Caucasus and the broader region of which it is a part.

Nine Degrees of Development

First, BTC has pioneered in the field of risk assessment, setting a high standard for all subsequent business ventures in the region. This began with the selection of the route and extended down to every detail of the planning. Against the background of crude engineering practices during the Soviet era, this stress on calculating and managing both physical and human risk is nothing short of a revolution.

Second, BTC would never have succeeded without the development and systematic application of uniform standards of law across all three jurisdictions, i.e.,

Azerbaijan, Georgia, and Turkey. Since these standards extend from engineering principles to issues of environment, health, and safety, they, too, add up to a transforming force in all the three societies.

Third, without local support the project could not succeed. This meant above all respecting the legal and human rights of affected populations. This was all the more important because the majority of firms participating in the project were from abroad. Hence, the consortium had to conduct itself like Caesar's wife and be above reproach. Aside from the fact that this was consistent with the values of most responsible international firms today, it set a new standard in Azerbaijan and Georgia that local firms will henceforth be expected to live up to. Some issues, like land acquisition and pipeline security, were especially sensitive. Because these matters were largely settled through negotiation rather than litigation, the process educated thousands of people on how to interact effectively and fairly with large enterprises in a market economy.

Fourth, every phase of the planning and construction required the help of thousands, and at times tens of thousands, of Azerbaijanis, Georgians, and Turks. Most needed to be trained. Thanks to this, the project became a major purveyor of skills both in technical and civil areas, an educational institution whose benefits will outlive the construction of BTC and possibly BTC itself. Specialists in the development field refer to this process as "capacity building" and see it as essential to economic modernization. Ordinary folks think of it as the key to feeding their families.

Fifth, the many disputes that were bound to arise in the course of so complex a project forced the pipeline consortium into the field of conflict resolution. When necessary, it resorted to courts of law, proceeding in accordance with local practice in each country. In far more instances than were documented, differences were resolved through the customary methods with which all local inhabitants were intimately familiar. More common, however, was the use of informal grievance procedures to settle disputes. These did not preempt citizens' right to sue in a court of law, but the fact that few chose to do so attests to the effectiveness of these innovative methods for resolving conflicts. Considering that in Turkey alone there were 62,000 landowners with whom agreements on land costs and the value of lost crops had to be reached, this is no mean achievement.

Sixth, all of this was conducted under conditions of transparency that were new not only to economic life in the former Soviet states but also in many parts of the more traditional areas of Turkey. Fortunately, the provisions of the British-sponsored "Extractive Industries Transparency Initiative" were readily at hand and could be adopted as a standard. Since these were clearly set forth in the *Citizens*

Guide and other publicly available documents issued by the consortium, individuals in the three countries could invoke principles of transparency against the consortium if they deemed it necessary. Here, again, the BTC project acted as a civic educator, raising expectations and opening effective paths of action at the local and regional level that were scarcely been available to ordinary citizens before BTC. These will outlive the construction process and will doubtless be invoked as local publics seek to address the heritage of corruption that infuses much of the region.

Seventh, the BTC project opened vast new territory to the activities of non-governmental organizations in all three countries, legitimizing and greatly strengthening them in the process. The NGOs, of course, might argue that it was shortcomings in the work of the BTC Pipeline Company and its chief participating firms that forced them to take action, and that without resolute intervention by the NGOs, the project would have done more harm than good. Polemics aside, it is to the credit of BP and SOCAR (the State Oil Company of the Azerbaijan Republic) that they recognized the value of cooperating with the more responsible NGOs.

Thus, a project in Georgia funded by the Eurasia Foundation and a region-wide initiative mounted by George Soros' Open Society Institute both interacted regularly with pipeline Company officials at national and local levels. Together, they addressed matters as varied as public disclosure, human rights, preservation of archaeological sites, and local-sourcing policies in the areas of employment and procurement. And when Amnesty International in 2004 identified what it claimed was a long series of abuses committed by the pipeline's builders and their friends in government, the Pipeline Company responded not by dwelling on instances of careless research by the NGO but by entering into extensive consultation with it. The consortium's readiness to take this step strengthened the NGOs' legitimacy as a force independent of both government and business, and also encouraged responsible and constructive behavior on the part of the NGOs themselves.

Eighth, the entire process of planning and executing the pipeline project fostered levels of regional interaction and cooperation that would earlier have been inconceivable. Not only did Azerbaijan, Georgia, and Turkey have to collaborate with one another, but they had to do so as equals and not as senior and junior partners. Considering that Turkey is nearly ten times the size of its eastern neighbors and wields many times their economic might, this is an impressive achievement. In the process, each party understood that the whole of their joint endeavor was far greater than the sum of their individual contributions, and that that regional whole had to be protected at all cost. To be sure, each country vied for

advantage in the project but in the end they all opted to work for the regional benefit.

The stimulus to regional thinking will not end with the completion of the pipeline from Baku to Ceyhan. Kazakhstan has already signed an agreement to send some of its new oil westward through BTC and is building tankers to link its oilfields with Baku. Discussions regarding a possible trans-Caspian pipeline promise to extend eastward the regional cooperation generated by BTC.

Ninth, the BTC project has been, along with NATO's Partnership for Peace, the single greatest promoter of interaction between the South Caucasus and Europe. As David Blatchford shows in his essay in this volume, the BTC project chose to apply European Union standards (notably EU environmental directives) in several key areas affecting national law in the three participating states. In this process, Turkey already assumes the role of Europe's eastern outpost, as it does more systematically within NATO. This is an important part of a much larger process by which the Black Sea littoral states are being drawn closer to Europe. As it develops, this process will expand from an initial focus on security and oil transport to social and economic policies more broadly. Thus, BTC is playing a vitally important role in drawing the new Caspian states out of the generations-long isolation to which they were condemned by the Soviet Union.

Unanswered Questions

The formal commissioning of the Baku-Tbilisi-Ceyhan pipeline on 25 May 2005 in Baku marks the culmination of a work begun with the collapse of the USSR in 1991. Its completion caps a process that extended international cooperation and integration into many areas from which they had earlier been barred. This has been accomplished over a decade and a half, during which every participating country saw a change of administrations. There is much that divides prime ministers Özal and Erdogan in Turkey, Major and Blair in Great Britain, and Brundtland, Suipe, Jagland, and Bondevik in Norway, or that separates presidents Shevardnadze and Saakashvili in Georgia, Heydar Aliyev and Ilham Aliyev in Azerbaijan, and Clinton and Bush in the United States. But with respect to the BTC project, they all spoke with one voice. Surely, this demonstrates that on this important issue democratic states have proven themselves capable of taking a long-term and strategic view, notwithstanding the ebbs and flows of politics.

Yet it is too early to declare that the Baku-Tbilisi-Ceyhan project is an unqualified success. Many of the most important consequences of the pipeline's construction will become apparent only as the oil begins to flow and the revenues from its sale

reach the participating countries. Among these, several will warrant particular attention.

To what extent will Azerbaijan and Georgia avoid what Vladimer Papava in this volume terms the "paradox of plenty," in other words, the unequal distribution of revenues among the population? Azerbaijan's Oil Fund, which is modeled closely on Norway's successful prototype, holds much promise. Yet it remains to be seen whether average Azerbaijanis will feel that it serves the country as a whole and all its citizens.

Similarly, will these two countries be able to escape the problem of governmentalism which has plagued many countries enriched by revenues from state-based oil sales or transport fees? And will they succeed in immunizing themselves against the so-called "Dutch disease," which arises when oil revenues drive up the cost of inputs to the non-oil economy without the possibility of offsetting those costs through higher prices on outputs?

No less important are the international dimensions of revenues deriving from the BTC pipeline. Armenia still occupies a fifth of Azerbaijan's territory as a consequence of the disastrous war over Nagorno-Karabakh. Oil revenues flowing to the government in Baku will decisively shift the balance of power between the two countries in Azerbaijan's favor. Will Azerbaijan succeed in using this new reality in such a way as to resolve peacefully the Karabakh problem, or will the shift instead drive the two parties into a renewal of armed conflict? The challenge will be to convince Armenia of the benefits that could accrue from participating in a regional economy, and to demonstrate that these outweigh any conceivable gains that might come from prolonging the conflict in Karabakh.

Finally, what lessons will Azerbaijan's and Georgia's neighbors draw from the successful opening of the BTC pipeline? Will Russia conclude that its interests are best served by respecting the sovereignty and independence of its southern neighbors, rather than continuing its decade-long covert and overt pressures against them? Will Iran abandon its religious and cultural propaganda against Azerbaijan, and concede that a prosperous neighbor across the Araxes River poses no threat to Teheran, even if that neighbor maintains cordial relations with the West? And, finally, will energy-rich Turkmenistan, under sustained pressure from Russia's state monopolies, Transneft and Gazprom, which still control its energy exports, resolve its differences with Azerbaijan and begin exporting through the BTC route?

The answers to these questions are far from clear today. What is certain, though, is that positive outcomes will be achieved only through the same kind of coordinated and sustained effort that brought the BTC pipeline to a successful conclusion.

There are solid grounds for optimism. The opening of the Baku-Tbilisi-Ceyhan pipeline eloquently refutes the smug assertions of skeptics and doomsayers in many countries. It is a monument to what can be achieved through the exercise of persistence and tenacity on a national and international level. If those same qualities can be mobilized to address the profound changes that BTC will soon wreak in the South Caucasus, there is every reason to believe that the resulting transformations will be positive.

2. Geostrategic Implications of the Baku-Tbilisi-Ceyhan Pipeline

Svante E. Cornell, Mamuka Tsereteli and Vladimir Socor

The building of the Baku-Tbilisi-Ceyhan pipeline constitutes a strategic milestone in post-Soviet Eurasia. In the first place, the pipeline's construction will have major implications for the South Caucasus, especially as regards its role in European and World Politics. For everyone involved, within as well as in every direction from the South Caucasus, the building of the BTC pipeline reconfigures the mental map with which political observers and decision-makers look at the world. Azerbaijan and Georgia will see their futures in more direct relation to Europe through the umbilical cord that BTC constitutes. For Turkey, with its significant trade relations to Russia including the Blue Stream gas pipeline, BTC is a cause to revisit its eastern vocation even at a time when the Turkish government is less inclined to do so. This time, the Eastern vocation is not an alternative to its western vocation, but an enrichment of its European connection. For Iran, the completion of BTC gives greater weight to independent Azerbaijan as a true independent actor, effective in mounting and concluding truly significant projects. For Russia, BTC provides a further testimony to the fact that the states of the South Caucasus are independent and sovereign actors, where Russia has a natural right to influence, but not to dominate or dictate policy. For the United States and Europe, BTC provides further impetus for western involvement in the energy and security sectors of the wider Caspian basin – and indeed, proves that the lofty but near forgotten ambitions of building an east-west corridor linking Europe to Central Asia and beyond via the Caucasus are not only possible but are being realized.

Indeed, the completion of this project will have implications that affect a larger region than the South Caucasus, most importantly Central Asia. While the successful completion of BTC is a significant move toward the deepening of interactions between the South Caucasus and the Euro-Atlantic space, it constitutes a first step toward providing the lands East of the Caspian Sea with a direct connection to Europe that does not depend on former colonial overlords. There is

hence reason to eschew complacency and look ahead to the opportunities that the construction of BTC will generate.

Immediate Implications of the BTC Pipeline

The Strategic Context

As the issue of extracting and exporting the major energy resources of the Caspian sea basin arose in the mid-1990s, there was effectively a Russian monopoly on the transportation of these resources to world markets. As various export routes were considered, three major options were under consideration as far as oil was concerned: expanding the Russian system to the north, through an existing network of pipelines and railroads; the Iranian option to the South, largely through newly built pipelines; and finally, the U.S.-supported concept of multiple pipelines, that sought to prevent any actor from a monopoly over the export of the Caspian energy resources. Aside from the low-capacity pipelines to transport so-called early oil, this strategy had two major components: the Caspian Pipeline Consortium, exporting Kazakhstan's oil through Russian territory, along with the Baku-Tbilisi-Ceyhan (BTC) Main Export Pipeline for the oil resources from the Western half of the Caspian sea.

It gradually became apparent that no single country or pipeline system could handle the volumes of oil that were to be exported from the Caspian basin. There was no technical, economic or political justification for relying entirely on either a Russian, Iranian, or Caucasian Energy Corridor system to deliver Caspian hydrocarbons to markets in a safe, timely and economically sound manner. Hence it is clear that at some point and to varying degrees, all these options may become operational, in order to meet the full-scale production plans and delivery requirements of Caspian producers. Two out of the three discussed options are already established oil transportation routes with their own advantages and disadvantages. The Iranian route was once considered as the most economically effective, and the general perception is that U.S. policy towards Iran and the sanctions regime have been the major obstacles for this option. In addition to this very real problem, any Caspian resources to be transported South to Iran will end up being exported through the Persian Gulf and the Straits of Hormuz, unless a pipeline is built to deliver oil outside these Straits. About 17 million barrels of oil are exported on a daily basis through this two-mile wide channel for inbound and outbound tanker traffic, creating by far the world's most important oil chokepoint. According to the U.S. Energy Information Administration, from the current production level of 80 million barrels per day (bpd), world demand for petroleum is expected to soar by 50 percent by 2020, or by 40 million bpd. A significant share of this growth in production will come from the Gulf States themselves, which means

that volumes exported through the Straits of Hormuz will increase even without additional flows from the Caspian. In addition to that, the way to the sea through Iran is short, but transportation facilities still need to be financed. As BP officials have stated, the combined cost of the pipeline and hauling tariffs will come close to the cost of other options.

Likewise, any additional volumes transported through the Russian pipeline system will increase pressure on the Russian system itself and most importantly, on the Turkish Straits. 3 million bpd is already passing through these only half a mile wide, hard-navigated waterways. The Turkish minister for maritime affairs Ramazan Mirzaoglu told a news conference in March 2005 that the Turkish straits are already at their limits, and that the shipments of Kazakh oil from Novorossiysk by tanker could deadlock traffic in the Turkish waterways. Furthermore, while Russia seems to perceive any oil that does not end up in a pipeline system to Novorossiysk as a policy failure, this option has numerous drawbacks. Firstly, transit fees are relatively high, while oil quality suffers. For example, Azerbaijan feeds high-quality oil into the Baku-Novorossiysk pipeline, but what is exported on its behalf at Novorossiysk is lower-grade crude, costing Azerbaijan large sums in lost income. This is likely the reason that the Baku-Novorossiysk pipeline has not operated at its full capacity of 100,000 barrels per day or 5 million tons per year. While Russia has desired an expansion of the capacity to 300,000 bpd or 15 million tons per year, the pipeline has operated at less than full capacity. Finally, with a current capacity of ca. 40 million tons per year, Novorossiysk is already developing into a dangerous bottleneck, given its proximity to the unruly North Caucasus. As an easy terrorist target, any further large quantities brought to Novorossiysk can be construed as a security risk given that supply security rests in diversity of supply.

In this regard, BTC has great advantages in comparison with the other options. It will ship oil to a deep-water port in the Mediterranean, avoiding major chokepoints in transportation such as Hormuz or the Turkish straits. Exactly this advantage makes BTC a very reliable option for delivering Caspian oil to markets in a safe, timely and economically sound manner.

The Status of the Caspian Sea

A major obstacle in the development of Caspian oil resources is the status of the Caspian Sea and the division of its resources, including hydrocarbons, among literal countries. Iran is demanding that the Caspian be divided equally among the sea's five littoral states – Iran, Russia, Kazakhstan, Turkmenistan and Azerbaijan. However, in demanding that the sea be split into 20-percent shares, Tehran is unclear as to whether that means 20 percent of reserves under the sea or 20 percent of the sea's area. Russia, on the other hand, has agreed to the principle of apportioning shares based on the length of each country's coastline, an idea which

the remaining countries basically support and which Azerbaijan and Kazakhstan have supported since independence. Under Russia's proposal, Kazakhstan would end up with 29 percent, while Iran would receive about 14 percent. Russia would secure about 19 percent of the sea's area. Although dividing the sea into national sectors – as opposed to sharing resources equally – would mean Russia would not be able to profit from the larger deposits off the coast of Azerbaijan or Kazakhstan, it still has deposits in the northern Caspian. At the same time, Russia counts on profiting by transporting and processing oil from other states. In practice, Azerbaijan, Kazakhstan and Russia have bilaterally settled their maritime boundaries, implying that the northern Caspian is basically demarcated and the principle of division of the seabed of the Caspian into national sectors is basically accepted. The major obstacle to a final agreement is Iran.

The major outstanding territorial disputes exist along the Azerbaijani-Iranian and Azerbaijani-Turkmen borders of the sea. The perhaps most significant dispute is between Iran and Azerbaijan. Following its claim to 20% of the Caspian sea, Iran has claimed the Araz-Sharg-Alov field in the Southwestern Caspian, to the extent of threatening to use of force in 2001 to evict BP-owned exploration vessels, de facto killing prospects of beginning work on the field in the foreseeable future. Indeed, this Iranian action prevented Azerbaijan from beginning explorations in a field that by every standard of division of territorial waters known in international law would be clearly within the Azerbaijani zone. In addition, several fields lying between Turkmenistan and Azerbaijan, such as the Kyapaz/Serdar field, are another point of contention. The unresolved nature of the territorial delimitation of the southern Caspian is an important impediment to the development of additional Caspian resources in the longer term. However, it should be noted that Caspian development continued throughout the 1990s in spite of a high level of uncertainty regarding the eventual division of the sea, and it is likely to continue with the current, though evolving, de-facto status of the sea's division.

BTC and the East-West Superhighway

Just a brief look at the map of the broader Central Eurasian region shows how important the corridor of BTC is for this mostly landlocked region. This pipeline is an integral part and the most important pillar of the larger Transportation network – also known as the new Silk Road – running all the way from Western China and Central Asia, through the Caspian and Caucasus, across the Black Sea, and then on to ports in Ukraine, and the Mediterranean. This transportation Superhighway is designed to complement existing transport routes from Asia to Europe, including the traditional and often heavily overloaded outlets via Russia. Eventually, the goal is to create a fully integrated transportation network – including upgraded highways, pipelines, railroads, ports, ferries, fiber-optic lines, electricity

transmission lines – that will make it easier for the states of Central Asia and the Caucasus to trade not only with each other but also with Europe, the Middle East, and the rest of the world. This system has a potential to become a very important element of the network of international economic security.

But this transportation network is important not only for trade, but also for strategic and military purposes. The ports on the Black Sea and Caspian Sea, highways, railroads and air corridors provide access to the Central Eurasian inlands. The oil and gas reserves have attracted attention to the region, but subsequently the war on terrorism and Operation Enduring Freedom confirmed the strategic importance of the region for the Western interests and the need for secure access and logistics.

The first significant flow of oil through the South Caucasus started in the late nineteenth century, when Baku became a major oil city, and Batumi the largest oil export outlet in the Russian Empire. Since then, this transportation system was operational throughout the historic turmoil of the twentieth century, when Georgia and Azerbaijan briefly gained independence, then lost it to the Soviets, and regained it again at the end of the century. The new discoveries of oil and gas in the mid- and late 1990s stimulated new developments. The early oil pipeline between Baku and the especially constructed port town of Supsa is perhaps relatively minor in quantity with a capacity of 145,000 bpd, but is still a success story of the operation of this corridor. For more then six years, close to six million tons of oil per year have been flowing annually through this pipeline. The Azerbaijani and Georgian railway systems are also busy with shipments of oil and oil products from Kazakhstan, Turkmenistan and Azerbaijan, mainly through the Batumi oil terminal with a transshipping capacity of 10 million tons, which stands to be increased.

But this corridor is not just an oil corridor. The existing transportation network ships a variety of goods and commodities in and out of the Caspian and South Caucasian countries. So far there have been no major disruptions in the flow of oil or other cargos. The states of the region moreover pay particular attention to the security of the pipelines and transportation routes, and security forces have been trained specifically to respond to the crisis.

Despite the major developments and increased trade and economic ties, it was the construction of BTC that brought a qualitative difference in the development of the South Caucasus transportation system. The system had to handle unprecedented volumes of cargo for the construction phase, including equipment for production at the oil fields, as well as pipes and other construction equipment and materials. But what makes this project *strategically unique* is the fact that it directly connects oil fields in the landlocked Caspian Sea to a deep-water port in the Mediterranean,

thus creating a precedent of historic significance for generations to come. Caspian resources can now flow directly not only to Black Sea ports, but also to the Turkish port of Ceyhan with greater capabilities of access to markets.

The obvious result of the operations of BTC will be increased volumes coming from the different producers of the region, beyond the initial members of the BTC consortium. And once a reputation as a reliable transportation corridor is established, it is expected that more oil will flow through other means of transportation as well, destined mostly for Central European markets via Georgian and Ukrainian or Romanian ports.

Another significant accomplishment of the BTC development is that it was a catalyst for the development of another important project, the SCP project, connecting Baku to Erzurum in Turkey via Georgia, which will deliver 6 bcm of gas to Turkey per year under an existing gas purchase agreement. Small volumes will be delivered to Azerbaijan and Georgia, thus contributing to the energy security of those countries. The initial capacity of the gas pipeline will be 8.4 bcm per year with throughput capacity to be increased to up to 30 bcm per annum, with the potential of being connected to Turkmen producers, aiming for transporting gas to European gas markets. The Azerbaijani fields' proximity to Turkey makes its position very competitive on the Turkish and South-Eastern European markets. The natural gas connection between Turkey and Greece is currently under development, and it is to be commissioned in 2006. This connection will provide the first opportunity to ship Caspian natural gas directly to the EU, thus providing the growing market with an alternative gas supply. It should be noted that gas shipped through the SCP is significantly more economic for Europe than some of the new projected Russian gas fields. This is in fact true both for Azerbaijani gas, but also according to cost projections for Turkmenistan's gas, even considering the cost of building a Trans-Caspian pipeline.

There are several projects under consideration to ship Caspian gas from Turkey to European countries. At this stage of project design, the capacity of a planned Turkey-Greece-Italy pipeline appears to be 10-12 bcm per annum with a possible upgrade to 22 bcm. The second pipeline under consideration is from Turkey to Baumgarten with a total annual capacity of 30 bcm per annum, of which 20 bcm would be delivered to the gas hub of Baumgarten at the Slovak-Austrian border, where it connects to the Central and Western Europe transit system. The 10 bcm capacity will bring diversification of supplies to transit countries which currently depend exclusively on Russian imports. The sponsors plan to start shipments of natural gas from Turkey in 2009.

If fully materialized, the Turkmen-Azerbaijani-Georgian-Turkish-EU pipeline will be another breakthrough, similar to BTC, in the development of the South

Caucasus Transportation network. It will deliver natural gas from the Eastern and Western Caspian Sea regions to European markets, yet another engineering feat.

With those developments underway, it is expected that the South Caucasus Transportation Network will gain even greater significance in the future. The privatization and tenders for management contracts in the transportation sector in Georgia and Azerbaijan should facilitate more effective management of the elements of this infrastructure. And the competitive access to transportation means will serve as an additional incentive for commercial shippers to use this corridor, thus bringing additional business and development to the region.

BTC is a logical step in the gradual southward shift of East-West energy infrastructure. In the past several years, dramatic developments have taken place, directly affecting Russia's long term development. The entire infrastructure development in Russia has moved from the Central regions to the South, thus contributing to negative economic and demographic trends in the traditional Russian heartland. The first large project to move South was the CPC pipeline. Although CPC is on Russian territory, it is still much further South than any other large communication system in Russia. BTC illustrates even further the southward move of infrastructure southward, in this case outside Russia's territory. Yet it affects Russia, since it will potentially take volumes which could otherwise go through Russian territory. That will affect transit revenues, but strategic consequences are even more important, as it proves that oil from Central Asia, and potentially from Russia, can be transited through alternative routes. It is important to emphasize that Russia itself contributed to this shift by the political decision to keep Transneft and Gazprom as state monopolies, and to limit competitive access of the different producers to its system.

On the other hand, Turkey is likely to try to develop its own Eurasian Center of Gravity, where BTC will be the key driver for the development of North-Eastern Axis. Turkey is already becoming the natural gas transit hub, and most probably BTC and SCP will be complimented by Baku-Tbilisi-Akhalkalaki-Turkey Higway, and by Tbilisi-Akhalkalaki-Kars Railroad as well. This development will naturally increase Turkey's economic influence in Southern regions of Russia as well, particularly under the most probable scenario that Russia's strategic retreat will continue.

Implications for the Geopolitics of the Caucasus

Far from being a purely economic project, the BTC pipeline has from the start been heavily political, though it was eventually implemented because it was found to be commercially viable. The strong political character of BTC was natural, given the crucial role of energy revenues for the countries involved, most of all Azerbaijan.

Indeed, the cornerstone of the BTC project has been the near consensus in Azerbaijani society that the country's independence can only be safeguarded if the country's major resources are exported in a manner that does not provide either Russia or Iran with a stranglehold on the transportation routes, and as a result, over the flow of income to the country. For related strategic reasons, both Georgia, Turkey and the United States accorded the project a highly significant importance in their foreign policy strategies. The importance of the project for these countries is best illustrated by the fact that it has been carried out despite important and even occasionally cataclysmic changes in government in all these four states, which have never jeopardized the countries' commitment to the project.

In turn, a major implication of the BTC pipeline is to have become a real catalyst for positive strategic cooperation of the young states of the region. At a first level and in practical terms, this cooperation has included Georgia and Azerbaijan as well as Turkey. Kazakhstan has constantly been involved in the project though at a lesser intensity; while Turkmenistan could potentially benefit tremendously from joining this cooperation. Being states in search of their political and economic identities, BTC provides the participating states with a basis for their strategic role of suppliers and transit countries of the world's most important commodity: energy. Indeed, BTC brought Azerbaijan and Georgia together and stimulated them to closely cooperate with Kazakhstan. It is no exaggeration to state that BTC has stimulated the creation of both the Azerbaijani-Georgian and Turkish-Georgian strategic partnership. Indeed, the project has forced the three countries to cooperate at many levels of government from heads of state on downward in the hierarchy, and has generated numerous avenues for face-to-face contact between leaders, bureaucrats, and businessmen of these three countries. In so doing, it has strongly advanced their sense of common destiny and helped build networks, incentives, and mechanisms for the peaceful and rapid resolution of the disagreements that have occasionally arisen between and among them. More than anything, BTC has driven home the fact that in terms of their international economic and political role, Azerbaijan and Georgia form a tandem. By dint of geography and their political choice, Azerbaijan and Georgia can only function as a tandem or not at all: as a major energy corridor, as Euro-Atlantic partners, and indeed as viable nation-states, Azerbaijan and Georgia stand or fall together. This point was clearly understood by the former leadership of both countries; however, the divergent political development in Georgia and Azerbaijan since fall 2003 has somewhat weakened the conviction among their respective leaders, and among foreign observers and in particular the United States, of this tandem relationship.

The BTC pipeline is a major step in anchoring Georgia and Azerbaijan to Europe. By itself, it strengthens their economic security; and moreover, it is a sine qua non for the implementation of other projects such as the South Caucasus Gas Pipeline,

and the wider East-West transportation and communications corridor. As such, it is a crucial factor in building true sovereignty and independence for these states and enabling them to freely choose their foreign and security policy strategy and orientation. Because of its role as a centerpiece of the evolving east-west transportation and communications artery through the South Caucasus, BTC indeed functions as an umbilical cord connecting the region to Europe.

But the political stability in the Caucasus is fragile, and countries are vulnerable to external as well as internal political and security threats. The conflict over Nagorno-Karabakh between Azerbaijan and Armenia remains unresolved, leaving Armenia outside of the major regional developments. The building of BTC highlights the fact that the Nagorno-Karabakh dispute remains the main impediment to the peaceful development of the South Caucasus, making it in every party's interest to resolve the conflict, which is a necessity for the involvement of Armenia in full-scale regional cooperation, including energy transportation. But Armenia has close military ties with Russia and Russia plays an important role in the security policy of Armenia. On the other hand, both Azerbaijan and Georgia seek real economic and political freedom and independence from Russia, and see the U.S. and European countries as natural partners in the process of reaching those goals. As far as the Nagorno-Karabakh conflict is concerned, there is much speculation that BTC could destabilize the status quo by changing the balance of forces in Azerbaijan's favor, enabling it to conduct a build-up of its military forces. Indeed, this possibility exists. A first question arising from this argument is whether this alters or restores the balance of forces. Any discussion of the balance of forces between Armenia and Azerbaijan needs to account for the fact that arms worth over a billion dollars were illegally transferred to Armenia from Russia in the mid-1990s, as Russian parliamentary investigations have concluded. In this sense, should Azerbaijan use its own resources to modernize its military, this would restore the balance of forces to the situation before the Russian transfer, rather than upset the balance. A second question concerns the implications of this gradually changing balance for negotiations. Clearly, the changing balance will increase Azerbaijan's negotiating positions, which has been relatively weak since the cease-fire agreement. Without a credible military option, and with Armenia in control of the land, Azerbaijan's main asset has been the international legal recognition of the territories as part of Azerbaijan. An improved Azerbaijani economy and military could either isolate Armenia, driving it to desperation; or force an evolution in the thinking in Armenia regarding the conflict. In this sense, the changes taking place, which are only partly related to BTC, could either divide the South Caucasus further or improve the chances of resolving the situation. As will discussed below, this is to a large extent dependent on leadership.

The slowly but clearly growing understanding in the West of the strategic importance of the South Caucasus is a major political factor for regional development. Indeed, the South Caucasian Energy and Transportation Corridor plays a specific role in this process. Azerbaijan and Georgia see their future in connection to those large-scale projects and are committed to them. Both countries are closely cooperating with the West on security issues and are moving forward in the process of integration with European political, economic and security structures. Both countries are active participants of NATO's PFP program and the interest and support is growing from the EU side as well, particularly to Georgia.

Russian politicians have repeatedly made it very clear that they seek to oppose the western orientation of Azerbaijan and Georgia. Georgia in particular has formed a target of Russian pressure. Russia responds 'adequately' to every move Georgia makes towards integration into western structures. Earlier, in the beginning of the 1990s, Russia supported separatist movements in Georgia to destabilize the country, forcing it to join the Commonwealth of Independent States and accepting Russian military bases on its territory. The policy of using separatist groups for policy purposes has not stopped, far from it. Moscow continues to unashamedly back the two secessionist territories in northern Georgia, Abkhazia and South Ossetia, who wrested off Tbilisi's control in the early 1990s with Russian help. Since the Rose Revolution of 2003, Moscow's policy of using them as leverage to penalize Georgia for its pro-western policies has become increasingly barefaced. Russia first exempted these areas from a visa regime it slammed on Georgia, then accorded Russian citizenship to their citizens *en masse*. Lately, President Putin has met with the self-declared Abkhaz and South Ossetian leaders to discuss the situation 'of Russian citizens' in these areas. Russia subsidizes their governments and arms their militaries, as illustrated by Russian support for South Ossetian rebels as this conflict heated up in Summer 2004. Not staying at this, Moscow refuses to abide by its international commitment to withdraw two military bases on Georgian territory. As Moscow refuses to agree on the closure of these bases, Mr. Saakashvili was forced to cancel his visit to Moscow to celebrate the 60th anniversary of the end of the second world war.

Russia has been using energy as a particular element in its pressure on Georgia. On New Year's day 2001, Russia cut off supply of natural gas to Georgia, in spite of prepayments for this energy made by the American AES Corporation, which operated the Tbilisi Power Station and distribution network of Tbilisi. With those steps, Russia sought to show Georgia its vulnerability and level of dependence on Russia. It served the purpose of forcing Georgia to make concessions on foreign policy matters, and to test the international reaction to that sort of actions against Georgia or any other country of Former Soviet Union. Russian aims in the short term have seemed to be to use Georgian territory in the war against Chechnya. In

the longer run, Moscow's ambition has been to exert control over the transportation of energy from the Caspian basin, and dominant influence over the entire Caucasian Transport Corridor by keeping two military bases in Akhalkalaki and Batumi for a 15 year period, as well as free access to those bases. Ideally, Moscow would like to see Georgia and Azerbaijan cutting their military and security cooperation with NATO, as well as with the U.S. and Turkey, and to build a North-South transportation corridor connecting Iran and Russia via the South Caucasus – at the expense of an East-West corridor. Azerbaijan, for its part, sees no conflict between these transport corridor projects.

Implications for Europe: Energy and Economic security

There is a clear match between the strategic interest of Europe and the West in general and the South Caucasus. Europe is in need of diversified access to energy, and other supply routes to Europe, and to have strategic access to the Central Eurasian inland. The states of the South Caucasus need to be politically independent and economically viable, and to have strong security guarantees from the major world powers. That is why relationships with NATO and the enlarged EU are becoming the top foreign policy priorities for the states of the emerging Black Sea-Caspian Region. The potential for alternative energy supplies to Europe and the enlargement of NATO and the EU are opening a new dimension in these relationships. The recent EU decision to include the South Caucasus in the European Neighborhood Policy is a small step in the right direction, but what the countries of South Caucasus need the most is long-term security guarantees under a NATO umbrella.

Conversely, the South Caucasus forms the hub of an evolving geostrategic and geo-economic system that stretches from NATO Europe to Central Asia and Afghanistan. It provides unique transit corridors for Caspian energy supplies and Central Asian commodities to the Euro-Atlantic community, as well as direct access for allied forces to bases and operational theaters in the Greater Middle East and Central Asia. Thus the Black Sea and Caspian basins, with the South Caucasus uniting them, comprise a functional aggregate, now linked directly to the enlarged Euro-Atlantic alliance. Although located on the Euro-Atlantic world's outer edge, this region has already begun functioning as a rear area or staging ground in terms of projecting Western power and values along with security into Central Asia and the Greater Middle East. This function is likely to increase in significance as part of U.S. and NATO strategic initiatives. For all of the above reasons, security threats to South Caucasus countries and the undermining of their sovereignty run counter to major Euro-Atlantic interests.

Azerbaijan and Georgia perform all those key functions in terms of strategic access. Thus, by dint of geography and their political choice, Azerbaijan and Georgia have

assumed major Euro-Atlantic responsibilities as members of the anti-terrorist coalition and NATO aspirants. Both countries have thereby accepted serious risks to their security. As noted above, they can only function as a tandem or not at all. American policy continues to bear the brunt of overall Western interests in the South Caucasus in terms of security assistance, state-consolidation efforts, and promotion of energy projects. Although Europe has a more direct stake in this neighboring region's security and energy sector development, European efforts are meager by comparison to those of the U.S., in spite of the obvious European interests in the region.

Indeed, among the top policy priorities for EU energy development is "avoidance of strategic dependence". At the same time, some EU member countries already have strategic dependence on Russian gas, particularly in Central, Eastern, and South-Eastern Europe, where there is an almost 100 percent dependence on Gazprom, a monopolistic gas supplier from Russia. Even France and Germany are increasingly dependent on Russian gas. Europe's natural gas demand is projected to increase substantially in the future. Even under conservative scenarios, the demand for importing natural gas to the EU will double from 200 bcm per annum in 2002 to 400 bcm per annum by 2030, with total demand raising from 400 bcm to up to 600 bcm in same period. Russia will try to fill this gap with its own gas. But if Turkmenistan and Kazakhstan do not have alternative delivery options by that time, Russia will seek to fill the vacuum by controlling the transportation of their gas. The alternative to this may be a natural gas pipeline through the Caspian to Azerbaijan, Georgia, and Turkey and then on to Europe. It is obvious that the potential entry of Caspian natural gas to Europe through the South Caucasus and Turkey would help Europe diversify its energy supply, and to reduce dependence on the state-owned Russian monopoly Gazprom. This development will perfectly complement major reforms planned in the European gas sector, aiming at the creation of a competitive market of multiple operators with the interest to have different options of delivery routes.

Such a competitive market is in the long-term interest of Europe, and Russia as well. Diversification of supply routes and gas sector reform in Europe will eventually drive Russian monopolistic supplier, as well as the Russian gas sector in general, towards much-needed reforms. After all, one of the drivers behind the development of the South Caucasus Energy Corridor has been the inflexibility of the Russian state monopolies, Gazprom and Transneft. By dominating access to markets and by creating barriers to access for others, they have forced producers to look for alternative means to the market. Unfortunately, rather than treat it purely as an economic issue, Russia has chosen to exploit its control of energy export as a geopolitical weapon , forcing its southern neighbors to respond with initiatives that will preserve their sovereignty in the face of such threats. The result has been the

development of alternative routes, which in turn makes Russia nervous and suspicious. Furthermore, without market liberalization, it will be impossible to attract investments to the Russian gas sector, and without investments it will be impossible to meet the ambitious production goals of Gazprom.

Against this background, it is significant to note the substantial initiative that the European Union launched to create a Transport Corridor to connect Europe via the Caucasus to Asia, known as the TRACECA project. An ambitious project designed to build a variety of East-West road, rail and sea links across the region, TRACECA was launched in the early 1990s. Unfortunately, the project was never followed up with significant resources and political attention. As a result, in spite of its truly enormous potential to change the transportation systems of Eurasia and to connect the EU with Central Asia, China and India in a novel and efficient manner, TRACECA has in practice accomplished very little. The failure of the EU to follow through on its initiative and in practice to allow it to self-die has had profound implications or the credibility of the EU as an actor in Central Eurasia. This impact has been felt not only in the nearby Caucasus, but also to a considerable extent in Central Asia.

BTC will palpably increase the mutual interdependence between Europe and the South Caucasus by adding a million barrels of oil a day to the European market. This may not seem much in view of the oil consumption of Europe, but it is a very significant addition of oil on the margins. To that, it is oil that is neither Russian nor OPEC in origin, thereby serving to diversify European energy sources. To that, BTC will bring light crude oil to European markets, a commodity in particular short supply. As such, BTC and Azerbaijani oil will have an impact on European energy supplies and perhaps on prices that is far beyond what is apparent from its quantities. Once Azerbaijani oil is flowing into the European energy system, any break or interruption of supply would have an instant impact on European consumers, in spite of the fungibility of oil markets. A sharp interruption of supply would be immediately felt. This in turn gives Europe an important stake in the security, stability and development of the South Caucasus as a whole. September 11 showed the need for hypothetical access to the region; this is a weaker link than the very real risk of breaks in supply of energy. Logically, then, Europe will gradually realize the need for investing politically and economically in the security of the South Caucasus.

The EU and its members states can do at least five things for the South Caucasus, and by extension for itself. The first would be to revive TRACECA with a serious political commitment and serious financial resources. BTC proved what can be accomplished by combining governmental political support and private as well as development funding. Indeed, as EU states are increasing their development cooperation with the South Caucasus and Central Asia, it is crucial that substantial

amounts of this funding be vested in the building of transport and communications infrastructure. Secondly, Europe can expedite the integration of the South Caucasian states in the broader Transatlantic partnership and in NATO, which the U.S. has been supporting and continental European states have been resisting. Third, Europe can actively facilitate the internationalization of conflict resolution processes in the South Caucasus, which are currently monopolized by Russia, which has shown little interest in actually working for the resolution of those conflicts. Fourth, in addition to reviving TRACECA, continuing strong support for the development of pipeline projects of both oil and natural gas is needed. Of particular importance is to reengage Turkmenistan in the development of the TransCaspian natural gas pipeline project, which can substantially balance the energy security of Central and Eastern European countries. Finally, Europe plays a key role in continuing support for the democratic political process and economic recovery, based on rule of law, private property and free entrepreneurship.

The case of BTC proves that politically motivated projects can become commercially viable. Technological and engineering advancements may lead to commercial viability for the greater traffic between Central Asia and Europe via the Black Sea and the Caucasus. It is in the interest of Georgia and Azerbaijan, as well as the U.S. and Europe, to promote infrastructure development in the Black Sea, which would connect Central Asian and South Caucasian transportation system directly to the Western shore of the Black Sea via ports in Georgia, using ferry connections, and potentially even pipelines to Ukraine. This East-West axis will be important to keep viable alternative for greater Russian-Turkish cooperation in the future in the Black Sea area.

Implications for the United States: Energy, Security, and Development

American support for the BTC pipeline is clearly the most strategic project that America has supported outside the security sector in the former Soviet space. There has never been a question that the Department of Defense can operate strategically through changes in administration, and indeed, it has done so in its military-to-military contacts with the states of Central Asia and the South Caucasus. However, that enduring and continuous engagement in a single project and indeed a single vision could be undertaken by the political branches of the U.S. government over several changes in administrations was less obvious. Nevertheless, BTC is the biggest project anywhere in the former Soviet Union that the United States has backed, promoted, and carried out strategically over three differing administrations.

The United States is the largest energy consumer in the world and it is natural for U.S. energy security purposes to look for diversified and easily accessible energy sources. Growing Indian and particularly Chinese energy demand will create

competition for the oil produced in Indonesia and the Gulf states, and the Caspian is considered an important replacement alternative. From the beginning of the 1990s, the United States has been a very strong positive factor in the entire Caspian development process. From the very beginning, the U.S. government involved in close cooperation with the governments of Russia, Turkey, Azerbaijan, Georgia and Kazakhstan and elaborated the Multiple Pipeline Strategy as the only economically and politically viable export solution for Caspian hydrocarbons. This strategy serves broad U.S. policy objectives towards the region, which have been outlined at numerous occasions by various U.S. officials, Those objectives are: (1) to assure the sovereignty and the independence of the countries of the Caspian basin; (2) to support economic cooperation among the countries of this region and with Turkey; (3) to promote diversified and reliable energy sources and (4) to support US investments overseas. Many oil companies initially opposed strong U.S. political involvement in the decision-making process for the Caspian transportation options, stating that decisions should be driven by the economics of pipelines, and not politics. Usually, political involvement makes business solutions more costly and ineffective. but in this case, political decisions are contributing to the creation of commercially effective solutions. The experience with the so-called early oil pipelines already proves this. The Multiple Pipeline Strategy produced two early oil pipeline solutions: a northern Route from Baku to Novorossiysk, completed in 1997, and a Western route from Baku to Supsa, completed in 1999. The U.S. played an active role in the decision by the Azerbaijan International Operating Company to build the Western route to the newly built Georgian port of Supsa. Because of the conflict in Chechnya as well as disagreements between Azerbaijan and Russia on customs and other commercial considerations, the Northern route has seldom operated at full capacity. In fact, since the second half of 1999, Baku-Supsa has become the sole stable transportation option for AIOC oil. In this case, a political decision turned out to the great economic advantage of the AIOC member companies.

Yet these were relatively minor projects. The CPC and BTC pipelines, as well as the TransCaspian Gas Pipeline, were always considered as the central elements of the Multiple Pipeline strategy. The CPC pipeline is another victory of this policy. It is already transporting oil from Kazakhstan's Tengiz field to Novorossiysk. The great significance of this project is that although it lies mainly on Russian territory, it is the first oil transportation system operating independently from the Russian state monopoly, Transneft.

The only project where the U.S. has so far been unsuccessful is the natural gas transportation project, which would bring large volumes of Turkmenistan's Gas to Turkey via an undersea pipeline to Azerbaijan, and through Georgia to Turkey.

In sum, BTC constitutes the partial fulfillment of the American policy of securing the transportation of Caspian oil through multiple pipelines. As such, it is an important accomplishment that furthers the U.S. energy security through its implications on global oil markets and on European energy supply, which in turns frees up other sources of oil for American use. But beyond energy, BTC also further American national security interests by strengthening the independence and sovereignty of the states of the Caspian basin. The reactions of regional states to the events of September 11, 2001, prove this point. Indeed, there was a clear correlation between the level of independence of a country and its reaction to September 11. States with high degrees of independence in their foreign policy such as Azerbaijan, Georgia and Uzbekistan responded quickly and positively, expressing their readiness to support America with whatever means available. Countries with a higher degree of dependence on Russia in their foreign policy formulation took longer to respond and in general committed less significantly to the coalition efforts. As BTC will serve to strengthen the independence of the states of the Caspian basin that will involve in project – immediately Azerbaijan and Georgia but potentially Kazakhstan, Turkmenistan and even possibly Uzbekistan – this development will also serve the national security interests of the United States.

Looking Over the Hill: Opportunities for the Future

As noted above, the Baku-Tbilisi-Ceyhan pipeline has a number of immediate implications for the security and development of the South Caucasus and beyond. But in addition to these, it poses a number of opportunities as well as challenges for the future. Most importantly, capitalizing on these opportunities will require strong leadership and vision on the part of regional as well as international leaders.

More Azerbaijani Oil?

As illustrated in the next chapter in this volume, the production from the Azeri-Chirag-Guneshli fields will peak relatively quickly, and barring new discoveries and increased potential in the fields, production will fall below the 1 million bpd capacity of the BTC pipeline early in the next decade. This clearly raises the issue of other potential oil resources to be fed into the pipeline. While the possibility of Kazakh or even Russian oil to be exported through BTC exists, an immediate concern will be whether other oil projects in Azerbaijan will be produced in quantities that will affect the BTC pipeline's operation. This question is crucial in terms of Azerbaijan's future as a significant oil producer.

As such, the completion of BTC raises the question of the disputed oil fields along the still disputed Azerbaijani-Iranian and Azerbaijani-Turkmen maritime borders. As exploration of the Araz-Sharq-Alov field was practically discontinued as a

result of Iranian saber-rattling in 2001, the exact content of the field is as yet unknown. However, most assessments suggest that significant quantities of oil and gas may be present in this structure. In this sense, with every passing year since the 2001 incident, the issue of delimiting this border will be more pressing. This is true especially for Azerbaijan. Likewise, the same is true as concerns the status of the Kyapaz/Sardar field, claimed by both Turkmenistan and Azerbaijan. Indeed, the development of the bilateral relations among these countries will be of crucial importance to the possibility of exploring these oil fields. Azerbaijani-Iranian relations have improved in recent years; nevertheless, Iran shows little intention to change its position on the Caspian, which is likely to imply that the Araz-Sharq-Alov field may not be explored in the immediate future. In this context, it is crucial to note the dumbfounded reaction of western powers to the Iranian threat of use of force. The absence of credible western security mechanisms in place in Azerbaijan implied that there was little western powers with strong commercial interest in the field and strategic interests in the exploration of resources could do. As a result, the U.S. and U.K. did practically nothing, since a protest would be have been an empty gesture. In order to prevent the possibility for recalcitrant countries to block the development of Caspian resources, credible security mechanisms for the producer states, mainly Azerbaijan and Kazakhstan, need to be in place. This further raises the importance of Euro-Atlantic security mechanisms moving into the South Caucasus in order to safeguard security of energy supplies.

Going East?

A major issue arising from the completion of BTC and the ensuing building of the South Caucasus Gas Pipeline is whether these projects will lead to the extension of the East-West energy corridor across the Caspian to Central Asia. This question in turns splits into two separate issues: in essence, whether Kazakhstani oil will feed into BTC, and whether Turkmenistani gas will complement the SCP.

The construction of BTC opened new opportunities for the shipment of Caspian resources to world markets. As mentioned above, it was the strategic decision to build BTC that made the South Caucasus Gas Pipeline project possible. In a similar vein, the success of BTC may stimulate yet another big pipeline project to ship oil through the South Caucasus corridor: the elephantine Kazakh Caspian field of Kashagan. Kashagan is known to be the largest single oil find in the past two decades, and its transportation to markets has not yet been determined. Given that Kazakhstan's Tengiz oil is exported through Russia to Novorossiysk, there is a considerable argument for Kashagan's oil to be exported westward. This raises a number of questions. As Kashagan will produce amounts that will fill an entire pipeline, the question is whether that pipeline will be drawn parallel to an existing

line or in a different direction. Clearly, a 'battle for Kashagan' may be beginning, although western leaders do not seem to be alert to this development.

Two or three options can be considered for Kashagan's oil. One is to export it through an expanded CPC pipeline or a parallel line to CPC to Novorossiysk. Two further options require oil to be brought across the Caspian by tanker or pipeline from Aktau to Baku. One is enlarging the capacity of BTC or build a parallel line to Ceyhan; another is to greatly expand the pipeline from Baku to Supsa. The final decision will naturally depend on markets. But from a western perspective, it is imperative to ensure that this oil is routed westwards. Such a solution will increase Kazakhstan's security as an oil producer; strengthen the independence and statehood of Kazakhstan; and cement the expansion of the East-West corridor into Central Asia. This will further increase the geostrategic importance of the South Caucasus as a strategic link between Europe and Central Asia in energy and security terms.

Transport options from Aktau to Baku include the building of a tanker fleet, which Kazakhstan is already beginning, or the building of a seabed pipeline. While tankers may be a good beginning for the short term, the transport of such quantities of oil by tanker is eventually uneconomic due to the small capacity of tankers that can be built in the landlocked Caspian sea. While Russia is opposing a seabed pipeline, only this option would make the Kazakhstani extension of the East-West corridor commercially attractive and make it possible to pump large amounts of oil to markets. The realization of this prospect will nevertheless take considerable time and resources, include difficult political battles, and will likely not be possible without the active support of both the U.S. and Europe.

If oil is indeed brought from Kazakhstan to Baku, the next question is whether this oil should be channeled through an expanded or parallel BTC pipeline to the Mediterranean. By this time, Ceyhan will have grown to such proportions (considering oil from Iraq also ending up in Ceyhan) that the argument made earlier about Novorossiysk could be made for Ceyhan as well – channeling an additional million bpd to Ceyhan could, from a strategic perspective, mean putting many eggs in one basket and thereby hamper supply security. Given the projected increase in energy consumption in Central and Eastern Europe, another option is to channel Kashagan oil through a greatly expanded Baku-Supsa pipeline. From there, oil could be shipped to extend to Ukrainian or Romanian ports. Romania possesses a great and underutilized refining capacity dating back to the Ceaucescu era. This could conceivably be modernized to accommodate Caspian resources; another option is to bring oil to Odessa and on via the Odessa-Brody pipeline.

In practice, Kazakhstani and Azerbaijani authorities have continued to try to hammer out an agreement on transit tariffs via BTC to ensure that it carries some

Kazakh oil when it comes online. The current discussions between SOCAR and Kazmunaigaz, the national oil and gas companies of Azerbaijan and Kazakhstan, appear to give greater emphasis to Kazakh oil in the pipeline. With the shift from the political to the commercial arena, officials from both companies confirmed that they are discussing a plan that would entail a much larger volume of Kazakh oil, primarily from Kashagan, to flow to western markets via BTC. The plan under consideration would see an actual 700-km pipeline laid across the Sea, linking the Kazakh port of Atyrau with Azerbaijan's capital, Baku, and an expansion of the BTC to handle 1.7 million b/d. In sum, just like BTC, the eventual transportation of Kashagan oil will be decided by a mixture of economic and political concerns. Plugging Kazakhstani oil to Baku would provide important advantages. It would bypass Russia, increasing Kazakhstan's energy security as so much of its oil is already transiting Russia. It would increase supplies to Europe while decreasing dependency on Russian energy; and it would increase the importance of the South Caucasus to the west and thereby increase western stakes in helping to build viable states in the region. As a result, it would increase the likelihood of integrating the South Caucasus with Europe.

With Turkmenistan, the situation is more complicated. As gas was discovered instead of oil in the Shah-Deniz field, Azerbaijan became not only a transit country for gas to Europe but a producer. The disagreements that ensued from the Turkmen leadership's disputes with Azerbaijan killed the Transcaspian gas pipeline project (TCP) in the late 1990s. Unexpectedly, therefore, the gas component of the East-West corridor became incomparably minor to the reserves of Turkmenistan that could were planned to be exported through this route. So the vision of a Transcaspian corridor remains partially unfulfilled. In the longer term, reviving the TCP is clearly a possibility, through political developments in Turkmenistan hold key to its future prospects. At present, Turkmenistan is bound to export gas through Russian pipeline systems at a price far below world market levels. There are nevertheless indications that the Turkmen leadership is becoming increasingly frustrated with this situation. As a result, Ashgabat has begun to look around for other options. Primarily, this has included looking South to the possibility of resurrecting the equally stranded Trans-Afghan Pipeline (TAP), which would bring Turkmen gas to Pakistan and India via Afghanistan. The Asian Development Bank is a strong backer of this project, nevertheless no western company has shown significant interest since Unocal dropped out in the end of the 1990s. Indeed, the TAP suffers from many problems, most importantly the fact that the Indian market is commercially key for the project. As long as India is reluctant to rely on Pakistan for its energy security, the prospects of building TAP are remote. In addition to the absence of an assured market (short of building expensive LNG facilities on the Pakistani coast), technical problems are

significant. For example, the absence of roads to bring equipment to site in Afghanistan is unlikely to be solved quickly. TCP, in this light, seems an easier option given the existence of the SCP and its impending connection to European gas markets. In this light, TCP seems in the longer run the only possible answer to current European over-dependency on Russian gas.

Aside from gas, oil producers in Turkmenistan – state-owned Turkmenneftegaz and UAE-controlled Dragon Oil, for example – have already declared their wish to join the ranks of the new pipeline's clients. Malaysia's Petronas and other onshore and offshore operators may soon follow suit. BTC is the shortest possible link to foreign markets for them. Currently almost half of Turkmenistan's oil production is exported via Azerbaijan. The terms of using the BTC route depend on the goodwill of the Azerbaijani authorities, who are unlikely to miss this bargaining chance in the dispute with Turkmenistan. The location of offshore fields between Azerbaijan and Turkmenistan naturally suggests a joint infrastructure. Nine of the largest fields, including Azeri, Chyrag, Gyuneshli, Kyapaz/Serdar, Livanov, Zhdanova, and LAM, look like beads on a thread between Cheleken and Baku. The distance between them varies from several kilometers to a few dozen kilometers, which makes it possible to build a connecting system of undersea pipelines from the Turkmen shore to the BTC and to the planned gas pipeline from Baku to Erzurum in Turkey. This arrangement would decrease the costs of Turkmenistan's upstream projects and open new export routes. Petronas already capitalizes on the proximity of facilities in Azerbaijan: it has borrowed a drilling rig of Transocean Sedco Forex there. It appears that a compromise in the dispute is more possible today than it was in 2002, when offshore projects in Turkmenistan were all but stalled and the construction of the BTC pipeline had hardly moved ahead. The resolution of these disputes would make the southern part of the Caspian Sea more attractive for foreign developers and contractors.

Challenges

Clearly, there are important challenges arising out of the BTC project. The potential consequences for the Armenian-Azerbaijani conflict have already been mentioned. The other main concern is the development of Russian policy. Moscow continues to aspire to dominate the transportation of oil and gas resources from the former Soviet Union. In this context, BTC and the SCP form the only exception.

There is an obvious risk that leading circles in Moscow will see the BTC pipeline as a necessary evil, but will seek to vociferously prevent the widening and extension of the East–West corridor to Central Asia. Should this happen, and an aggressive Russian policy to prevent such developments emerge, the security landscape in Central Eurasia as a whole may be affected in a negative manner. Russia's anticipated reaction should in no sense be allowed to dictate the

development of the energy transportation resources in the Caspian basin. Yet it is obvious that Moscow's policies will be a factor profoundly affecting the development of the future export routes of additional Caspian energy resources. This fact only makes western engagement more crucial in order to ensure the safe, and economic transport of these resources in a manner that satisfies the sovereignty and independence of producer countries.

In a similar vein, Iran's attitude to Caspian pipeline politics will be an important factor. The clear loser in the present-day development is clearly not Russia, through which the majority of Caspian hydrocarbons will continue to transit for the foreseeable future; but Iran, whose stakes in Caspian energy extraction are low. No major pipeline is likely to transit Iran in the foreseeable future, especially in the absence of a change of regime in Tehran. Minor swap deals are being conducted and may increase in quantity, but thanks in great part to its hard-necked refusal to compromise on the status of the Caspian Sea, Iran is gradually forfeiting its chances to be a serious player in Caspian energy. Indeed, Russia in the late 1990s realized that it was losing opportunities by opposing the sectoral delimitation of the Caspian, with a 180 degree change of policy as a result. Unfortunately, Tehran has not come to the same insight, seeking instead to obstruct development of southern Caspian resources, barring a settlement of the status issue on its own terms. The consolidation of hardliner domination in Iranian politics does not bode well for the future of Iran's position, nor does it herald improvements in U.S.-Iranian relations, which will continue to have a serious impact of Caspian energy development. Clearly, bringing Iran into the equation as a cooperative actor will realistically entail some costs and compromise on the part of producers, particularly Azerbaijan; nevertheless, the Iranian position has failed to substantially approach that of the other players in the Caspian. As a result, the risk that an increasingly alienated Iran will be tempted to be a spoiler in the Caspian energy sweepstakes remains significant.

Finally, a challenge that the BTC project poses for the three countries it traverses is the risk of socio-economic expectations kindled by the energy projects and nurtured by the governments not being met. This problem is particularly salient in Azerbaijan, as discussed elsewhere in this volume. A failure on the part of the Azerbaijani government to ensure the equitable distribution of income from major energy projects would have the potential to increase tensions in society considerably. So far, there is little sign that this is taking place, but the problem lies more in the expectations in society of BTC bringing welfare than in the actual performance of the government.

Leadership and the New Agenda

As this chapter has sought to show, the building of the BTC pipeline generates important direct implications for the South Caucasus, Central Asia, and beyond. Perhaps more importantly, it creates important opportunities as well as challenges. The question, then, is whether these opportunities will be seized, the challenges managed, and the dangers averted. The answer to this question will rest mainly on the nature and quality of leadership showed by the men and women in a position to guide political and economic strategies in and toward the region.

The issue of leadership concerns equally the countries of the region and the powers with interests there. As far as the Nagorno-Karabakh issue is concerned, it will require strong statesmanship on the part of the Armenian and Azerbaijani leaders to embark on a policy of moderation and restraint, realize the imperative of compromise, and eschew temptations toward isolationism and belligerency.

As far as the extension of BTC and SCP into Central Asia is concerned, the roles of numerous actors will be important. The leaders of the regional countries will be of crucial importance for this prospect to be realized. But BTC was built to a great extent because of the commitment of western, in particular American, leaders, to the concept and vision of multiple pipelines. This time around, American leadership will again be critical. The potential is clearly present: in May 2001, the office of Vice President Richard Cheney requested a review of the U.S. energy situation. Recommendations were on the way to greatly increase U.S. attention and efforts to expand the Eurasian East-West corridor. With the events of September 11, this strategic opportunity was derailed. In this contest, the building of BTC could be considered a new opportunity to build momentum for this initiative.

But it would be unwise of Turkish, European, or regional leaders to assume that America will once again ensure that projects to their benefit will be brought about by America. In particular, Europe is the player that stands to gain most from the building of an energy bridge to Central Asia, to such an extent that this may be termed crucial for Europe's long-term energy security. European involvement will therefore be required for the realization of this ambitious vision: an energy corridor extending from Europe across the Caucasus to Central Asia, supplemented by a wider transportation and communications superhighway. If this is indeed accomplished, BTC will with hindsight be recalled as the historic, first major step in this direction.

3. Economic Implications of the Baku-Tbilisi-Ceyhan Pipeline

Jonathan Elkind[1]

Later this year, when tankers start leaving the port of Ceyhan laden with oil that has been transported from the Caspian Sea to the Mediterranean through the Baku-Tbilisi-Ceyhan (BTC) pipeline, they will be serving global oil markets that are *gasping* for new supply. In fact, shipments of oil through BTC are expected to represent roughly 25% of the incremental new supply that will reach global markets in 2005 and 2006.[2]

Those who initiated the idea of a BTC pipeline – and those who lobbied for it, negotiated, planned, designed, financed, and built it – did not specifically intend to bring BTC into operation at such a crucial time. None of those people knew that oil markets would be so especially jittery at the time of BTC's commissioning that a modest, unanticipated bump in East Asian and North American oil demand – a demand increase of only one or two million barrels of oil per day – would send oil prices skyrocketing toward $60 per barrel.

What the backers and builders of BTC did know was that the project had the potential for significance on a host of different levels – first and foremost as a critical infrastructure link between once-distant Caspian energy deposits and global markets, but also as a source of greater supply diversity, a symbol of independence, a proof of cooperation among neighbors, a standard for the performance of a global industry, and a tool for economic development.

This essay surveys the economic implications of BTC for global oil markets, for the region and countries participating directly in it, and for the global energy industry. No aspect of the BTC story is simple. On the contrary, it is a complex project that exists in a complicated region of the world and that has confronted challenges at every turn. For these reasons, BTC merits study and, as it begins operating in 2005, celebration.

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[1] The author is an independent consultant who has worked as an external advisor for the BTC Pipeline Company. He served on the staff of the U.S. National Security Council from 1998 to 2001.

[2] "Energy Security and Investment: BP in the South Caucasus" – Conference presentation by Wref Digings, Country Manager for Georgia, BP. Tbilisi, March 2005.

Beginnings Of The Idea

At the end of the Soviet period, global oil and gas companies realized that they had an important new opportunity. The USSR, and then its successor states, needed technology and capital in order to develop oil and gas deposits that were beyond the capabilities of local companies. The international energy companies, in turn, needed new reserves.

The Caspian Sea region was an area of particular interest in the 1990s, and something of a gold rush mentality prevailed in Baku, Azerbaijan and Almaty, Kazakhstan in particular. International energy executives frequently came to visit; annual oil exhibitions were flooded by investors and service providers and policy makers. Project agreements were signed; companies struggled to secure exploration and development infrastructure, as well as global-standard office and residential services.

One key problem with this Caspian gold rush was the need for transportation systems to get the oil production to the global marketplace. Azerbaijan, Kazakhstan, Turkmenistan, and Uzbekistan had existed previously as a part of a unified Soviet oil and gas industry. The transportation infrastructure reflected this fact, giving Russia – a competing energy producer and the recent imperial ruler – a monopoly over the Caspian countries' access to foreign markets.[3] The map shown in Figure 1, below, which depicts selected major oil and gas pipelines in Eurasia nearly 15 years after the breakup of the USSR, underscores the extent to which the architecture of the Soviet energy transportation systems persist.

A further challenge that complicated oil transportation from the Caspian region, and thus complicated upstream investment decisions, was the fact that the prime southern Russian oil export route – the port of Novorossiysk – as well as routes using the Georgian Black Sea ports of Batumi and Supsa, and the Ukrainian port of Odessa, require tanker transits through the Bosporus Strait. The Bosporus slices through the center of Istanbul, a city of twelve million inhabitants that has been designated by UNESCO as a World Heritage Site. The Bosporus twists and turns its way from the Black Sea to the Sea of Marmara, passing historical palaces, commuter ferry docks, submerged shipwrecks, and elegant promenades.

In the mid-1990s, tankers carrying approximately one million barrels of oil transited the Bosporus daily, and that figure doubled already by 2005. Accidents involving explosions, and serious injuries or fatalities have been a periodic fact of

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[3] For more detail on the development of oil and gas resources and related transportation infrastructure in the Caspian region, see the chapter entitled "Energy Transportation Futures," co-authored by Jan Kalicki and Jonathan Elkind, in *Energy and Security: Toward a New Foreign Policy Strategy*, Washington, DC: Woodrow Wilson Center Press and Johns Hopkins University Press, 2005 (forthcoming).

life in Istanbul. This united the Turkish public in fear of hazardous cargos; every successive Turkish government has opposed further increases in oil transits.

Figure 1

Source: US government, 2004

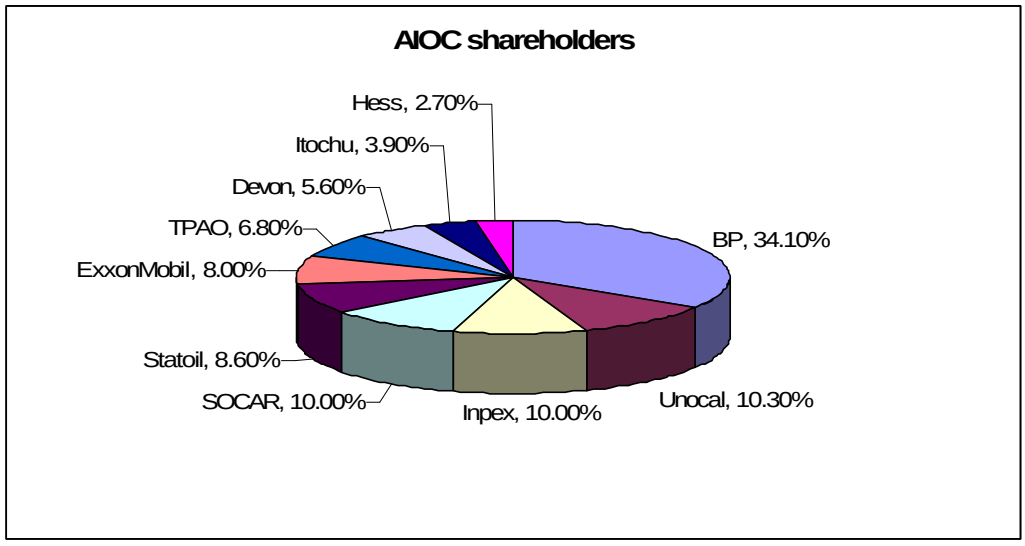
The late 1990s brought a flurry of commercial studies, diplomatic initiatives, and public statements about how to address the energy transportation challenges of the Caspian region. Working groups were formed for the purpose of assessing options. Basic and detailed engineering studies were conducted. Finally, after about five years of intensive analysis and negotiations, a commercial structure took shape that led to the creation of the Baku-Tbilisi-Ceyhan Pipeline Company (BTC Co.).[4]

[4] In the interest of space, a complex chronology has been compressed into a paragraph. For more on the development of the BTC project, see Kalicki and Elkind, cited above, or consult the common website that is maintained by BP, in its capacity as operator of BTC, ACG, the Shah Deniz project, and the South Caucasus Pipeline (SCP): http://www.caspiandevelopmentandexport.com/ASP/BTC_ProjectHistory.asp.

The BTC Project – Participants And Users

To assess accurately the significance of BTC for global energy markets, one must view the project in the manner that was stressed above: BTC is a three-billion-dollar transportation system that allows producers of oil to reach global markets reliably and to generate returns on their investments in multi-billion-dollar upstream projects. The companies that joined together to form the consortium called the BTC Pipeline Company are mostly – but not exclusively – partners in a separate consortium, the Azerbaijan International Operating Company. AIOC is building and will operate a 13-million-dollar project to produce crude oil from the Azeri, Chirag, and Deepwater Guneshli fields which are located in the waters of the Caspian Sea, about 100 kilometers offshore from the Absheron Peninsula (usually referred to as the ACG project). Certain AIOC partners, notably including ExxonMobil and Devon, opted not to invest in the BTC project. They felt that they could more profitably move their oil from Sangachal to world markets without expending the capital needed for a pipeline to bypass the Turkish Straits. Figure 2 shows the current AIOC investors, and their shares of the consortium.

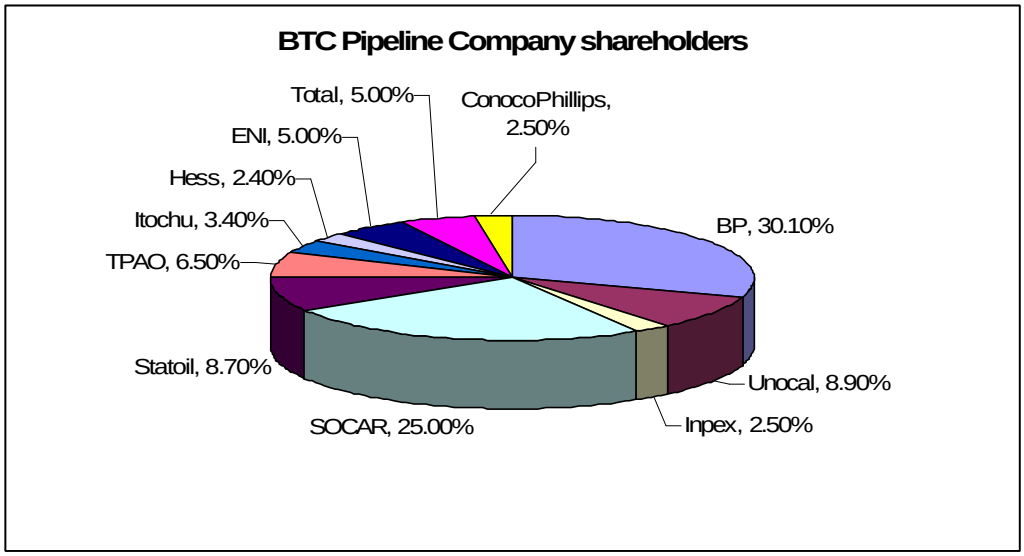
Figure 2



In addition to the AIOC participants, there are some BTC partners that are not participants in AIOC. Total, ConocoPhillips, and ENI are all investors in the Kashagan project, a super-giant field in the Kazakhstani area of the northern Caspian (as is Inpex, which is both an AIOC participant and a Kashagan partner). The Kashagan project is still several years away from major oil production, and its export routings are yet to be determined. Nonetheless, shipping oil across the

Caspian Sea and then out to the Mediterranean via BTC is one export option for Kashagan, and discussions are now underway about the creation of framework agreements that would set the terms for such shipments. Even in advance of the formal framework, certain Kashagan partners evidently feel that BTC's offering is attractive enough to merit early investment that would establish an option for the future. Figure 3 shows the current BTC investors, and their shares of the company.

Figure 3



In short, then, the BTC project is a critical link in the crude oil value chain of the Caspian region. BTC will move crude oil from production wellheads in the Caspian to a modern, deep-water port in the Mediterranean. That port is equipped to load the most efficient modern tankers, which not only means that less oil will be shipped through the tortuous Bosporus, but also that the oil can cost-effectively be moved to refineries in many corners of the world, including refineries in the United States.

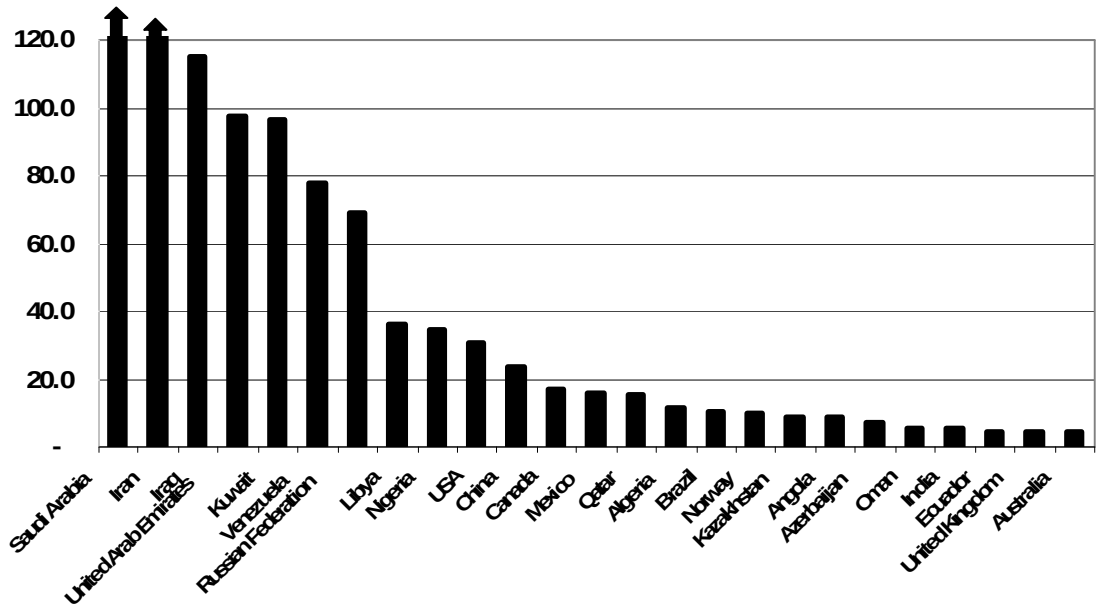
BTC's Significance For Global Energy Markets

As noted above, the BTC project comes on-line at a time when an oil-hungry world is seeking new production. In order to appreciate how significant BTC is in this regard, it is useful to examine the magnitude of oil resources in and around the Caspian Sea, as well as the alternative export routings that are available for companies that do produce the oil.

Oil and gas production has traditionally been a significant part of the economy of Azerbaijan, and Azerbaijan's production has underwritten the economic

calculations that led the BTC partner companies to build the pipeline. Nonetheless, it must be recognized that Azerbaijan's reserves and production are relatively modest by comparison with the reserves and production of the global leaders.

Figure 4



Data from: *BP Statistical Review of World Energy*, 2004

Figure 4 above depicts proven oil reserves for the 25 countries with the top oil reserves. Azerbaijan ranks twentieth in the list with seven billion barrels of proven reserves. Neighboring Kazakhstan, by comparison, has upwards of nine billion barrels.[5] Russia has reserves that are nearly ten times as large – 69 billion barrels. Saudi Arabia and Iran's reserves, however, are literally off the chart, with 262 and 130 billion barrels respectively.

Azerbaijan is in the company of Angola, another country that has lately come to occupy a significant place in new oil production, and Azerbaijan's reserves exceed those of the UK. Together, the Caspian countries' reserves amount to roughly the same magnitude as the reserves of the North Sea.

Just as Azerbaijan's proven reserves are in the second tier of the global oil industry, likewise Azerbaijan is in the second tier of current oil production. Table 1 below shows production volumes from nearly twenty of the world's leading oil-producing

[5] Kazakhstan's proven reserves are a matter of some debate. Both BP's Statistical Review of World Energy and Oil and Gas Journal cite nine billion barrels of proven reserves, but other analysts such as Wood Mackenzie cite substantially higher figures.

nations. Azerbaijan would not even appear on this listing on the basis of current production, which was 310,000 barrels in 2004.[6] In fact, the entire 5.4 billion barrels of the Azeri, Chirag, and Deepwater Guneshli (ACG) reservoirs amount to roughly one-half of one percent of the world's proven reserves – a modest quantity.[7]

Oil production by country (2003)[8]

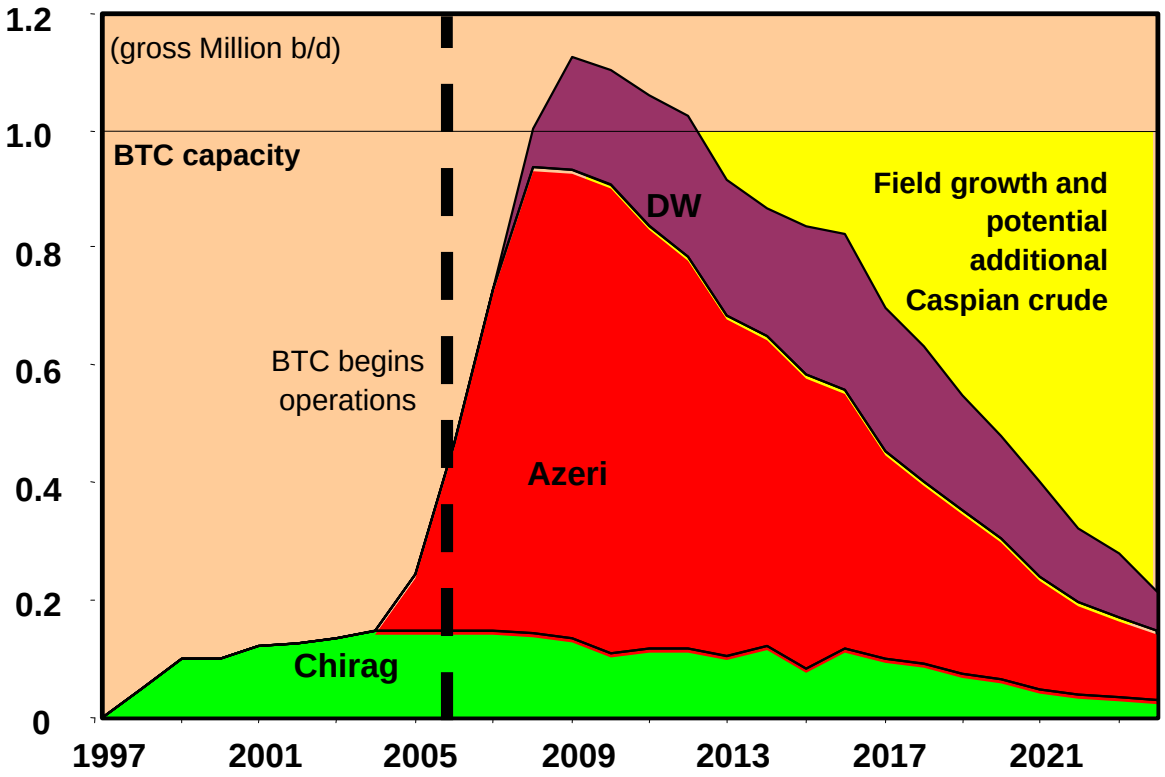
Saudi Arabia	9.8
Russian Federation	8.5
USA	7.5
Iran	3.9
Mexico	3.8
China	3.4
Norway	3.3
Canada	3.0
Venezuela	3.0
United Arab Emirates	2.5
Nigeria	2.2
Kuwait	2.2
United Kingdom	2.2
Algeria	1.9
Brazil	1.6
Libya	1.5
Iraq	1.3
Azerbaijan (by 2010 – projected)	1.3

All of these data naturally raise two questions: whether there is sufficient oil to support the cost-effective operation of BTC and whether BTC is truly significant for global energy markets. The first question was the source of extensive speculation in the general and trade press through the late 1990s. Many observers asserted that there was insufficient oil to support the building of a lengthy, large-diameter pipeline.

Figure 5 shows that this accusation is incorrect. The production curves for the three elements of the ACG project are shown at the bottom of the graphic. The production volumes from Azeri, Chirag, and Deepwater Guneshli (DWG) will peak relatively quickly, barring the discovery and extraction of further volumes from the license areas. Starting around 2013, there may be room in the BTC for production volumes from the Kashagan project or other non-BTC shippers.

[6] BP Statistical Review of World Energy, 2004.
[7] Digings, BP op. cit.
[8] Data from: BP Statistical Review of World Energy, 2004

Figure 5



Source: BP

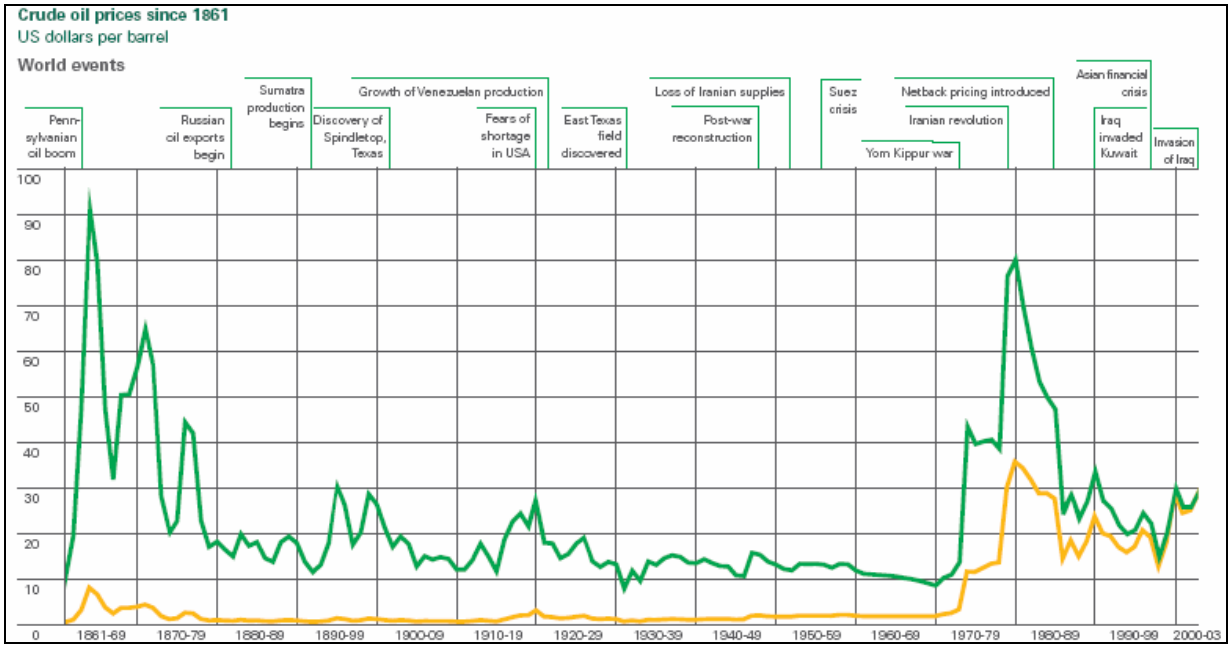
Another factor worth considering is the competing transportation routings that might be used by those Caspian oil producers who opt not to use BTC. As noted above, shipping through one of the Georgian or Russian Black Sea ports, and then onward through the Turkish Straits is one possibility. Some oil companies prefer to send tanker shipments through the Bosporus because they view the Bosporus as a "free good."

Shippers naturally compare the costs of shipment through the Straits against the costs of using BTC or any other bypass pipelines (such as the planned Burgas-Alexandroupolis pipeline or possibly the Odessa-Brody pipeline which may conceivably be reversed to operate in its original, northbound direction). Unfortunately for those companies wishing to ship through the Straits, bad weather combined with the Turkish government's increasingly strict safety rules for transits of hazardous cargos have created monumental traffic jams that significantly delay the movement of tankers. In the 1990s, roundtrip passages into and back out of the Black Sea typically took between three and five days on average. Now, during the winter season, the roundtrips often take two weeks or more. For each day that the tankers sit at anchor waiting their turn to pass through the Straits, shippers must pay demurrage charges that often reach $60,000 per day

or more. In short, even in the absence of an accident that might close down the Straits, no longer are the Straits a "free good."[9]

Shipping oil north from the Caspian, through Russia's Transneft crude oil transport system, also has cost implications. Transneft does not operate a quality bank (a means of accounting for varied oil quality and compensating shippers according to the quality of the oil they ship); nor does Transneft use batching or other means of segregating cargos to protect the market value of higher-quality crudes. This means that comparatively light, sweet crudes from the Caspian are mixed with all the other heavier, sourer grades in the Transneft system. Azeri Light crude that is shipped north from Baku, for example, arrives at the port as Urals blend, losing $4 to $5 per barrel of value in the process.[10]

Figure 6



BP Statistical Review of World Energy, 2004

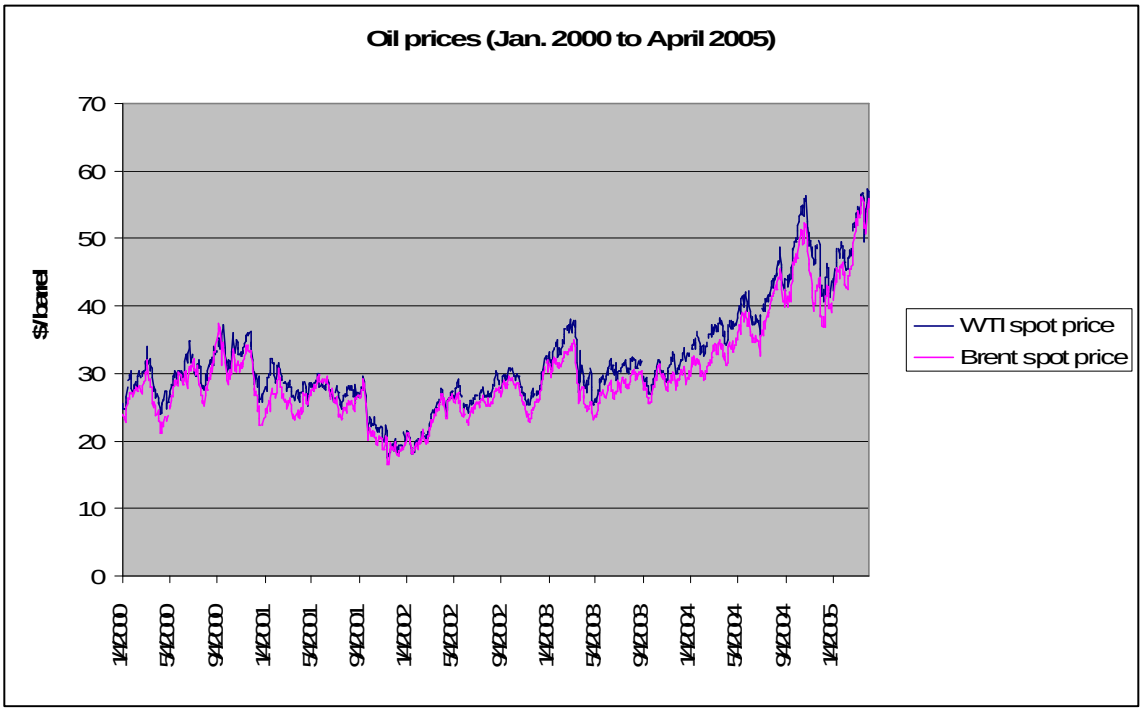
Next comes the question of whether BTC will have a significant impact on world oil markets, and if so why. The answer is less a reflection of Azerbaijan's future oil production than it is a function of the current state of oil markets. Figure 6 depicts the historical movement of world oil prices for the period from the beginning of industrial oil production, in the 1860s, until the present day. The lower of the two

[9] Data on delays and demurrages are based on numerous press reports and the author's discussions with industry experts. For an example of the press reporting, see: Torrey Clark, "Greece, Russia Consider Oil Link Bypassing Bosporus," *Bloomberg News Service*, March 11, 2005.

[10] "AIOC Will be Losing More than $3.5 Million in the Baku-Novorossysk Transit Every Month," Azer-Press, February 15, 2005.

curves on Figure 6 traces prices per barrel using the money of the day, whereas the higher curve shows constant-dollar prices from 2003. As is clear, historical oil prices have stretched even higher than recent levels, but current prices are elevated compared to historical averages. Figure 7 provides an even more detailed look at price levels for two of the so-called benchmark crudes (West Texas Intermediate and Brent) during the last two years. Contrary to some expectations among political leaders, the conclusion of active hostilities in Iraq did not lead to a rapid rebound of Iraqi oil production. In addition, during this same period, both East Asian demand (chiefly in China) and North American demand (chiefly the U.S.) have grown robustly. As a consequence, global oil prices not only failed to subside after the war in Iraq, they actually have risen still higher.

Figure 7



Data from: Energy Information Administration, US Department of Energy

So oil markets are tight. The question is whether the start of BTC's operations will have a significant impact on these markets. After all, the oil industry is a mammoth, globalized commodity market. The projected one million barrels of oil per day that will be transported by the BTC at peak throughput will amount to roughly 1.3% of current global supplies.[11] This is not an eye-popping figure to be sure. But significant price impacts in the global oil market are caused by modest

[11] Digings, BP.

marginal changes; the unanticipated one or two million barrels of oil per day of Chinese and American demand have helped to push prices up and keep them at elevated levels over the last several years. The availability of BTC, in turn, will allow the full field development of ACG and will encourage the investment necessary for the sustained development of other upstream projects in the Caspian. As noted at the start of this essay, BTC's million barrels of oil per day will amount to about 25% of the new oil supply that will enter the world market during 2005-2006. Clearly, BTC will make a positive impact on a global market that is experiencing volatility and high prices.

Significance For Host Countries

The discussion above has assessed the implications of the BTC project for the companies that are participating in it, and for the global oil market. Obviously, there are other parties whose interests are significantly affected by BTC – especially the host countries and regional neighbors.

Throughout the 1990s, the routing of BTC and its companion, the gas pipeline known as the South Caucasus Pipeline (SCP), were often referred to by the short-hand phrase – the East-West Energy Transit Corridor. This term emphasized the fact that the BTC oil pipeline and the SCP project would be a departure from the Soviet-era energy infrastructure; the new transportation systems would break monopoly reliance on pipeline networks that were designed to meet the demands of Soviet times. With the advent of the East-West Corridor, oil and gas producers in the Caspian region would at least have a choice about how to reach the marketplace.

In addition to this general implication for the Caspian energy-producing countries as a group, BTC has had specific implications for each of the host countries. Political analysts debate whether these implications have been sufficiently positive, but only time and historical analysis will provide adequate answers to this question. The simple fact for the moment is that Turkey, Georgia, and Azerbaijan have received varied and significant benefits.

Turkey, for example, receives the benefit of significant reduction in the level of tanker traffic that would otherwise pass through the Bosporus and the Dardanelles. As noted above, this objective is one that has united Turks of all classes, political affiliations, and sensibilities. In addition, Turkey will receive approximately $200 million per year from BTC transit tariffs in the initial years of operation, with the possibility to increase to $290 million per year from year 17 to year 40.[12] Turkey is also benefitting from an increase in economic activity in eastern Anatolia, the least

[12] Regional Review, BP.

developed area of the country. The port of Ceyhan, which has experienced significant reductions in activity since the 1991 Gulf War, is entering a time of resurgence.

Turkish construction companies have played critical roles in the building of BTC and related infrastructure both inside Turkey and in the other two host countries. Turkey's entire economy will benefit from less expensive gas supply once SCP comes into operation, because the Shah Deniz gas is being sold to Turkey at a price that compares very favorably with current costs. And in addition, at the peak of BTC construction in the fall of 2004, approximately ten thousand people were employed along the pipeline construction project in Turkey alone.[13] BP has been careful to note that these are not permanent positions; pipeline operations are capital-intensive, not labor-intensive.

In addition to all these conventional direct benefits, BTC Co. has instituted extensive social investment programs that are designed to bring special positive impacts to those areas of the three host countries that are most directly affected by the project. In Turkey, BTC Co. has funded a Community Investment Program (CIP), that provides funds for high-priority community development projects in those towns and villages that are within four kilometers of the pipeline right-of-way. At present, the CIP is undertaking projects with 300 villages in Turkey.[14] BTC Co. has also funded an Environmental Investment Program which engages in special environmental projects above and beyond project-related obligations.[15]

Georgia too has received a variety of important benefits from the BTC project. The combined BTC and SCP projects are far and away the largest investment activities that are underway or planned in Georgia, and they are bringing the country critically-important foreign direct investment (FDI) at a time when the country is trying to shake off a reputation for endemic corruption and a poor investment climate. Most authoritative macro-economic assessments, such as the one undertaken annually by the European Bank for Reconstruction and Development (EBRD), highlight the importance of BTC-related construction and spin-off investment for Georgia's overall economic activity.[16]

In October 2004, after weeks of intensive discussions about the magnitude of the risks and benefits that BTC would bring to Georgia, BTC Co. undertook additional

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[13] All employment figures were received from BTC Co.

[14] In addition, CIP is working with 70 villages in Georgia and 80 in Azerbaijan. For more information on CIP see: http://www.btcinvestment.com/.

[15] More information about the Environmental Investment Program is available on the internet through http://www.btcinvestment.com/ or at http://www.caspiandevelopmentandexport.com/Downloads/BTC/eng/q4_es_04/10_2004-Q4%20Additionality%20and%20Offset%20Programmes.pdf

[16] For example: "The economy is expected to grow by 5-6 per cent per year in the medium term, supported by activity linked to the construction of the BTC and South Caucasus Gas Pipelines." Page 131, *Transition Report 2004*, European Bank for Reconstruction and Development, October 2004.

commitments designed to help Georgia to get on its feet economically. BTC Co. initiated a series of new grants that will provide an additional $40 million to the Georgian budget by 2010 for projects that will contribute to broad-based socio-economic development. In addition, BP in its capacity as operator of the BTC and SCP projects made a unilateral grant in the amount $10 million for socio-economic development programs such as educational stipends and economic development programs.

In Georgia, as in Turkey, a significant number of people are employed by BP during the roughly two-year construction period for BTC and its sibling pipeline, SCP – 6000 people overall, of whom roughly 4500 are citizens of Georgia. Again, their employment is not long-term in nature, but these workers will benefit from becoming familiarized, and in many cases technically qualified, with the kinds of health, safety, an environmental practices that are required in modern companies the world over. In many cases, these are practices that have never been introduced previously in Georgia.

Because the BTC will cover a shorter distance on Georgian territory than on Turkish territory, Georgia's transit tariffs will amount to a comparatively modest $50-60 million per year at peak capacity. Nonetheless, even as Georgia's official budget grows over the coming years, these monies will represent a solid contribution to overall receipts.[17] In addition, to use comparative terms rather than absolute figures, Georgia will be paid roughly twice as much, on a per-kilometer basis, as its neighbors Azerbaijan and Turkey.

Georgia will receive two final types of benefits from the BTC and the overall East-West Energy Transit Corridor. First, with the beginning of SCP operations in late 2006, Georgia will have a choice in its gas supply. Initial gas volumes for Georgia from SCP will be modest – an insignificant quantity in the first couple years. Nonetheless, already by the third year of SCP operations, Georgia will have the opportunity to receive as much as one-third of current demand – a valuable addition to current supplies, which come exclusively from Russia's Gazprom. Competitive pressures being what they are, the existence of this new supply has the potential to contribute significantly to Georgia's energy security.

Finally, the operation of BTC and its sibling projects will underscore the fact that serious investors can do business successfully in Georgia. In the period since independence, analysts and commentators have rightly described Georgia as a place of beauty and great hospitality, but they have also often emphasized its instability. Political turmoil, secessionist movements, and endemic corruption have been the

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[17] In addition, for each of the last five years, Georgia has received greater than $8 million in tariff revenue from the Western Route Export Pipeline, one of the two Early Oil routings that are being used as precursors to BTC, BP: Azerbaijan Business Unit 2004 Sustainability Report.

prominent features found in western assessments of the country. BTC will be concrete proof that, for all of the challenges of the last decade, investors can achieve real results in Georgia – and, moreover, they can achieve real results especially when Georgia works in partnership with its neighbors.

Azerbaijan is in a wholly different position from either of its partner host countries, Georgia and Turkey, because BTC will allow Azerbaijan to monetize its energy resources: It is Azerbaijan's oil that sits under the coastal waters of the Caspian in the Azeri, Chirag, and Guneshli deposits. As noted above, the State Oil Company of the Azerbaijan Republic (SOCAR) owns a ten percent share of AIOC. SOCAR also owns a 25% share of the BTC Pipeline Company, and ten percent of the Shah Deniz partnership. For Azerbaijan, the beginning of major operations of the East-West corridor is a matter of vital economic significance.

In fact, the future economic flows from the major oil and gas projects are of such significance to Azerbaijan that the country faces what some economists refer to as the paradox of plenty. The history of world's oil industry includes all too many cases where major new developments led to economic challenges that the host country was unable to handle effectively. Azerbaijan is certainly at risk of Dutch Disease – imbalance in the macro-economy that can lead to exchange rate effects and smother non-oil development. The Government of Azerbaijan has repeatedly acknowledged this risk and has taken steps to avoid it. In December 2000, Azerbaijan created the State Oil Fund of Azerbaijan (SOFAZ), in order to segregate energy revenues from the remainder of the economy and make more transparent and deliberative decisions about the wise use of the country's energy revenues.[18]

BP has worked closely with Azerbaijan to help it become familiar with effective revenue management practices, including by supporting SOFAZ's participation as a pilot country in the UK-sponsored Extractive Industries Transparency Initiative (EITI). BP also "publishes what it pays" to the host government in order to provide additional encouragement for transparency and effectiveness in revenue management. In 2004 – before the major increase in production that will occur this year – BP delivered to the Government of Azerbaijan 8.3 million barrels of "profit oil" (Azerbaijan's share under the terms of the production sharing agreement (PSA) that governs the ACG field development) – which must be understood as a mere hint of the volumes that Azerbaijan will receive during full-scale operations. BP estimates that Azerbaijan will receive more than $100 billion in revenue from operations of the ACG, BTC, Shah Deniz, and SCP projects, and even this figure

[18] For more information on the State Oil Fund of Azerbaijan, including information on the regular SOFAZ audits that are conducted by international accounting firms, see www.oilfund.az. For more information on the importance of effective revenue management, see the Regional Review, available on www.caspiandevelopmentandexport.com. Or see Svetlana Tsalik, editor, *Caspian Oil Windfalls: Who Will Benefit?*, New York, Open Society Institute, 2003.

is based on a an oil price of $30 per barrel – a figure that is substantially below current price levels.[19]

As is true with the other two host countries, Azerbaijan is experiencing an employment benefit from BTC and its sibling projects, in addition to the revenue income. In the case of Azerbaijan, 2600 short-term jobs have been created during the construction period by the joint BTC-SCP project with another 9600 created by the upstream Azeri project. In addition, several hundred long-term jobs will exist after construction due to the sizable permanent BP business presence in Baku and the on-going operations at the mammoth Sangachal terminal.[20]

Sangachal itself is another form of benefit for Azerbaijan. It is one of the largest installations of its kind anywhere in the world at present, and it employs state-of-the-art technology. Azerbaijan's association with the global oil industry dates back to the days of the Nobel Brothers in the late 1800s, but sadly oil development in Soviet times brought the country incredible environmental devastation. By contrast, Sangachal and the off-shore platforms serve as a reminder to the people of Azerbaijan that modern engineering, investment, and environmental protection practices can significantly decrease the extent of environmental impact that is associated with the country's most important economic activity.

Azerbaijan is also benefiting from BTC and its sibling projects in the form of considerable quantities of locally-procured goods and services. In May 2002, BP and its partners established the Baku Enterprise Center, which helps local businesses understand the requirements and practices of major international investors like BP and its partners.[21]

Significance for the Energy Industry

The discussion above highlighted the fact that BTC will bring benefits to today's tight global oil markets and to the countries and companies that participate in the project. In addition, BTC has major implications for the energy industry itself. The BTC Pipeline has introduced new practices at a time when a great deal of worldwide public attention is focused on the actions of the oil and gas industry.

Many non-governmental organizations (NGOs) – some based in the host countries of Azerbaijan, Georgia, and Turkey; others located in North America or Europe – have raised concerns about the BTC project during its planning and construction. Chiefly, the NGO concerns have centered on perceived risks in relation to the

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[19] Estimates for the period 1994-2024, BP: Azerbaijan Business Unit 2004 Sustainability Report, forthcoming.
[20] For detailed breakdown of employment figures, see BP's business update for 2004, available on: http://www.ecbaku.com/i/news/docs/busupdateeng.doc.
[21] For more information about the Enterprise Center, see http://www.ecbaku.com/.

project's impacts on the environment, human rights, and socio-economic development.

The greatest environmental controversies related to BTC have been related to global climate change and impacts on sensitive areas. Some NGO activists have criticized BP and its partners for bringing on-line new oil capacity at a time when there is growing awareness of the threats posed by the emissions of carbon dioxide and other greenhouse gases.[22] Others have pointed out that the BTC will cross geo-hazards such as earthquake faultlines, as well as cherished natural areas such as the Kodiana-Borjomi area of Georgia.[23]

In relation to human rights, NGOs have expressed concern over the legal framework that was established for the project, and some have charged that security systems for the project may undermine human rights of the people of Azerbaijan, Georgia, and Turkey.[24] A few NGOs charge that the project has already had a negative human rights impact.[25]

Concerns over the perceived socio-economic development risks of BTC have particularly emphasized the history of past oil rushes in developing countries. In the view of campaigners focusing on the socio-economic risks, oil and gas development inevitably leads to macro-economic distortions, increased corruption, and a worsening of living standards, instead of economic improvements.[26]

BP has not attempted to side-step these criticisms. Instead, it has sought to enter into dialogue with critics of the BTC project, to seek effective new approaches to rule out potential problems, and to institute an unprecedented level of transparency in connection with the project.

The engagement with civil society started early on, with countless information sessions and public meetings, and it continues today. Some of these discussions took place in the national capitals: Baku, Tbilisi, and Ankara. Others took place in European or North American cities where there is high interest in the BTC project.[27] Complaints and suggestions are tracked, reported to the public, and

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[22] Friends of the Earth-UK, for example, decries BP's investment in "a dirty oil pipeline" at the very time that the corporation is investing heavily in an identity as a greener energy company. See: http://www.foe.co.uk/campaigns/corporates/case_studies/bp/index.html.

[23] See for example, the website of CEE Bankwatch, http://www.bankwatch.org/issues/oilclima/baku-ceyhan/mbaku.html.

[24] See for example, Amnesty International's report from May 2003, entitled "Human Rights on the Line" http://www.amnesty.org.uk/images/ul/H/Human_Rights_on_the_Line.pdf.

[25] These accusations come mostly from Corner House and the Kurdish Human Rights Project. See http://www.bakuceyhan.org.uk/press_releases/ffm.htm.

[26] For example, see Friends of the Earth-UK's paper criticizing the effectiveness of governmental funds for the management of oil revenues – http://www.foe.org/camps/intl/worldbank/oilrev.pdf.

[27] For example, the Brookings Institution in Washington, DC, hosted a two-session workshop on BTC in May 2003. See http://www.brookings.edu/dybdocroot/comm/events/20030304btc.pdf.

followed-up.[28] Literally hundreds of discussions have taken place in villages near to the pipeline right-of-way, in small halls and schoolrooms – even in outdoor gathering points.[29]

In Azerbaijan, BP and its partners in BTC Co. have teamed up with the Open Society Institute (OSI) to institute a program of NGO monitoring during the implementation and early operation of the BTC. OSI has managed an extensive program that provides training on monitoring methods and standards and then enables the NGOs to develop workplans and carry outmonitoring activities, including site visits. The NGOs have formed five working groups that are investigating the effect of the pipeline on the environment, cultural heritage, human rights, local content (procurement issues), and social impacts.[30] In Georgia, Eurasia Foundation has initiated a similar program. In both cases, the NGOs' reports are being made available to the general public. BTC Co. will respond to key criticisms. In Turkey, NGOs will also have extensive opportunities to learn about the project, engage with BTC Co. and relevant Turkish pipeline authorities, and assess the implementation of BTC.

Transparency mechanisms such as these NGO monitoring processes have been a fundamental element of the approach that BP and its partners have employed throughout the planning and implementation of the BTC project. BP has taken a step that is unprecedented for major oil and gas projects: It has published all the major framework agreements and documents that underlie the BTC. Internet users will thus find at the project website (www.caspiandevelopmentandexport.com) the text of the production sharing agreement (PSA) for the ACG project – the chief source of oil that will be shipped through BTC.

They will also find on-line:

- The inter-governmental agreement (IGA) for BTC that was entered into by the governments of Azerbaijan, Georgia, and Turkey;
- The host government agreements (HGAs) between BTC Co. and the three governments;
- The environmental and social impact assessments (ESIAs) for each phase of BTC and its sibling projects in each country;

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[28] For more information on the extent of on-going consultations and examples of the public reporting of complaints, see the quarterly environmental and social reports, such as the one found at: http://www.caspiandevelopmentandexport.com/Downloads/BTC/eng/q4_es_04/06_2004-Q4%20Case%20Study%206.1.pdf.

[29] For example, see the Public Consultation and Disclosure Plans (PCDPs) – one each for Azerbaijan, Georgia, and Turkey – that were prepared as a part of the Environmental and Social Impact Assessments – http://www.caspiandevelopmentandexport.com/ASP/dd_BTC_Detail.asp?PID=9973.

[30] For more details, see OSI Azerbaijan's website: http://www.osi-az.org/crw_nw2.shtml#.

- Numerous critical reviews and assessments of the BTC project by independent technical experts working on behalf of the lenders;
- The so-called social and resettlement action plans (SRAPs – a misnomer: the project does not involvement any permanent resettlements despite its 1768-km length crossing three countries);
- A detailed report on the method by which the routing of the BTC was chosen within Georgia, where there has been protracted controversy over the pipeline's proximity to the treasured area of Kodiana-Bakuriani and Borjomi; and
- Many other major documents that describe either the commitments that BP and its partners have entered into, or their performance against the established commitments.[31]

BP also took two further steps in relation to BTC. First, BP exhaustively researched, wrote, and then released to the public in February 2003 a document called the *Regional Review*, which states the general philosophy and principles with which BP approaches the BTC and its sibling projects. The Regional Review surveys a host of the most controversial issues related to major oil and gas infrastructure projects – corruption, revenue management, human rights, social development, conflict, and environmental impacts. For each topic, the Regional Review assesses the potential impacts of BTC and the other BP-led projects on the three affected countries, as well as the potential impact of the countries on BP and the projects. It then discusses measures that are being employed to mitigate negative impacts.

Secondly, in recognition of the fact that the project framework agreements (the PSAs, IGAs, and HGAs mentioned above) are complicated documents written by and for lawyers, BP prepared a *Citizen's Guide* to the BTC. This document explains in everyday language the nature of the commitments that BP and its partners have made. It provides answers to critical questions, such as whether BTC and the sibling projects are exempt from the provisions of national law, a frequent but inaccurate accusation.[32]

The net effect of all of these measures is simple: BP has not said to the people of Azerbaijan, Georgia, and Turkey "just trust us." Instead, BP has laid out in detail what it has promised, and what its own expectations are of itself and of the

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[31] See http://www.caspiandevelopmentandexport.com. Most of the key documents have been made available in the host-country capitals and in many regional information offices and even public libraries, in addition to on the web.
[32] For the text of the Citizens Guide, see: http://www.caspiandevelopmentandexport.com/Downloads/citizens%20guide%20final.pdf.

partners and contractors that will work with BP. It has thus provided very public standards, and BP has every reason to believe that it will be held accountable by international public opinion, and by its own shareholders.

Three specific cases illustrate the approach. Controversy emerged in the press in early 2004 over alleged shortcomings of the anti-corrosive coating that BP is applying to the pieces of pipe ("joints" as they are known in the industry) before welding and laying the pipe down into the trench. This coating is important for reducing or eliminating corrosion that, over time, can reduce the thickness of pipe walls and lead to failures or even spills. In the initial application of this "field joint coating" during cold weather, BP and its contractors discovered that the coating was failing to cure and adhere properly in some instances. Work was interrupted until BP and the contractors corrected work practices; the application of heat addressed and eliminated the problem. In short, there was a technical problem; the problem was identified by BP's quality control systems; the problem was diagnosed and fixed; work then continued. What is more, BP made available on the internet the key findings of an independent assessment of the topic, in order to address the controversy.[33]

Turning to a second case study, in May 2004, Amnesty International released a major paper that accused BP of failing to take steps to protect human rights in connection with the BTC project. Rather than launching a public relations offensive to reject the Amnesty charges, BP entered into an extensive expert dialogue with Amnesty and their legal counsel. BP clarified: (1) its plans to implement in the security systems for the entire pipeline – for the first time anywhere – the Voluntary Principles for Security and Human Rights (a new industry-government compact that creates high standards), (2) its adherence to other, far-reaching human rights commitments, and (3) a self-imposed legal obligation (a Deed Poll) to use the project's legal framework as a strengthening of – not as an escape from – national law.[34]

A third case study of BP's transparent approach for the BTC project can be found in the form of the Caspian Development Advisory Panel (CDAP). CDAP is an independent body that reports to the group chief executive of BP, John Browne. The panel consists of four experienced individuals – a Dane, an Algerian, a Canadian, and an American – who have had distinguished careers in senior positions in industry, international organizations, and government. Their mandate

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[33] See the Independent Field Joint Coating Review and Related Documents on http://www.caspiandevelopmentandexport.com/ASP/PD_BTC.asp.

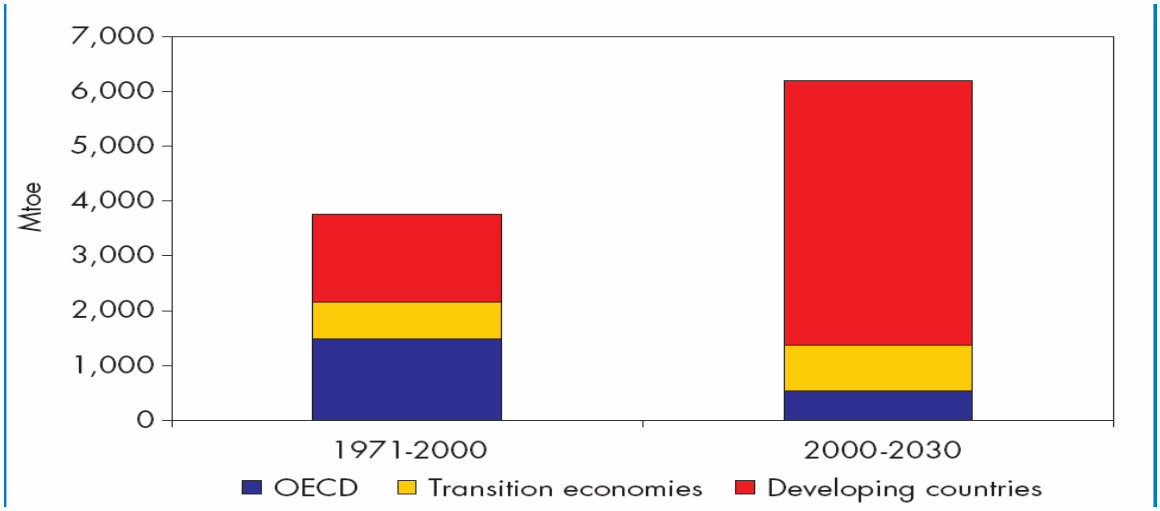
[34] This legal obligation is referred to as a Deed Poll. For more information, see the Citizens Guide, mentioned above. Amnesty did not retract its report and did not endorse the BTC project, but it did document on its website the engagement with BP and the resulting understandings. See http://www.amnesty.org.uk/business/btc/

has been to review the implementation of BTC and its sibling projects, enter into independent dialogue with all manner of interested stakeholders, and bring significant findings directly to the attention of the chief executive. Each of the Panel members has his own independence and credibility at stake, so the panel does not hesitate to highlight instances where they feel that the BTC project managers have missed an opportunity or have failed to live up to appropriately high expectations. Similarly, the panel has highlighted major achievements of the project team. A professional secretariat and expert consultants support the Panel, and its findings are published on the internet.

BP's approach in managing the BTC has raised the bar for future projects in the oil and gas industry. It has made clear that companies can take account of the criticisms and concerns of civil society and can, in fact, respond to those criticisms and concerns in a way that strengthens the projects, to be the benefit of investors, shareholders, and civil society alike.

BTC will certainly not be the last major energy transportation project that involves features like a developing-country setting, multiple legal jurisdictions, challenging technical and political parameters, and close attention from host-country and international NGOs. On the contrary, one has every reason to believe that more energy projects will have these characteristics. The International Energy Agency has made this point repeatedly in its forecasts for the global energy industry in publications such as the *World Energy Outlook*.

Figure 8



Source: *World Energy Outlook 2002*, International Energy Agency

In the 2002 edition of this publication, IEA published the graphic that appears above in Figure 8. This graphic makes the point that, in the last three decades,

roughly equal shares of our total global energy production came from industrialized countries on the one hand and from developing and transition countries on the other. In the coming three decades, however, roughly four-fifths of total energy production will come from developing and transition countries. Energy investors working in these countries, which will be such an important part of our energy future, will face many of the same challenges that BP and its partners have faced on BTC – pressing need for new employment, weak institutions, high levels of corruption, low standards of living, and political instability.

Notably, BP's actions as the operator of BTC have also had the effect of raising the stakes for BP itself. The company has made itself accountable, and it would pay dearly in terms of its reputation if BTC were to suffer a serious failure or defect. This fact provides an explicit incentive for BP to do its utmost to prevent potential defects or failures.

In reality, when building and operating major industrial infrastructure such as a pipeline system, one is never able to categorically rule out failures. Nonetheless, clear accountability creates the pressure that is required to minimize chances of bad outcomes. This is an approach that other companies will feel pressured to emulate, and that means that BTC will serve as a learning experience for future operations of the energy industry.

Conclusions

The $3-billion Baku-Tbilisi-Ceyhan pipeline project is an enormous and multi-faceted undertaking, as the discussion above has illustrated. BTC is a project that was dismissed by some as a fantasy, an illusion that would never come to pass. Now, in 2005, the project is entering operation.

As it does come to fruition, BTC continues to carry great significance for many thousands – indeed millions – of people who are affected by the project in one way or another. Energy consumers in the United States, Europe, Japan, China, and elsewhere will experience subtle, though important, impacts through a global oil market that is experiencing a time of volatility. Energy industry leaders will receive a useful case study of how they can conduct major energy projects in the future. Energy-producing and energy-transit countries around the Caspian will have new choices about how to reach markets. Citizens in the three host countries will experience both indirect benefits (wealthier state coffers) as well as direct benefits – employment, local procurement, community development, and other social investments.

All along the way, from the first conceptual discussions in the 1990s to the present day, BTC and its potential positive impacts have been anything but an inevitability. Now, as the pipeline enters operation, those who have labored to

make BTC a reality can take a moment to celebrate the achievements to date. The Baku-Tbilisi-Ceyhan oil pipeline will bring positive economic impacts for years to come.

4. The Baku-Tbilisi-Ceyhan Pipeline: Implications for Azerbaijan

Svante E. Cornell and Fariz Ismailzade

The BTC pipeline's total length throughout the three countries will be 1,760 km, of which Azerbaijan will host 445 km. The pipeline will export up to 1 million barrels of crude Azerbaijani (and subject to the future negotiations, possibly Kazakhstani and Russian) oil per day from the Azeri, Chirag, and Guneshli fields in the Caspian sea to world markets. It will originate at the existing Sangachal terminal near Baku and will terminate at a new storage and export terminal, the BTC Marine Terminal. The first tanker with Caspian oil leaving the port of Ceyhan will be loaded in the second half of 2005.

The pipeline will occupy a corridor eight meters wide, and will be buried at a depth of no less than one meter. Although originally priced at $2.9 billion, BTC will cost more than $3.4 billion. The Azerbaijani section will be 42 inches wide in diameter with a durability of 40 years. In Azerbaijan, BTC passes 350 road and rail and 700 water crossings. There will be two pumping stations in the Azerbaijani part of the pipeline and one metering station.

BTC's overall meaning for Azerbaijan

BTC has been largely regarded in Azerbaijan as a tool to decrease its dependence on Russia in terms of export routes for oil and gas, as well as to build new economic, political and security links with Turkey, Azerbaijan's ally, and subsequently with Western Europe. The Azerbaijani political leadership has treated BTC more as a geopolitical asset as opposed to a mere economic benefit. The fact that Azerbaijan's leadership has preferred this western route over Russian or Iranian routes shows the limited nature of Baku's trust in its northern and southern neighbors and its desire to secure the country's independence and sovereignty with the help of Turkey and the West. It is widely believed that should BTC be completed, Azerbaijan will gradually integrate and merge with Turkey and Western Europe in the economic, energy and security fields. At the same time, BTC has been instrumental in developing and strengthening the so-called "East-West" energy, transport and telecommunications corridor. As this corridor would eventually

bypass Armenia and deepen its political and economic isolation, BTC has also served as a negotiation tool for Baku in the Nagorno-Karabakh conflict. Finally, BTC was and remains regarded by Azerbaijanis as a tool for economic prosperity. This approach is more pronounced among ordinary Azerbaijanis than among the political elite. Average citizens of the country have been desperately waiting for the completion of the pipeline as they have been promised a long-awaited and much-desired economic boom and a concomitant reduction in the poverty rate.

BTC's Economic Impact

There are currently close to 15,000 people employed with foreign companies in oil and gas projects in Azerbaijan. The pipeline's construction has created 10,000 short-term jobs (2,300 of which in Azerbaijan) and will require 1,000 long-term employees (250 of which in Azerbaijan) throughout its expected 40 years of operations. BTC has also led to various community and environment investment programs conducted by the shareholders of BTC. Specifically, a total of $8 million will be invested into community development programs and $2 million into environmental programs. Moreover, $150 million in direct in-country investment will reach Azerbaijan. Many local companies will also benefit from BTC due to the project's policy to purchase local goods and services if they meet international standards.

It is estimated that following the construction of BTC and the export of Azerbaijani oil to Western markets, the total oil revenues of Azerbaijan will reach close to $140 billion dollars at world oil prices of $45 per barrel – though it should be noted that BP projects $100 billion at prices of $30 per barrel. The Shah Deniz gas field, discovered in 1999 and containing an estimated 400 billion cubic meters (bcm) of gas, is scheduled to yield another $20-30 billion when the South Caucasus gas Pipeline (SCP) will be completed and will export Azerbaijani gas to the Turkish city of Erzurum, and onwards to Western markets. As the current budget of the country barely reaches $2 billion, these number are of obvious significance to Azerbaijan. Thus, if effectively managed, the oil extraction and pipeline projects, are expected to bring lasting political, economic, social and environmental benefits to the people of Azerbaijan, and in addition, to those of Georgia and Turkey.

Yet, there are also reasons for caution. Local economists believe that the huge amount of oil and gas revenues will generate several negative consequences for the local economy. A first and obvious point is the very real danger that Azerbaijan will develop an economy over-reliant on energy, and suffer from the so-called 'Dutch Disease'. Since independence, the overwhelming majority of foreign investment in Azerbaijan has been focused on the oil and gas sector. If, as projected, a very significant part of the state's finances is dependent on oil and gas sales, the price fluctuations of these commodities will affect Azerbaijan's economy and stability significantly. In this context, the creation of the State Oil Fund,

examined in detail below, clearly is a crucial element in avoiding the most direct effects of the Dutch Disease. Yet this does not prevent Azerbaijan from facing another problem: when oil sales begin to plummet in a few decades, the country's economic future will be dependent on to what extent the state has spearheaded a diversification of the economy that can form a basis of a strong economy even in the post-oil era. So far, the government shows every sign of realizing this necessity – but still needs to move from words to action.

Secondly, and related to this, is the possibility of a psychological feeling of over-confidence and security in the future developing, which in turn could lead to inefficiency and a slow pace of reforms. In short, economists warn that easy access to cash will make the government reluctant to conduct long-term economic reforms.

At the same time, it is expected that the national currency, the *manat*, will get ever stronger in relation to the U.S. Dollar, and that this could lead to decreased domestic production and in turn hurt the local economy. This tendency, alongside with inflation, has already been observable in Azerbaijan since 2004 and is likely to continue in the future. The stronger *manat* could also slow down the real competitiveness of the local economy and result in higher unemployment.

The peak of BTC's operation and of the general level of oil and gas output will take place between 2010 –2015, after which oil and gas production will be slowly reducing, effectively coming to an end in 2030, if no other fields are discovered. Economists believe that the slowly diminishing pace of oil production could also result in a slow down or even reduction of the GDP growth rate. This would also negatively affect the local economy, because the government would have to dip into the accumulated oil fund to sustain the level of spending which existed during peak production years.

Should the accumulated oil revenues not be wisely invested into the diversification of the local economy and should inflation not be kept at minimal levels, these pessimistic predictions could become true.

BTC's impact for the communities

BTC is passing through more than a dozen administrative regions in Azerbaijan. Most of these are rural areas with agriculture and livestock breeding as the primary economic sectors. During the course of the pipeline's construction, many communities in these rural areas have been affected by the pipeline. Most were affected in a positive way, but there have been also reports that the construction works have negatively affected the human and property rights of some citizens.

Among the positive impacts of the pipeline, infrastructure and community development are the most often cited. BTC and the SCP, which remains under

construction, are jointly investing $8 million in the Community Investment Program (CIP) in Azerbaijan. This program's goal is to promote sustainable economic and social development in the country with projects in the fields mainly of health awareness, social infrastructure and agricultural development, and to promote income generation opportunities. For instance, in the village of Sitalchay, people complained about the lack of water. British Petroleum, the main operator of BTC, then built a water pipeline to the village. Other cases involved the rehabilitation of local schools, roads, hospitals, electricity and sewage lines, water canals and irrigation pipes, construction of kindergartens and playgrounds, development of sustainable communication and energy lines, creation of economic opportunities through both training and technical assistance. One can cite thousands of such kind of cases. The implementing partners for these projects are the international NGOs "Save the Children", "The International Rescue Committee", "The International Medical Corps", "The Foundation for International Community Assistance" together with their local NGO partners. All the partnering organizations have been selected by means of a Request for Proposals with special attention to relevant skills and experience.

Besides these programs, in order to make sure that BTC has direct, tangible, immediate and sustainable impact on the community, BTC has implemented various community development and mobilization projects. These projects have been aimed at increasing the sense of initiative, activity, community belonging, ownership and organization among the residents of the communities where the pipeline passes. This, in turn, would help not only to empower the communities for the long-term period, but also to involve the communities into the protection of the pipeline, as they would feel responsibility and ownership of the pipeline. Many vocational education opportunities and micro-enterprise initiatives were also created.

In order to further increase the positive impact of the BTC pipeline on community life, BP has planned to launch a new Regional Development Initiative (RDI). This initiative will support the economic development of the BTC host countries but will also aim at targeting those areas and communities where BTC does not physically pass (beyond the 4 km corridor.) The European Bank for Reconstruction and Development (EBRD) and BP have each earmarked up to $25 million in grants and loans for this initiative with other members of the BTC consortium expected to join with further funding up to $100 million. The initiative will be launched in mid-2005.

Alongside with the positive impacts of BTC on the lives of communities, local and international human rights organizations have drawn attention to the problems and conflicts in the construction process. Primarily, this related to the acquisition of land and employment policies. The construction of BTC takes up a 32 meter wide

land corridor for temporary usage with further plans to return the land for agriculture and grazing. Although BTC does not result in the physical resettlement of people, the project has a temporary impact on land owners and users. BTC Co. has developed a "Resettlement Action Plan" to compensate to the local people for the use of land for the construction of the pipeline and has planned to distribute $133 million to landowners in all three countries. Yet, the process of monetary compensation did not always go smoothly. In some areas, local authorities have illegally purchased or forced people to give up their lands in order to avoid paying compensation. The most common practices in these cases have been the transfer of private lands into the hands of municipal councils, which would then end up in the hands of the local mayor. In other cases, the land acquisition process has taken place too quickly, leaving people unaware of their rights and unprotected from the harassment of local authorities.

Furthermore, local residents, employed at the construction of BTC have complained of being mistreated in terms of labor rights and medical treatment. According to the legal and regulatory frameworks that govern BTC, governments are primarily responsible for the maintenance of law and order, and for the respect for human rights and security. Yet energy companies are also tasked to make sure that the human rights of local residents are protected. BTC Co. has taken an obligation to protect the rights of the employees and contractors according to both national legislation and the international conventions that Azerbaijan, Georgia and Turkey are party to.[1] BTC Co. and the three host countries reiterated their commitment to the respect of human rights in a joint statement signed on May 16, 2003 in which they highlighted their intention to make BTC a model project in terms of respect for human rights.

Despite these commitments, the local media, NGOs and human rights organizations have regularly reported on cases of mistreatment at work. These cases included denial of medical compensation for employees hurt during working hours, prevention of attempts to organize labor unions, and discrimination.[2] Although these cases did not prevent or prolong the construction of the pipeline, they have affected the image of multinational oil companies among the general public. Most importantly, the construction of BTC has become a process in which many local residents and employees of the project do not feel their voices are heard. The feeling of powerlessness and lack of voice dominates the local communities

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[1] This applies to Universal Declaration on Human Rights, the UN Convention Against Torture and other in Cruel Human or Degrading Treatment or Punishment, the European Convention for the Protection of Human Rights and Fundamental Freedoms, International Convention on the Elimination of All Forms of Racial Discrimination, the UN Basic Principles on the use of firearms by Law Enforcement Officials, the UN Code of Conduct for Law Enforcement Officials and many others.

[2] Eg. "Foreign Oil Companies Accused of Rights Violations", *Baku Today*, 30 April 2005; Kathleen Williams, "BTC Project Plagued by Human Rights Abuse Claims", *Trade & Forfeiting Review*, 22 April 2005.

and people involved in the project for the most part. Many residents and employees of the project believe that the local government and multinational companies are too powerful and distanced from the local communities to hear their concerns. BP, it should be noted, has regularly disciplined and even fired BTC staff who violated the code of conduct. In spite of the company's best efforts, however, it seems that these problems have not been entirely averted. This is likely due in great part to the time pressure under which the project has been, as well as the complex trilateral interaction between the local authorities, citizens, and the international companies.

BTC's Environmental Impact

While the environmental aspects are covered in detail elsewhere in this volume, it should be noted that under the Environmental Investment Program (EIP), BTC Co. is investing $2.7 million in Azerbaijan for environmental projects until the end of 2006. Some of the projects under this program involve the habitat improvement scheme for the semi-desert Gobustan area, a forest management project to conserve and improve areas of the Tugai forest, but several more projects are expected to be announced later.

The construction of BTC has not caused as much environmental concerns in Azerbaijan as it has in Georgia, where it passes the Borjomi Gorge mineral water spring. In Azerbaijan, some local NGOs have raised concerns about the passage of BTC though the Kur river as well as the Gobustan area, a national historical park. Yet, the government of Azerbaijan, specifically the State Oil Company of Azerbaijan and the Ministry of Ecology and Natural Resources, have downplayed these concerns. BTC constructors have taken special, internationally recognized technological measures at the river and fault crossings to ensure the pipeline's and the surrounding areas' safety. The BTC project meets the environmental requirements of international institutions, including the World Bank.

BTC's Impact on Democracy and Governance

As paradoxical as it is, the overwhelming majority of countries in the world where the oil and gas industry dominates the local economy have experienced problems with democracy, human rights, governance and corruption. Norway stands out as the exception that confirms the rule. It remains to be seen whether the years after the completion of BTC and the export of "major oil" from Baku to Western markets, Azerbaijan will emulate the Norwegian model and significantly improve governance in the country.

Elections in Azerbaijan continue to remain the most problematic aspect of democratic development. Almost all elections since the re-establishment of the country's independence, be it presidential, parliamentary or municipal, have been

challenged and resulted in deep political polarization and animosity between political actors in the country. The availability of rich energy resources and thus large amounts of cash adds fuel to the competition between the political forces in the country, simply by raising the stakes for political actors. The ruling party, the Yeni Azerbaijan Party, established by late President Heydar Aliyev, came to power in 1993 and has since then established a tight grip on governance. Azerbaijan continues to be a highly centralized state with only limited authority given to lower levels of government. The state of war in which Azerbaijan finds itself has been an important element in sustaining this centralization.

Corruption and lack of transparency is another deep problem in Azerbaijan. Gaining necessary monetary resources from the oil and gas sectors, there is a risk that the Azerbaijani government and bureaucracy would become increasingly distanced from ordinary citizens. That said, the Azerbaijani government has taken a number of important steps to work toward transparency, especially in the energy sector, of which the oil fund is only the most apparent. The government has also been supportive of new international instruments to fight corruption.

Poverty and unemployment remains rampant throughout the country. According to official statistics, 42% of the population remains below the poverty line, and local economists claim that over a million Azerbaijanis have emigrated abroad in search of jobs and economic opportunities. Lack of democratic development and inefficient governance is also felt in other sectors of daily life, such as education, agriculture, health services and science.

At this moment, there are two ways to look at the impact of the BTC on the political developments in the country: an optimistic and pessimistic one. The supporters of the former approach claim that the close proximity of Azerbaijan to Europe and the connection of Azerbaijan into the European economy through BTC will eventually result in the full political and economic integration of the country into European institutions and values. This, in turn, will lead to the improvements in the sphere of democracy, governance, transparency and human rights.

Indeed, some facts of the recent years support this thought. In 2001, Azerbaijan joined the Council of Europe, which has been a crucial factor behind reforms in the country, such as the passage of the law on the fight against corruption, the establishment of a public TV station, the release of political prisoners, and amendments to the constitution, including opening the way for ordinary citizens to appeal to the Constitutional Court. Some of these changes are still new to Azerbaijani society and lack proper mechanisms of implementation, thus it is not clear what the full positive effects of these reforms will be. Yet, the fact that these changes are being made provides hope for a positive development in the field of democracy and good governance. The Council of Europe continues to press the

Azerbaijani government on other issues such as the improvement of the electoral law, transfer of power and authority from local executive bodies to the municipalities, and the establishment of a strong civil society. Other international organizations also work in this front. With the help of the UN, the Azerbaijani government since 2003 developed and started to implement the state program on "poverty reduction and economic opportunities." The IMF has been instrumental in working with the Azerbaijani government to establish an annual reporting system of the executive branch of the government in the National Parliament as well as transferring the primary decision-making role over the State Oil Fund from the President into the hands of the Parliament. Other foreign and international organizations, such as USAID, the World Bank, the Organization for Security and Cooperation in Europe (OSCE), the Open Society Institute and many others, continue their activities to develop and empower the local NGO and media sectors so that they will play a more active role in the decision-making and governance process.

Yet, none of these improvements and reforms in the political sector are directly driven from BTC or other oil and gas projects. In fact, oppositional advocates argue that ongoing oil and gas projects seem to be having a negative impact on the development of democracy and human rights in the country. After the presidential elections in 2003, many opposition figures and NGO activists accused foreign countries and multinational oil companies of closing their eyes to electoral fraud and supporting the authoritarian regime in the name of stability and security. Foreign powers and powerful energy companies are primarily interested in preserving long-term stability in the country in order to ensure the smooth continuation of the oil and gas projects. This implies that energy companies work with the government of the country, which they clearly have no influence in determining. Indeed, during the past decade the oil companies operating in Azerbaijan have developed strong partnership ties with the Azerbaijani government and have little incentives to finance opposition parties or civil society groups in order not to risk their contracts and business ties with the government.

In the final analysis, there is no substantiation for the assertion that oil has had a negative effect on the political development of Azerbaijan. Neither can it be stated that its influence has been positive on the political system. What is clear is that oil has been instrumental in helping Azerbaijan build a functioning state with governmental institutions that work considerably better than states with comparable socio-economic situations, such as Georgia and Kyrgyzstan. As argue among other by Francis Fukuyama in his recent book *State-Building*, the building of functioning state institutions is a sine qua non for long-term political development and durable democracy. In this sense, time will determine what the long-term effect of oil on Azerbaijan has been.

On another note, the cooling of official Washington's attitude to Azerbaijan since the 2003 elections tends to disprove the thesis that oil takes precedence over democracy. Indeed, the completion of the BTC pipeline seems to have altered little in the distance between Washington and Baku that developed after Fall 2003, when U.S. policy warmed up considerably to Georgia while maintaining a distance to Azerbaijan, in spite of the strong strategic interests that the U.S. has in the country, best illustrated by Defense Secretary Donald Rumsfeld's three visits to Baku in as many years.

The State Oil Fund

The increasing amount of oil revenues as well as the recommendations of the international financial institutions resulted in the Azerbaijani government's decision in December 1999 to establish a State Oil Fund of the Azerbaijan Republic (SOFAR). (decree # 240 signed by President Heydar Aliyev). The statutory regulations of SOFAR were approved on December 29, 2000. Mr. Samir Sharifov was appointed as the executive director of SOFAR, reporting directly to the President.

SOFAR was a new institution in Azerbaijan's political and economic history and required a great deal of care in its establishment and management. Prior to this, Azerbaijan never had an experience with the receipt of large amounts of revenues during a short period of time, or with managing these revenues.

SOFAR's main goal was to accumulate the oil revenues from the Production Sharing Agreements signed with foreign energy companies, and invest them into interest-generating bonds and stocks. At the same time, SOFAR serves as a tool for the prevention of inflation, as a result of massive oil cash inflow into the national economy and subsequent excessive spending that would be likely if the money went straight into the state budget. Finally, SOFAR's funds are considered as an investment opportunity for the domestic economic and social projects in order to diversify the economy.

SOFAR's primary sources of income are generated from bonus payments, royalties, revenues from the sale of crude oil and gas, rental and transit fees, revenues from the joint activities with foreign companies, revenues from investments and from the sale of assets. The accumulated revenues are kept offshore with internationally recognized and reputable financial institutions and fund managers.

SOFAR has been proudly mentioned as one of the most transparent and non-corrupt institutions of the government. From the first day of its operation, SOFAR has been transparent with the local media and NGO sectors about its revenues, earned interests and expenditures. This information has been shared with the public both through SOFAR's web site and regular press-conferences, and the

publication of reports. SOFAR's key principles of operation are its independence from the accounts of the National Bank or the Ministry of Finance; its disconnection from the state budget; additional elements include close supervision, tax exemption, prudency and transparency.

SOFAR has also enthusiastically used the services of local and international auditors. The Parliamentary Chamber of Accounts, the supreme audit institution of the country, is responsible for the regular auditing of SOFAR's activity. At the same time, the international auditing firm Ernst & Young has conducted an audit of SOFAR's activity for three years in a row, and reached the following conclusion: "We have audited the accompanying statements of financial position of the State Oil Fund of the Republic of Azerbaijan (the "Fund") as of December 31, 2003, and 2002, and the related statements of financial performance changes in net assets and cash flows for the years then ended... We conducted our audits in accordance with International Standards on Auditing issued by the International Federation of Accountants....In our opinion, the financial statements referred to above present fairly in all material respects the financial position of the Fund at December 31, 2003, and 2002, and the results of its financial performance and its cash flows for the years then ended in conformity with International Public Sector Accounting Standards issued by the Public Sector Committee of the International Federation of Accountant."

In order to further increase the transparency of SOFAR, the Azerbaijani government has decided to join the Extractive Industries Transparency Initiative (EITI), an international initiative by British Prime Minister Tony Blair. The project brings together representatives of governments, industry and civil society to improve transparency in the oil, gas and mining industries. In the second conference of EITI in London in March 2005, Azerbaijan, along with several other countries, was commended for its encouraging progress towards transparency in the oil and gas sectors. Azerbaijan became the first participant of the EITI to disclose the transparency initiative report, and several multinational oil and gas companies operating in the country have promised to fully disclose their monetary transfers into the Azerbaijani government.

Despite the general transparency of SOFAR, local and international organizations continue to express their concerns about the safety of the oil funds and their most effective usage. The IMF and other international organizations recommended to the Azerbaijani government that the role of the primary decision-maker of the SOFAR be passed from the President of the country to the Parliament. Additionally, local economists worry that in spite of SOFAR's transparency, the funds transferred from SOFAR into the state budget for public goods and services will be subjected to corruption and embezzlement. There is little public (media and NGO) control or monitoring over these funds. The local NGO "Public Funds

Monitoring Center and the Open Society Institute-initiated and funded "Caspian Revenue Watch" project have so far been the only initiatives from civil society to monitor oil and gas revenues.

Strategy on the use of oil revenues

By January 1, 2003, SOFAR had accumulated $690 million. By mid-2005, the figure exceeded $1 billion. The lion's share of these funds has come from the sale of crude oil (Azerbaijan's share in PSAs) and bonus payments. There is a general understanding among the Azerbaijani political leadership that the revenues from the oil contracts will be accumulated in the SOFAR and later be used for domestic projects, aimed at the development of the economy's non-oil sector. President Ilham Aliyev, Minister of Economic Development Farkhad Aliyev, and other state officials have repeatedly made statements to that effect at official and non-official gatherings.

Yet, up to this moment, the Azerbaijani government has pursued a rather conservative policy regarding this issue, not spending much of the accumulated funds. The President has issued decrees for the allocation of 675 billion AZM (more than $135 million) for the improvement of social and living conditions and construction of housing for refugees and internally displaced persons, as well as the financing of Azerbaijan's share in the BTC project. Furthermore, another 500 billion AZM (more than $100 million) were transferred into the state budget. This conservative policy is often encouraged by the international financial institutions that are afraid of the collapse of the macroeconomic stability and low inflation rate by too much cash input into the national economy. This fear is well shared by the local economists and politicians.

In order to further develop Azerbaijan's strategy on the utilization of oil and gas revenues, President Ilham Aliyev on September 27, 2004 signed a Presidential decree on "the long-term strategy on the management of the oil and gas revenues." This decree defines the management of the oil and gas revenues for the period 2005-2025 and proposes that the revenues from oil and gas contracts be used in the future for the following areas:

- development of non-oil sector; regions; small and medium businesses
- large-scale development of infrastructure
- implementation of poverty reduction measures and other social projects
- stimulate the increase of the intellectual and technological basis of the economy
- development of the "human capital"
- strengthening the defense capacity of the country

- re-development of the liberated territories and the resettlement of the displaced people.

Some of these priority directions, such as the development of human capital, have been mentioned not only by the government but also by the UN, opposition parties, and local NGOs. In 2003, the opposition party National Independence Party proposed to allocate $1 billion from SOFAR funds to establish a scholarship program for Azerbaijani students to study abroad. Some members of parliament have suggested to spend 1% of SOFAR's revenues on the elderly and war veterans. The strengthening of the army has been also cited by the President Aliyev as a regular focus for the spending of oil revenues.

On March 29, 2005, the chairman of the National Bank of Azerbaijan Elman Rustamov has proposed that the funds from the State Oil Fund of Azerbaijan Republic be used for investments in large scale projects, such as building power stations and laying highways. He also warned that these projects should not cause inflation or hurt the general macro-economic policy of the state, but instead be directed at the development of the country's regions as well as the non-oil sector of the economy.

Despite these promises and concrete plans, there have been also disagreements on the use of oil and gas revenues. Some opposition parties have argued that the accumulation of the oil revenues in SOFAR and their investment into foreign low-interest bonds and stock is not as productive as would have been their investment into the local economy. Lack of loans for farmers and small businessmen is often cited as a good example of this problem. A recurrent complaint has been to ask why Azerbaijan borrows money from foreign banks and financial institutions at high interest rate to provide loans to farmers, if it could use its own oil revenues for the same purpose. At least on one occasion, government representatives, such as State Economic Advisor Vahid Akhundov's, have agreed with this concern.

Security Challenges to the BTC Pipeline

The BTC pipeline has been designed to be the most secure pipeline in the world. It is buried under ground and protected against corrosion. The entire route of the pipeline will be under the constant safety surveillance and the program of inspection and maintenance will ensure that the pipeline remains in good condition. BTC co. has pledged to train its staff to respond to any potential incidents. Links from the Sangachal terminal to the metering and pumping stations will provide real-time information about the flow of oil. That said, there are several risk areas for the pipeline that can not and should not be underestimated. Located in a troublesome and unstable area of the world, Azerbaijan faces major threats on a daily basis. Here are some of them:

International terrorism. Azerbaijan is a country that has experienced major problems with terrorism since its independence. Buses, metro, apartments and oil pipelines (a total of 32 terrorist acts) have been blown up on several occasions. Different criminal and political groups have used terrorism to achieve their goals. The government has identified several Armenian, Chechen and even Lezgin groups that have used terrorism to pressure the Azerbaijani government.

International terrorist groups such as the PKK and Al-Qaeda have threatened with the destruction of oil pipelines, should their political demands not met. The PKK even specifically threatened to blow up the BTC pipeline.

Thus, dealing with the international terrorism is a major priority for Azerbaijan's political elite. After the September 11 terror attacks, Azerbaijan joined the international war on terrorism as an enthusiastic partner and sent troops to both Iraq and Afghanistan. It has also arrested at least 39 international terrorists on its territory and deported another 152 suspected terrorists.[3] It has actively cooperated with the U.S. and NATO in border security and other areas.

Conflict with Armenia. Azerbaijan has been engaged in a bitter territorial dispute with neighboring Armenia since 1988. The conflict, which started over the Armenian claims to the Azerbaijani area of Nagorno-Karabakh, grew into a full-scale war and resulted in the occupation of over 17 percent of Azerbaijan's territory, the ethnic cleansing of over a million people, the overwhelming majority of which were ethnic Azerbaijanis, from their homes, and the death of over 30,000 people on both sides. Military actions were stopped with a 1994 cease-fire agreement, and during the past 10 years, both sides have with the help of international mediators been trying to find a peaceful solution to the conflict.

In fact, the unresolved conflict between Armenia and Azerbaijan is the largest threat to peace and security in the South Caucasus and perhaps in the wider region. With every year that the deadlocked conflict continues without a solution, the risk of a resumption of hostilities looms larger, with ever larger implications. Until the past two years, the political elites in both Armenia and Azerbaijan have seemed inclined to find a solution by peaceful means. However, the experience of the past two years indicate a hardening of negotiating positions on both sides, while the activity of international mediation is low.

While Armenia has suffered considerably in both economic and demographic terms (mainly due to out-migration) as a result of the conflict, its current leadership refuses to compromise on the demand for Nagorno Karabakh's independence. This is partly due to the dominance of a Karabakh elite in Armenian politics: President Robert Kocharian is the former President of the unrecognized

[3] Data is taken from the presentation of the official of the State Border Services of Azerbaijan.

republic, and defense minister Serzh Sarkisian is its former defense minister. This elite seems to give at least equal emphasis to Karabakh's distinct interests compared to those of Armenia proper, unlike former President Ter-Petrossian, who concluded by 1997 that Armenia's interests required a compromise on the status of Karabakh. The influence of the Karabakh lobby is growing, as indicated by a public declaration in June 2004 by Garnik Isagulian, an advisor to President Kocharyan, stating that Armenia's next President should also be from Nagorno-Karabakh, as that area is crucial to Armenia's national interests.[4] The Armenian leadership currently controls the territory of Mountainous Karabakh and seven adjacent Azerbaijani regions, hence feeling less urgency in a solution. Armenia is clearly interested in preserving the military *status quo* until it can get a favorable deal.

Meanwhile, Azerbaijan's society and leadership is deeply disturbed by the humiliation of losing around a sixth of the country's territory, and the massive refugee and internally displaced population is both an economic drain and a political concern. Popular frustration in the country is rising with what is perceived as Armenian intransigence and international disregard to the aggression committed against their country. Concomitantly, the political elite is increasingly seeing the deadlock in Nagorno-Karabakh as the key and crucial issue preventing the full realization of Azerbaijan's political and economic development and potential. As a result, Azerbaijan views Karabakh as having a higher priority than any other foreign policy concern. The result is an increasingly strong conviction among Azerbaijan's population, intellectual and political elite that Karabakh can only be recovered through the use of force and that Azerbaijan should therefore prepare for the use of force. The defining moment in the development of Azerbaijan's perception of the problem seems to have occurred in August 2002, as President Heydar Aliyev offered the restoration of economic relations in return for Armenian withdrawal from the four occupied territories along the Iranian border. President Robert Kocharyan's refusal to discuss this offer led to a widespread sentiment in Azerbaijan that Armenia's leadership was not interested in a negotiated solution, and that as a result a military solution is the only remaining option to restore the country's territorial integrity and enable refugees to return to their homes.[5] Ilham Aliyev's government, which has always kept the military option as a last resort, is now increasingly stressing that the Azerbaijani army is ready to liberate its territory if negotiations fail. If the present deadlock continues, as seems likely, the public and elite mood in Azerbaijan will continue to gradually tilt towards war. A new war between Armenia and Azerbaijan, should it take place, is unlikely to remain as limited as the previous one was. In 1992-94, the two states

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[4] Radio Free Europe/Radio Liberty Caucasus Report, vol. 7 no. 23, 10 June 2004.

[5] Fariz Ismailzade, "Latest Efforts to Solve Nagorno-Karabakh Dispute Fails, Killing Talk of Economic Cooperations", *Central Asia-Caucasus Analyst*, 9 October 2002.

had only rudimentary weaponry, and the military forces involved were far from professional. But in the last eight years, both states have acquired more sophisticated and therefore more deadly arms, meaning that a new war would almost certainly cause much larger human and material destruction.

So far, negotiations have yielded no results and the Azerbaijani population and leadership gets increasingly frustrated with the deadlock in the peace talks. Should the military warfare resume, it will directly threaten the BTC pipeline, as it passes only 30 km away from the Armenian border and the cease-fire line.

Spillover of other conflicts in the Caucasus. The past ten years show the ease with which conflicts in the Caucasus tend to spill over into the territory of other countries. This has been the case for the Chechen conflict, spilling over into the territory of Georgia and into Dagestan in Russia. Azerbaijan is not protected from this and should political or criminal groups destabilize the situation in one region of the Caucasus, the risk that a conflict spillover into Azerbaijan will take place cannot be ignored. In turn, this could threaten the stability of the country's energy infrastructure.

In 2001, for example, criminal groups from Dagestan and Chechnya committed armed actions in the north of Azerbaijan on several occasions. Some separatist slogans were also used with the aim of destabilizing the situation. This might take place again in the future.

Petty thieves. Although BTC is buried under ground, other pipelines and fuel storage risk being attacked by petty thieves, who try to drill a hole in the pipeline and steal fuel. This has taken place on many occasions in the past and although it does not pose a major threat to the pipelines, still it presents a problem for the political leadership of the country and to the environment.

Protection Policy and Methods

Azerbaijan works with its neighbors and international partners to protect the critical energy infrastructure in the country. The protection of the energy infrastructure is undertaken at several levels:

National. According to the BTC agreement, the states shall implement the Voluntary Principles on Security and Human rights within the framework of the international agreements they are party to and their national legislation. Basically, this means that each country that hosts BTC is responsible for the protection of the pipeline in its own territory. Nevertheless, the three countries are actively involved in the coordination of security issues.

Azerbaijan has already taken measures on this issue and trained a battalion of security forces that will be dealing with the protection of BTC. They will use modern equipment and dogs and will station a patrol team at a distance of 30 km

from each other. Azerbaijan also created a state commission to ensure the security of the pipelines. Azerbaijan has also significantly strengthened its state border services in the past ten years. These troops are charged with fighting international terrorism and illegal migration as well as protection of the energy infrastructure in the border areas. These troops also protect the oil and gas fields in the Caspian Sea.

Tri-party (with Georgia and Turkey). In 1999, Azerbaijan, Georgia and Turkey signed an intergovernmental agreement with the aim of creating a consistent, transparent and predictable technical and legal regime for BTC's operation. Host governments also signed "Host Government Agreements" with the oil companies which set out mutual responsibilities of the participants of the construction of BTC to secure the pipeline.

In April 2002, the Presidents of the three countries met in Trabzon, Turkey to discuss ways of protecting BTC. This was the first real step towards ensuring the safety of the pipeline. Following that, in 2002, Azerbaijan's Minister of Interior Ramil Usubov and his Turkish counterpart Abdulkadir Aksu signed a protocol of cooperation in fighting international terrorism and crime. A protocol among Turkey, Azerbaijan and Georgia relating to the East-West energy corridor was signed in Baku on 23 July 2003. This protocol was elaborated according to the BTC Intergovernmental and Host Government Agreements and Article 22 of the "Security Agreement" signed among the three countries on April 30, 2002. Regular command-staff training of representatives of military forces of the three countries take place in which high-ranking officers from the three nations develop measures to ensure the security of BTC. These kinds of exercises have been in place since 1998.

Regional efforts (GUUAM). In 1999, Azerbaijan together with Ukraine, Georgia, Moldova and Uzbekistan created and institutionalized a regional alliance known as GUUAM, aimed at strengthening economic, political and military ties. GUUAM was conceived as a kind of a regional alternative to the CIS. While it began as a means of coordinating foreign and security policies, GUUAM seems poised to take on military duties in the future, especially given Ukraine's and Georgia's increasing interest in the organization. A document circulated by Azerbaijan calls for a joint GUUAM battalion to engage in an exercise on oil field and pipeline protection measures with the participation of Turkey, Azerbaijan, Georgia, and possibly Ukraine. All members of GUUAM have been actively cooperating in the past several years and since 2002 GUUAM members have also been engaged in regional security trainings.

Partnership with NATO and the U.S. A military alliance and pipelines may sound like a mismatch but, in fact, NATO has its own fuel pipelines linking its different facilities, and a department dedicated to their management. This "Infrastructure

Logistics & Civil Emergency Planning Division" has been providing advice to Azerbaijan on environmental security; i.e. handling oil spills and similar accidents. A NATO official stated that the alliance was considering a request from Azerbaijan to expand cooperation to include "operational security", meaning cooperation on actually protecting or defending the Caucasus pipelines. NATO's role would consist of expert visits and consultations. At the same time, the NATO official stated that there were no plans in NATO to offer actual physical aid to the Caucasus pipelines. NATO could, however, provide its military expertise to the planned GUUAM battalion.

Community approach. In many ways, BTC will become a test for a new method of protection of critical energy infrastructure. Yet, it should be kept in mind that traditional methods of utilizing high-tech hardware and military units to safeguard the pipelines often do not yield desired results. It is the involvement of the communities into decision-making processes that can ensure the long-term safety of the BTC and SCP pipelines. A feeling of ownership over the pipelines, and being convinced of their positive impact to the communities, can encourage people to take an active role in the protection of the pipelines and serve as a support resource to the government's paramilitary protection units. The resources of ordinary people should not be underestimated in this case.

BTC and Azerbaijan's relations with foreign countries

Since Azerbaijan gained independence in 1991, the BTC pipeline has been, with the exception of the Nagorno-Karabakh conflict, the most important factor in the foreign relations of the country. Opposition or support for this project has determined the level of the bilateral or multinational relations of Azerbaijan with its neighbors.

Russia

Moscow has been the most vocal opponent of the BTC pipeline. Political circles in Russia have regarded the BTC pipeline as a U.S.-backed project aimed at decreasing the economic and political influence of Kremlin in the Caucasus and breaking Russia's monopoly on the oil and gas export routes. In many ways, that was indeed true. Prior to the building of the BTC and Baku-Supsa pipelines, also supported by the U.S. administration, the pipeline going from Baku to the Russian port of Novorossiysk was the only outlet for Azerbaijani oil. Thus, Moscow vigorously opposed the pipeline from the first days of its initiation.

Russian political scientists and economists have termed BTC as 'economically not viable' and referred to its geo-strategic purpose as the only reason for its construction. Moscow's opposition to BTC has determined Azerbaijani-Russian relations for the most part of the 1990s and has created much animosity and

hostility between the two governments. When the "contract of the century" was signed in 1994, a series of internal coups and high-level political assassinations, all with links to Moscow, rocked the Azerbaijani and Georgian capitals. When the first oil from the Azeri-Chirag-Guneshli oil field was successfully extracted in 1997, the Russian army transferred large amounts of military hardware (totaling over $1 billion) into the hands of Azerbaijan's rival Armenia, causing much tension in bilateral relations.

Yet, despite strong opposition and political pressure from Moscow, official Baku never wavered on the issue of BTC. Russian politicians developed something of a tolerance to the pipeline only after construction works started and the pipeline's existence became a bitter reality to them. Moreover, ever since President Putin came to power in Russia, the bilateral relations between Azerbaijan and Russia have significantly improved, leading up to agreements on the Qabala Radar station, a bilateral delimitation of the Caspian sea, and increased trade volumes.

In 2004, officials of BP, the largest stake-holder of BTC, even shocked the local and international media by announcing that they were considering to ship some Russian oil through the BTC pipeline. BP-Azerbaijan's President David Woodward informed the public in late December 2004 that the shareholders of BTC Co. were considering, together with British-Russian oil company TNK-BP,[6] the possibility of transporting Russian oil through the Baku-Tbilisi-Ceyhan pipeline. Local media speculated that this could be done through exporting the Siberian oil via the Russian city of Novorossiysk to Baku, as it was planned during the Soviet times. Currently this pipeline is working in the reverse direction, exporting Azerbaijani oil to Novorossiysk.

Azerbaijani observers have welcomed the idea. They have in general taken it as a proof that Russia seeks ways to participate in this project, because BTC is the best option in the region for exporting oil to European markets due to the congestion in the Bosporus straits. Moreover, the participation of Russian companies in BTC would only increase the stability of this pipeline.

The Russian daily *Nezavisimaya Gazeta* argued in its turn that Russia intends to boost its presence in the energy projects in the Caucasus in order to balance out the increasing influence of the U.S. in the region. Should these plans materialize, Russia would change its image from an opponent of the BTC pipeline into a participant. In any case, the BTC project, although still jealously regarded in Russia and considered as an American project, is unlikely to play as negative a role in Russian-Azerbaijan relations as it did in the 1990s.

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[6] TNK-BP is the third largest oil company in Russia, established in September 2003, employing 100,000 people and working in such geographic areas as Western Siberia, Far East and Ural region. TNK-BP is a company with 50% of its shares belonging to BP.

Iran and the Islamic world

Iran was another regional power that aggressively opposed the BTC pipeline and the overall involvement of the Western oil and gas companies in projects in the Caspian sea. Official Tehran claimed that the unresolved legal status of the Caspian sea prevents Azerbaijan from inviting foreign energy companies and beginning exploration works. Moreover, the Iranian government was upset that Iranian firms were excluded from the "contract of the century" under strong pressure from Washington.

Iranians watched with great worry as Azerbaijan continued to develop economic, political and even military ties with Tehran's enemies in the West and thus considered the BTC project as "politically driven." Tehran has lobbied for the Iranian route for the export of Azerbaijani oil and gas as the shortest and economically most beneficial route.

Due to the above-mentioned reasons, bilateral relations between Baku and Tehran soured for the most part of 1990s, reaching its lowest point in the summer of 2001, when Iranian military jets and gunboats threatened to use force against Azerbaijani vessels conducting exploration works in the Southwestern Caspian sea within the frames of a PSA signed with BP (the Alov oil field, located in the territorial waters of Azerbaijan.) This was a sign of great insecurity and anger on the part of Tehran regarding energy cooperation between Baku and the Western powers.

The situation somewhat changed in 2001, after the terrorist attacks in New York and Washington. The subsequent war on terror launched by President Bush, and the inclusion of Iran into the 'axis of evil' changed Tehran's priorities towards Azerbaijan. Instead of opposing the energy projects and trying to sponsor radical Islamic groups, Tehran undertook a 180-degree change in its policy towards Azerbaijan, in an attempt to secure Azerbaijan's neutrality in the case of U.S.-Iranian conflict. Fearing that Azerbaijan would serve as the host for American military bases, the Iranian government decided to engage in a partnership dialogue with the Azerbaijani leadership. Reciprocal visits by the two countries' heads of state illustrate this. Other thorny issues such as the opening of the Azerbaijani consulate in Tabriz, and the beginning of airline flights between Tabriz and Baku were also quickly resolved.

BTC will continue to be treated with frustration in Tehran for a long time, yet its impact on bilateral relations are set to decrease significantly in the coming years as the pipeline becomes a reality.

At the same time, the ongoing poverty in the country and the frustration of the Azerbaijan people with the lack of reforms have led to a rise of Islamic tendencies in the country. A survey conducted by the independent Baku-based Far research center showed that almost a quarter of 1,200 randomly selected respondents favor

Islamic governance. Another 29% welcomed the application of Shariat norms in some aspects of their daily life, such as family life. Another Baku-based think tank, the Foundation for Azerbaijani Studies, came to a similar conclusion after its own survey. The study found that nearly 37% of the surveyed population in the south of Azerbaijan, near the Iranian border, favored Shariat governance.

While the rise of Islamic sentiments among impoverished and frustrated Azerbaijanis could endanger the fate of regional oil and gas projects as well as Azerbaijan's integration with the west, the process has not yet reached proportions that should cause alarm. Nevertheless, in spite of BTC, it is important to note that the Azerbaijani population is increasingly disillusioned with the policy of western powers, especially in relation to the Nagorno-Karabakh conflict.

The West

European states and the United States have been active supporters and participants in the BTC project. Both the Clinton and Bush administrations have lobbied hard for its materialization. Thus, the existence of BTC has significantly improved the relations of Azerbaijan and the Western countries and increased the presence of the U.S. and EU in the Caspian region.

BTC is a tool for economic integration of Azerbaijan into a European, thus global economy. But it is also a major geopolitical asset, linking Azerbaijan with Turkey, a NATO member, and thus creating major guarantees for Azerbaijan's independence and sovereignty. In fact, BTC was pushed through as a project aimed at linking the Caucasus to Turkey through the development of an East-West corridor, which, in turn, would create further opportunities for the American presence in the region.

BTC and other oil and gas projects have created a solid foundation for the integration of Azerbaijan into Western economies and for strong political relations between Baku and Washington. These relations will continue to stay active even after the completion of the construction works, because the issue of BTC's security will most probably involve NATO and the U.S. military to some extent.

Armenia

With the construction of BTC, Azerbaijan has done much to achieve one of its major foreign policy goals – that is, the increasing economic isolation of Armenia with the purpose of weakening it economically and forcing it to compromise on the issue of Nagorno-Karabakh. Indeed, Armenia became one of the biggest losers of the BTC project. Geographically, a pipeline route passing through Armenia onward to Turkey would have been the shortest and economically cheapest way to transport the Caspian oil to the Mediterranean sea. Naturally, the ongoing territorial conflict quickly put an end to this idea. In the early 1990s, some foreign and domestic organizations proposed to build BTC through Armenia in exchange

for the liberation of the occupied territories. Both warring sides nevertheless rejected this proposal with official Yerevan saying that it did not want to trade land for oil, and official Baku adamant to avoid making such a strategic asset dependent on an enemy. Thus, the construction of BTC, SCP, and the development of the East-West energy, transport and telecommunications corridor from Azerbaijan to Europe all took place through Georgia, effectively deepening Armenia's regional isolation. With all major regional projects bypassing Armenia, economic stagnation and lack of trade opportunities weaken Armenia's future development.

At the moment, influential circles both in Armenia and other regional states as well as international organizations believe that the completion of BTC and the subsequent export of "major Azerbaijani oil" will distort the military balance between Baku and Yerevan, and in turn increase the likelihood of the resumption of the military hostilities. Up to this moment, BTC has played rather a deterrent role with regard to the resumption of military activities between Armenia and Azerbaijan, because the Azerbaijani government sought not to jeopardize this major investment. But as oil production continues to increase in Azerbaijan, the government is spending increasing amounts of funds for the modernization of the army. Speaking in December 2004, President Aliyev said that he intended to double the military budget and do so consistently in the coming years. Coupled with the deadlock in the peace process and the growing frustration among the Azerbaijani population and elite over the fruitlessness of the negotiations, increasing military power might well push Azerbaijan toward the resumption of military activities and an attempt to retake the lost lands by force. Influential public and political figures in Azerbaijan openly call for this already. Of course, if wisely used, Azerbaijan's strengthened situation could simply provide the government with a stronger negotiating position, which it has lacked in the past.

In 2005, the number of cease-fire violations along the Armenian-Azerbaijani border and cease-fire line surpassed such incidents in previous years, causing much worry among international organizations, and forcing OSCE to conduct an unplanned monitoring of the border areas. Only in March 2005, 48 cease-fire violations were recorded. The UK-based non-governmental organization International Alert, in a recent report on the impact of BTC on the regional conflicts, warned that the success of BTC and the growing oil revenues of Azerbaijan would increase development disparities in the South Caucasus and might well lead to the restoration of the conflicts rather than their solutions. This analysis omits the possibility that BTC's completion will further lead to the current development in Armenia toward a reconsideration of its foreign policy priorities, and toward a more conciliatory position in regard to the conflict.

China

Perhaps unnoticed at first, China has been gradually moving to become one of Azerbaijan's reliable partners in the oil and gas sector. President Ilham Aliyev's March 17, 2005 visit to China marked a new, more expanded phase in the bilateral relations.

From the economic point of view, Beijing is most interested in Azerbaijan's oil. China's growing economy requires constant access to ever more sources of oil, and the expanding oil and gas sector of Azerbaijan serves as an attractive market for this purpose. Several Chinese companies have already been granted production-sharing agreements by the Azerbaijan State Oil Company for the development of onshore oil fields in the country. For instance, in June 2004 the Chinese oil company Shengli received a permission to work on the Garachukhur oil field. It is expected that the completion of BTC and the increase of oil and gas production will further expand Azeri-Chinese relations with further implications to the textiles, military, trade and political spheres.

Central Asia

Three countries in the Central Asian region have played a major role the foreign policy of Azerbaijan in the past decade, more specifically in the area of oil and gas industry. Foremost, the construction of BTC has opened new opportunities for relations between Azerbaijan and Kazakhstan. The two countries were already enjoying a high level of economic and political relations, but the materialization of the BTC pipeline opened doors for Kazakhstan's oil to be shipped to the Western markets not only through Russian-owned pipelines as previously, but also through pipelines that do not pass through Russia. Azerbaijani and Kazakhstani officials have been engaged in bilateral talks over the conditions of the shipment of Kazakh oil through BTC. Most recently, Kazakhstan's President Nursultan Nazarbayev announced that experts from both sides would work together to agree on the tariffs. Should Kazakhstan's oil also be shipped via BTC, it would further strengthen bilateral relations between the two countries.

Azerbaijan's relations with Turkmenistan have not developed as smoothly as was the case with Kazakhstan. Ashgabat has contested the Kyapaz oil field, located in the middle of the Caspian sea, with Baku. This dispute led to the deterioration of the bilateral relations and tensions between the two capitals. This in turn, has effectively killed – for the time being – the idea of building a Trans-Caspian gas pipeline to export Turkmen gas via Azerbaijan and Georgia.

Uzbekistan, on the other hand, has developed rather firm relations with Azerbaijan and has been playing an active part in the development of the East-West energy

and trade corridor. Tashkent and Baku reaffirmed their strong ties also through the regional alliance of GUUAM.

Conclusion

The successful completion of the Baku-Tbilisi-Ceyhan pipeline is a major victory in Azerbaijan's foreign policy. Indeed, in the mid-1990s, few analysts believed this pipeline would ever be built. As late as 2000, western, Russian, and Iranian analysts alike could still be caught on record arguing that the chances of the pipeline being built were close to nil. In spite of the dire predictions, BTC was built to a significant extent because of an often neglected factor: it was the strategic decision of the Azerbaijani government to export its energy assets through a western pipeline. This, in connection with the Turkish straits issue, strong U.S. government support, and the lack of other options with both economic and political viability, ensured that BTC emerged as the sole feasible option for the export of Azerbaijani major oil.

The realization of the BTC pipeline carries major implications for the development and strengthening of Azerbaijan's statehood and independence, as well as for its relations with the Euro-Atlantic community. First of all, BTC ensures that Azerbaijan's major economic assets are not in the hands of regional powers that would be inclined to use this asset to influence or control Azerbaijan's foreign and domestic affairs. But beyond this, BTC will help Azerbaijan to emerge as a player on the world stage. As a new significant non-OPEC source of oil, Azerbaijan will become a significant contributor to Europe's energy security, a desperately needed asset given Russia's dominance in the European energy market. Domestically, the income generated by oil exported through BTC constitutes a tremendous opportunity for Azerbaijan to find a short-cut in its economic transition and in the building of a modern, wealthy and diversified economy.

In political terms, BTC will be of great significance for Azerbaijan's regional position. Situated in a strategic location and surrounded by great powers, Azerbaijan's small population and size would tend to doom it to the role of a minor power under the influence of larger states. Indeed, most states in the Caucasus and Central Asia have often found themselves either under the dominant influence of one larger power, or forced to play off regional powers against one another to maximize their own independence and freedom of action. This exercise consumes substantial energies and impedes the development and implementation of long-term strategic foreign policy goals. Moreover, it makes the state dependent on the shifts in policy and attention of one or several regional power. Indeed, Armenia is heavily dependent on continued Russian commitment, just as Georgia depends on America's attention. Thanks to its energy resources, Azerbaijan stands a chance to fulfill its leadership's long-standing goal to emerge as a regional player in it own

right. This in no sense means Azerbaijan will become a regional power; what it does mean is that Azerbaijan can build its statehood and security on a more equal basis with its neighbors, as well as regional and great powers. This feat, which Azerbaijan shares only with Kazakhstan and Uzbekistan in the wider region, would have been impossible without BTC.

Of course, BTC is not a panacea for the solution to all of Azerbaijan's very real challenges. Indeed, its effect on the country's political development are unclear, as it poses both an opportunity for political reforms and carries simultaneous risks for a slowdown of reforms. Likewise, BTC could significantly strengthen Azerbaijan's negotiating position vis-à-vis Armenia, and thereby help it achieve a negotiated solution; but it could also increase the risk of renewed hostilities. In the end, BTC provides great opportunities for Azerbaijan's development in political, economic, as well as strategic terms. The extent to which the numerous expectations that are tied to BTC will be realized will depend on the government's ability to capitalize on these opportunities.

5. The Baku-Tbilisi-Ceyhan Pipeline: Implications for Georgia

Vladimer Papava

The Baku-Tbilisi-Ceyhan (BTC) pipeline project is primary importance for Georgia, both from economic and political standpoints. From the very beginning, when the question of building the BTC pipeline was raised, Georgia had numerous obstacles to overcome of both a domestic and international nature. These included the weakness of the state, corruption, and Russia's policy towards Georgia. Additional problems may be anticipated in the future too. However, the "Rose Revolution" that took place on 22-23 November 2003, gave rise to new challenges and opportunities for the country's successful development.[1] Against this background, the implementation of various investment projects, including that of the BTC oil pipeline, is expected to open new avenues for Georgia. This essay analyzes the current status of key economic, social and political problems associated with the construction and operation of the BTC pipeline on Georgian territory.

Economic and Social Importance of the BTC Pipeline for Georgia

At every historical stage of its existence, any country has to solve a set of problems related to its economic development, of which the primary and most important is the choice of strategy. Following from this, tactical steps are determined. This problem is an especially critical one for Georgia as the country is not enriched with

[1] Neal Ascherson, "After the Revolution", *London Review of Books*, Vol. 26, No. 5, 2004. http://lrb.veriovps.co.uk/v26/n05/asch01_.html; Zeyno Baran, Removing the Thorn in Georgia's Rose Revolution. *Georgia in US Media*. Embassy of Georgia to the USA, Canada and Mexico. 2004, 24, March 2004; CSCE, "Georgia's "Rose Revolution." Report Prepared by the Staff of the Commission on Security and Cooperation in Europe. Commission on Security and Cooperation in Europe, 108th Congress, 2nd Session, http://files.csce.gov/Georgia_Revolution.pdf.; Cory Welt, Georgia: Consolidating the Revolution. *Russia and Eurasia Program*. Center for Strategic and International Studies, April 2004, http://www.csis.org/ruseura/pubs/Agenda/040406_welt.pdf; Zurab Zhvania, "After the Rose Revolution: Building Georgia's Future", *CSIS Statesmen's Forum*. Center for Strategic and International Studies, April 26, 2004, http://www.csis.org/ruseura/040426_zhvania_report.pdf.

substantial mineral resources[2] and, therefore, this factor has no material influence on the national economy.[3]

In geo-economic terms, Georgia is situated along the quickest route linking Europe with Asia, a fact that has naturally led to the emergence of the idea of reviving the ancient Silk Road.[4] Ultimately, this translated into projects like TRACECA (Transport Corridor Europe Caucasus Asia) and INOGATE (Interstate Oil and Gas Transport to Europe) both of which are of greatest importance not only for Georgia's economy, but also that for the entire Caucasus.[5] It is exactly on these projects that Georgia's international economic function rests, and its economic development depends.[6]

The great energy potential of the Caspian basin[7] requires its energy resources to be transported by means of a ramified pipeline system,[8] one branch of which will cross Georgian territory.[9] At present, Georgia has two sea terminals from which Caspian oil is transported to the rest of the world. One is situated in Supsa, with a capacity of 200,000 barrels/day (b/d), and another in the seaport of Batumi, with a capacity of 200,000 b/d. However, their benefit (like that of the Russian port of Novorossiysk, 680,000 b/d), and particularly their potential of expansion is limited by the straits of the Bosporus.

No such constraints are associated with the BTC pipeline, however, which links Baku with the Turkish Mediterranean seaport of Ceyhan. The overall length of the pipeline is 1,760 km of which a 248-km-long section runs through Georgia, including nearby its capital Tbilisi. It is worth noting that before the commencement of the project, appropriate and detailed assessments of potential

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[2] Alexander Tvalchrelidze, "Economic Evaluation of the Georgian Mineral Resources", *Mining Industry of Georgia in a Free Market Environment*, Proceedings of Seminar (Tbilisi, January 31 – February 1, 2002). Ed. Alexander G. Tvalchrelidze and Yuji Nishikiwa, Tbilisi: JICA, GRSD, 2002, pp. 34-72.

[3] Alexander Tvalchrelidze, and George Loladze, 2002. Mining Industry and its Role for Economic Development of Georgia. In.: *Mining Industry of Georgia in a Free Market Environment*. Proceedings of the Seminar (Tbilisi, January 31 – February 1, 2002), ed. Alexander G. Tvalchrelidze and Yuji Nishikiwa, Tbilisi: JICA, GRSD, pp. 10-16.

[4] Eduard Shevardnadze, *Great Silk Route. TRACECA-PETrA. Transport Corridor Europe-Caucasus-Asia. The Eurasian Common Market. Political and Economic Aspects*, Tbilisi: Georgian Transport System Ltd, 1999.

[5] Archil M. Gegeshidze, "The South Caucasus: Getting Close to Europe?" *Marco Polo Magazine*, No. 1, 1999, pp. 7-9. Alexander Rondeli, "TRACECA: a Tool for Regional Cooperation in the Caucasus", *Marco Polo Magazine*, No. 1, 1999, pp. 24-27. Alexander Rondeli, "The South Caucasus: Pipeline Politics and Regional Economic Interests", *The South Caucasus: Promoting Values Through Cooperation*. Seminar Report Series No. 20, Helsinki, 12-15 May 2004. Rome, NATO Defense College, Academic Research Branch, 2004.

[6] Vladimer Papava, "On the Special Features of Georgia's International Economic Function", *Central Asia and the Caucasus*, No. 2, 2002, pp. 143-147.

[7] John Roberts, "Energy Reserves, Pipeline Routs and the Legal Regime in the Caspian Sea". *The Security of the Caspian Sea Region*, ed. Gennady Chufrin, New York: Oxford University Press, 2001, pp. 33-44. There is a well-known expression that "The Caspian is more comparable in oil resources to the North Sea, than to the Persian Gulf" (e.g. Paul F. Hueper, "The Energy Locomotive" *Russian-Eurasian Renaissance? U.S. Trade and Investment in Russia and Eurasia*, ed. Jan H. Kalicki and Eugene K. Lawson, Washington: Woodrow Wilson Center Press, 2003, p. 184).

[8] e.g. Jan H. Kalicki "Caspian Energy at the Crossroads", *Foreign Affairs*, Vol. 80, No. 5, 2001, pp. 120-134.; Roberts, "Energy Reserves", pp. 44-64.

[9] Zurab Tevzadze, "Caspian Oil: Its Export Routes and Transportation Problems", *Central Asia and the Caucasus*, No. 1, 2004, pp. 88-101.

environmental and social impacts of the BTC pipeline at both construction and operation phases were completed.[10]

According to the corporate policy of the BTC Company, the company will generate "economic benefits and opportunities for an enhanced quality of life for those whom our business impacts".[11] Bearing this in mind, specific goals of investment programs in Georgia are as follows:

- Improved economic opportunities and increased incomes;
- A developed and improved agricultural sector;
- Enhancement of the quality of life by means of revitalized social infrastructure;
- Improved ability of communities to take independent initiatives, organize and manage social development.[12]

The BTC pipeline's impact on the Georgian economy can be considered at two levels, the microeconomic and the macroeconomic.[13] In accordance with this approach, at the microeconomic level the economic effect of the BTC pipeline may be measured by means of maximum net profit index (which is the difference between profit and expense), whereas at the macroeconomic level, it can be measured by means of multiplier of investment costs. Obviously, the first indicator demonstrates the direct economic effect of the BTC pipeline on the national budget, whereas the other one shows its indirect effect.

Bearing in mind the fact that oil transportation tariffs in the territory of Georgia will grow from US$0.89 to US$1.86 per ton,[14] the range of expected revenue for the Georgian government for 2005 to 2024 will be significant.[15] Overall, during 40 years, the national budget of Georgia will be filled by US $2.5 billion, i.e. at an average of US$62.5 million per year.[16] The direct effect on employment, i.e. the total direct employment in connection to the BTC pipeline in Georgia, amounts to 2,500 for the construction phase and 250 for the operation phase.[17]

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[10] AETC Ltd / ERM, "Social Impacts and Mitigation. BTC Pipeline ESIA, Georgia", *Environmental and Social Impact Assessment. Baku-Tbilisi-Ceyhan Oil Pipeline*, 2002.
http://www.caspiandevelopmentandexport.com/Files/BTC/English/ESIAs/Azerbaijan/Content/Statement/BTC%20ESIA%20Statement%20Section%2011%20Social%20Impacts%20and%20Mitigation.pdf.

[11] CSR Network, *Environmental, Land, Community and Social Overview. Baku-Tbilisi-Ceyhan Pipeline Project*, 2003. http://www.caspiandevelopmentandexport.com/ASP/dd_BTC_Detail.asp?PID=10362&LegendOR=True&NotesOR=True.p. 182)

[12] CSR Network, *Environmental, Land, Community and Social Overview*, p. 182.

[13] Tevzadze, "Caspian Oil" pp. 98-99.

[14] George Eradze, Mark Hudson, David Jinjolia, et al., "Economic Trends", *Georgian Economic Trends*, No. 3, 2002, pp. 5-84, p. 10.

[15] Tevzadze, "Caspian Oil", p. 99.

[16] Caglayan et. al., p. 89; Eradze et. al., p. 10.

[17] CSR Network, p. 79.

From the very beginning, a total investment of US $514.670 million was budgeted for the construction of the Georgian section of the BTC pipeline, of which no less than US$221 million will be spent on construction as such, US$120 million on the payment of compensations to land owners (including for harvests), more than US $88 million on the purchase of pipes, and more than US $85 million on other capital costs.[18] The breakdown of investments for the period 2002-2004 is shown in the table below (Table 1):

Construction of the Georgian Section of the BTC Pipeline (Million US $)[19]

	2002	2003	2004
1. BTC pipeline construction expenditures directly in Georgia	60,338.0	179,971.8	215,855.8
o/w			
– materials and equipment	27,385.0	104,929.4	55,531.3
– office costs	0,585	4,454.3	2,980.9
– payments to Georgian contractor firms	0,770	15,299.7	18,346.0
2. Construction expenditures of the Georgian section of BTC pipeline outside Georgia	0,126	0,743	1,479.6
3. Costs for the construction of schools, health facilities, etc.	0	2,094.0	0,888
Total	60,464.0	182,809.2	218,223.7

When calculating the indirect effect, of particular importance is to determine the multiplier of investments to be made during the construction and operation phases of the BTC pipeline. According to conservative assessments, for Azerbaijan this indicator amounts to 1.43, and it is believed that for Georgia the indicator will be the same;[20] a very similar indicator is quoted in another paper.[21] According to other estimates, this indicator ranges between 1.5 and slightly more than 3.[22] Special estimates aimed to determine indirect effects of the BTC pipeline for the Georgian economy showed that the construction of the BTC pipeline would diminish the level of unemployment by 33.3%, whereas employment, self-employment, household earnings and spending, and gross domestic product (GDP) rates would

[18] e.g. Eradze et al., p. 10.
[19] Information was provided by the State Statistics Department of Georgia.
[20] Caglayan et. al., p. 105.
[21] CSR Network, p. 79.
[22] Tevzadze, "Caspian Oil", p. 99.

grow by 7.3, 7.0, 7.1, 7.1 and 6.6 percent.[23] All these indicators clearly point at a significant indirect effect of the BTC pipeline for the Georgian economy.

For the comparative analysis of the BTC pipeline's influence on economies where it will make its way, one must take into account the differences that exist between Azerbaijan and Georgia, which are economies in transition, on the one hand, and Turkey, which is a large emerging economy, on the other hand. This feature was emphasized from the very beginning by those experts who had tried to make economic evaluations of the BTC project.[24]

Undoubtedly, it would be worthy of interest to include also Armenia in a regional comparative economic analysis, even though the pipeline is not going to cross this country. This enable the presentation of rather clear results in assessing the project's impact on economic development of the relevant countries.

Gross National Income (GNI) of the South Caucasian Countries and Turkey,
Atlas Method (Current US$, World Bank)

	1999		2002		2003	
	GNI	GNI per capita	GNI	GNI per capita	GNI	GNI per capita
Armenia	1.9 billion	630.0	2.4 billion	810.0	2.9 billion	950.0
Azerbaijan	4.6 billion	570.0	5.9 billion	720.0	6.7 billion	810.0
Georgia	3.5 billion	750.0	3.3 billion	720.0	3.8 billion	830.0
Turkey	185.4 billion	2,800.0	174.5 billion	2,510.0	197.2 billion	2,790.0

Table 2 illustrates the differences in economic development of the countries of the South Caucasus and Turkey. Turkey's per capita GNI is higher than those of all the three South Caucasian countries taken together. Consequently, Turkey's economy is by far more developed than those of the South Caucasus. At the same time, Table 2 shows that by per capita GNI, all the three economies of the South Caucasus are almost at the same level.

For a number of reasons, it is of particular interest to compare the economic development parameters of Georgia with those of Armenia: firstly, both countries are economies in transition, which means that to a certain degree both face the same economic problems; secondly, neither of them possess significant oil and gas deposits.

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[23] Alexander G. Tvalchrelidze, *International Economic Projects in the Southern Caucasus and Trends of Sustainable Economic Development*. The Center for New Institutional Social Sciences. The International Research Workshop, May 28–June 1, 2003, Washington University in St. Louis, St. Louis, Missouri, USA. http://cniss.wustl.edu/internationalresearchworkshoppapers/santo.pdf.
[24] Caglayan et. al., p. 54.

It must be noted that governments of both countries have developed poverty reduction and economic development programs. Above all, differences between the two programs consist in the fact that the program for Georgia includes the construction and operation of the BTC and the South Caucasus Gas Pipeline (SCP) pipelines, whereas in the Armenian program such a factor is clearly absent.

According to the Armenian poverty alleviation program, annual growth rates of real GDP in 2005 and 2006 will amount to 6%, in 2009 to 5.5%, and in 2012 and 2015 to 5.0%. As for the Georgian poverty alleviation and economic development program, it has been developed based on two macroeconomic scenarios – realistic and optimistic ones. According to the first one, annual growth rate of real GDP in 2005-2015 will amount to 5%; according to the second one, to 8%. At the same time, in the optimistic scenario the importance of the construction and operation of the BTC and SCP pipelines are emphasized. Additionally, one should bear in mind that the implementation of the poverty reduction program and the accomplishment of projected goals will depend on many factors, including those which have little (or nothing) to do with the implementation of the pipeline projects.

Of particular importance are social investments envisaged within the framework of the BTC pipeline construction project. In aggregate (for all countries where the BTC pipeline will be laid), to this end US $25 million have been budgeted, of which US$8 million will be invested in Georgia.[25] According to Table 1, over the period of 2003-2004, US$3 million were spent out of the BTC pipeline project funds for the construction of schools, medical facilities, and the like in Georgia.

Of no less importance are the efforts taken for the protection of cultural heritage objects located along the BTC pipeline route. Field research operations implemented along the Georgian section of the pipeline route identified 51 archaeological sites and mote than 200 cultural monuments.

Based on the foregoing, it may be stated that the BTC pipeline will have a considerable influence on the economy and social sphere of Georgia at both its construction and operation phases.

"Dutch Disease", Corruption, and Fostered Governmentalism

Countries suffering from the "Dutch Disease" are those, where, because of significant growth of exports in one or another raw material sector, the national currency is being revaluated, leading to the growth of export prices (and, therefore, decrease in exports) (of other commodities) and decrease in import prices (and, therefore, increase in exports). Historically, this economic phenomenon was first marked in the Netherlands after the discovery of gas deposits in 1960s. Since then,

[25] CSR Network, p. 191.

as a rule, the phrase the "Dutch Disease" has primarily been used in the context of significant growth of exports of oil and/or gas in a given country. A number of post-Soviet oil and gas exporting countries have, to a certain extent, been "infected" with this disease.[26] The study of the reasons, treatment and cures of the disease has become the subject of many prominent modern scholars.[27] Some of them invented certain mechanisms of disease management by which it could be modified into a rather "optimal" mode.[28]

There have in other places been known examples of the emergence of the "Dutch Disease" due to the growth of exports of any kinds of commodities (and not only of oil and gas). In this context, depending on which materials have caused the effects of the "Dutch Disease", it has been proposed that the name of the relevant country is inserted in the name of the disease; in particular, the disease is proposed to be referred to as Indonesian, Nigerian, Mexican or Venezuelan, if it is caused by the growth of exports of petroleum; Thai, if it caused by rice, rubber and tin; Malaysian if it is rubber and tin; Brazilian if it is coffee and sugar; Colombian if it is coffee; Ivory Coast if it is coffee, cocoa and wood; Bangladesh if it is because of foreign aid inflows; Egyptian if it is for tourism, remittances and foreign aid inflows; Jordanian if caused by remittances; Zambian, Zairian if it is for copper; Ghanaian if it is about cocoa; or Kenyan if it is caused by tourism and coffee.[29] In other words, all the above "diseases" are variations of the "Dutch Disease".

The question that arises from the foregoing, therefore, is this: is Georgia under threat of being infected with the "Dutch Disease", whether in its classical form or any of its variations?

Russian experts predict that Georgia can not avoid the "Dutch Disease" and that the BTC pipeline is going to be the key reason for it.[30] At the same time, it has quite rightly been believed that if the maximum profit from the project (about US

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[26] See e.g. Ariel Cohen, "Confronting Kazakhstan's 'Dutch Disease.'" Press Room, Commentary, 26 March 2003, The Heritage Foundation. http://www.heritage.org/Press/Commentary/032603c.cfm; Akexei Moiseev, "Analysis of Influence of the "Dutch Disease" and Taxation on Economic Welfare. Example of the Russian Economy" Research Program on "Transforming Government on Economies in Transition" Working Paper # BSP/99/030, 1999. http://www.nes.ru/english/research/pdf/Moiseev.pdf.; Christoph B. Rosenberg and Tapio O. Saavalainen, "Dealing with Azerbaijan's Oil Boom", *Finance & Development: A Quarterly Magazine of the IMF*, Vol. 35, No. 3, 1998. http://www.imf.org/external/pubs/ft/fandd/1998/09/rosenber.htm.; Joseph Stiglitz, Presentation in Baku on 20 November 2003 at the Initiative for Policy Dialogue/Public Monitor Center Workshop "Covering Resource Wealth.", 1998. http://www2.gsb.columbia.edu/ipd/bakutranscript.pdf.

[27] See e.g. Thorvaldur Gylfason, "Lessons from the Dutch Disease: Causes, Treatment, and Cures." Working Papers Series W01:06, Institute of Economic Studies, University of Iceland, 2001. http://www.ioes.hi.is/publications/wp/w0106.pdf; Stiglitz Joseph, 2004. We Can Now Cure Dutch Disease. *Guardian*, August 18, 2004. http://www2.gsb.columbia.edu/faculty/jstiglitz/download/opeds/We_Can_Now_Cure_Dutch_Disease.htm.

[28] See e.g. Egil Matsen and Ragnar Torvik, "Optimal Dutch Disease", Working Paper Series No. 1/2003. Department of Economics. Norwegian University of Science and Technology, 2003. http://www.svt.ntnu.no/iso/WP/2003/1ODD_sep_02.pdf.

[29] E. Wayne Nafziger, *The Economics of Developing Countries*. Upper Saddle River, Prentice-Hall. 1997, p. 335.

[30] Anna Agababyan, "The Role of the Baku-Tbilisi-Ceyhan Oil Pipeline in the Formation of Regional Policy", *News of CIS, Analytics*, 2004. http://www.mpa.ru/analytics/issue.php?id=319. (In Russian).

$60 million per year) is collected, Georgia will be at no risk of contracting the "Dutch Disease".[31] In the meantime, during the implementing the BTC construction project in 2004, some symptoms of the "Dutch Disease" did appear in Georgia. In particular, while after overcoming negative consequences of the Russian default in 1998, the exchange rate of Georgian lari stayed stable[32] due to maintaining a floating exchange rate,[33] in 2004, according to the information provided by the National Bank of Georgia the real exchange rate of lari strengthened by 13%. Furthermore, the Georgian national currency strengthened not only against the US dollar and the Euro, but also against the Russian ruble and the Turkish lira.[34]

In this connection, one needs to take into account the fact that one of the special features of the Georgian economy is its large-scale dollarization;[35] although in 2004 it went down to 74.32% from 85.52%, it still stays at a quite high level.[36]

Construction of the Georgian Sections of the BTC and SCP Pipelines
(Million US $)[37]

	2002	2003	2004
BTC and SCP pipelines construction expenditures directly in Georgia (million $)	60,338	227,607	356,149
o/w			
– materials and equipment	27,385	135,428	93,696
– office costs	0,585	4,946	4,898
– payments to international contractors	31,598	78,777	229,976
– payments to Georgian contractor firms	0,770	18,456	27,580
2. Construction expenditures of the Georgian section of BTC and SCP pipelines outside Georgia	0,126	0,909	2,421
3. Costs for the construction of schools, health facilities, etc.	0	2,094	1,131
Total	60,464	230,610	359,701

[31] Caglayan et. al., p. 89.
[32] Vladimer Papava, *Splendours and Miseries of the IMF in Post-Communist Georgia*, Laredo: We-publish.com, 2003, pp. 45-46.
[33] See e.g. Merab Kakulia, "Composition if the Domestic Foreign Exchange Market in Georgia", National Bank of Georgia, 2002. http://www.nbg.gov.ge/eng/publication_report/shida%20sav-bazr-struqt-kakulia.htm.
[34] NBG, 2004. *Bulletin of Monetary and Banking Statistics*, No. 4 (70), January-December. Tbilisi, National Bank of Georgia, pp. 100-103.
[35] Kakulia Merab, and Nana Aslamazishvili, "Dollarization in Georgia: Size of the Problem. Factors and the Ways of Solution", 2000, http://www.nbg.gov.ge/eng/publication_report/1a.html; Kakulia and Aslamazishvili, "Dollarization in Georgia: How Sustainable is it's Trends for a Country?", 2002, http://www.nbg.gov.ge/eng/publication_report/pdf/dolar_1_e.pdf.
[36] NBG, p. 10.
[37] Information was provided by the State Statistics Department of Georgia.

At the same time, one must bear in mind the fact that Russia and Turkey remain Georgia's most important trade partners: in 2004, these countries accounted for 14.5% and 12.9% of Georgia's whole foreign trade turnover.[38]

Out of all possible causes of the revaluation of lari, is the effect of the construction of the BTC pipeline not the most self-evident one? Furthermore, parallel to the BTC developments another major pipeline project, namely the SCP (Shah Deniz-Baku-Tbilisi-Erzurum) has been implemented. Table 3 above provides aggregate figures of investments implemented in 2002-2004 during the construction of the Georgian sections of the BTC and SCP pipelines:

According to Table 3, in 2004, US$127,588 more was invested in the implementation of the two pipeline projects in Georgia than in 2003 (in 2003, the exchange rate of Georgian lari stayed basically stable). This information is not enough to assert that the key reason for the revaluation of lari was the growth of investments in the BTC and SCP pipelines projects. One must also take into account other factors which may have influenced the exchange rate and which by nature were associated with the post-revolutionary situation in the country.[39]

Immediately after the "Rose Revolution," the Government of Georgia took decisive steps against corruption: former government officials and their relatives (especially those of the former president of Georgia, Eduard Shevardnadze) were arrested and later released after having paid a so-called "price of liberty" to the government. Officially, this was proclaimed as paying back to the State money and properties that had been stolen from it. It must be noted, however, that nobody has ever proven whether that "price of liberty" in each particular case really matched the actual amount of stolen funds.

Despite this, the government stated that during the first post-revolutionary year some US$200 million was returned to Georgia's national budget.[40] In reality, however, new functionaries, so-called "fighters against corruption", have recovered much more than this from those charged of corruption, although it is hard to specify the exact amounts so recovered. The reason is that the government, specifically for this purpose, established extra-budgetary "law-enforcement development accounts" where those suspected of corrupt practices were compelled to transfer payments to buy their liberty. In other words, a new form of corruption

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[38] SDS, 2005. *Georgia: Statistical Review, 2004*. Tbilisi, State Department for Statistics of Georgia. (In Georgian), p. 59)

[39] See e.g. Jaba Devdariani, "Georgia's Rose Revolution Grapples with Dilemma: Do Ends Justify Means" *Eurasia Insight*, 26 October 2004, http://www.eurasianet.org/departments/insight/articles/eav102604.shtml; Mark McDonald, "Democracy Flourishes a Year After Georgia's Rose Revolution", *Knight Ridder Newspapers*, 8 March 2005. http://www.realcities.com/mld/krwashington/11082999.htm; David Sands, "Georgia on a Wild Ride to Democracy", *The Washington Times*, 20 November 2004.
http://www.georgiaemb.org/DisplayMedia.asp?id=363&from=media.

[40] E.g. McDonald, "Democracy Flourishes a Year After Georgia's Rose Revolution".

has developed in Georgia based on a special institutional foundation[41] which has taken the form of "extra-budgetary accounts".[42] As those suspected of corruption had accumulated their capital in US dollars (rarely in Euros), whereas recovery of those accumulations have taken place in Georgian lari, which is the only legal tender in this country, the demand for lari grew even further which obviously is another factor for its revaluation.

With the intensification of the fight against corruption, taxpayers have improved in performing their tax obligations to the State. Specifically, in 2004, compared to 2003, tax and non-tax revenues of the summary national budget grew by a factor of 1.5 and 3.2 times.[43]

One of the most important features of the Georgian economy consists of huge money transfers from Georgian nationals that have emigrated to other countries in search of employment. In 2004, compared to 2003, the inflow of oversees transfers grew by US$52.4 million; although the outflow of money also increased by US$15 million, the balance remained positive and, in aggregate, in 2004, compared to 2003, the foreign currency inflow grew by US $37.4.[44] In fact, however, this index must be even higher as many money transfers, especially those from the Commonwealth of Independent States (CIS) take place outside the banking system.

Another factor influencing the growth of cash flow in 2004 was the fact that after the "Rose Revolution" many representatives of the old government left the country. Their share of money transfers from abroad to their relatives has been significant. Many of them have sought refuge in Russia and other CIS countries. As a result, in 2004, money transfers from Russia to Georgia accounted for 37.57% of all inflows into Georgia and grew by 39.65% compared to 2003.[45]

The emergence of the "Dutch Disease" and the revaluation of lari as its manifestation in 2004 was the result of the joint influence of all the above factors, namely: construction of the Georgian sections of the BTC and SCP pipelines, fight against corruption and increased money transfers. It must be noted that in 2004, compared to 2003, Georgia's negative trade balance grew by 77.30%.[46]

On the other hand, the revaluation of lari did not have any negative impact on the exports of products of industrial processing, the reason for which lies in a low competitive capacity of Georgian manufacturers in international markets. In other words, the inflation mechanism of export fostering either is non-existent or

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[41] Vladimer Papava, "Economic Approach to the Restriction of Corruption in Georgia" *Georgian Economic Trends*, no 3-46, 2000. 51-55.
[42] Davit Usupashvili, "Rose Revolution – A Year After". *Advocacy Magazine*, October 2005. http://www.advocacy.ge/magazine/RoseRevolution-AYearAfter.shtml.
[43] SDS, p. 32.
[44] NBG, p. 115.
[45] NBG, p. 115.
[46] SDS, p. 57.

underdeveloped in Georgia (and other post-Communist countries like Georgia).[47] This can be proved by the structure of Georgia's exports, in which over the recent year scrap metal has constituted the biggest share (in particular, in 2004, it amounted to 14.8%); although, second place in this list has been held by the export of aircraft (12.9%),[48] it is largely conditioned by the manufacturing and repairing of military jets at the Tbilisi Aviation Plant, the proceeds of which are entirely used to pay off Georgia's debt to Turkmenistan.[49]

Nevertheless, the process of revaluating the lari is a negative signal for those who might be willing to invest in the export-oriented businesses of Georgia which, in turn, will lead to the negative effects of the "Dutch Disease". Practically, all the above factors (construction of the Georgian sections of the BTC and SCP pipelines, fight against corruption and increased money transfers) have continued acting in 2005 too. In addition to this, in 2005, the Government of Georgia is going to implement a large-scale privatization program with the involvement of foreign investors. This may also have a negative impact on Georgia's economy.

The attractive international post-revolutionary image of Georgia, as a country that has opted for democratic development, enables the Government of Georgia to count on more than US $256 million as a national budget revenue from the privatization of large industrial and transport (e.g. Georgia's ocean vessels) enterprises of Georgia to foreign investors.

Contrary to international practice of using significant inflows of international currency into the country,[50] the Government of Georgia could not resist the temptation of spending significant portions of national budget revenues from the privatization program for domestic needs. To avoid a potential rise in the inflation rate, the National Bank of Georgia will have to use all available monetary tools to reduce the amount of cash in circulation, as a result of which free monetary resources will tend to move from the private sector to the Government. This, in turn, will negatively affect economic growth in Georgia.

Having said all the foregoing, it may be concluded that post-revolutionary Georgia has been in the process of contracting the "Dutch Disease," although symptoms of the disease (first of all, trends of changing exports) are quite different from its classical model. Most of the above factors (fight against corruption, money transfers and large-scale privatization, except construction of the Georgian sections of the BTC and SCP pipelines), are by nature political ones. Nevertheless, it would

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[47] Vladimer Papava and Vepkhia Chocheli, *Financial Globalization and Post-Communist Georgia. Global Exchange Rate Instability and its Implications for Georgia*. New York, iUniverse, 2003. pp. 10-17.
[48] SDS, p. 60.
[49] Helen Saradova, "Commercial News Update for Georgia", no. 5, 2004.
http://www.bisnis.doc.gov/bisnis/bisdoc/0405newsge.htm.
[50] Gylfason; Matsen and Torvik; and Stiglitz, "We Can Now Cure the Dutch Disease".

be unfair to classify the ongoing development in Georgia as a "Political Dutch Disease" as this expression has already acquired a different connotation.[51]

What happens in Georgia may be explained, first of all, by the fight against corruption and mistakes made by the Government in spending funds raised from the large-scale privatization program. It could, therefore, be concluded that what we are facing now is a Georgian version of the "Dutch Disease." To the same extent as the above-mentioned tradition defines the word "disease" by the name of the country where it takes place, we are allowed to say that what Georgia suffers from is the "Georgian Disease," which has occurred as the result of the joint influence of the construction of the Georgian sections of the BTC and SCP pipelines, the fight against corruption, money transfers and the large-scale privatization program.

Experience of post-revolutionary Georgia teaches us that fostered governmentalism and reduced corruption depends not only and not much on the implementation of large-scale pipeline construction and operation projects, but also on political will and qualifications of government officers that can make appropriate decisions. This is the reason why, despite the successful completion of the BTC pipeline construction project and the continuation of the construction of the SCP pipeline, post-revolutionary Georgia still has some problems associated with human rights and democratic development in Georgian society.[52] In this connection, Georgia is not an exception; quite the contrary: unfortunately, Georgia could not avoid the mistakes in the process of development of national statehood that are characteristic of many countries with rich oil deposits and well-developed pipeline grids.[53] As a matter of fact, not all hopes associated with oil regarding help to overcome the economic and political problems of the post-Communist transformations[54] come true at all times (neither in Georgia, nor elsewhere).

The BTC Pipeline and Georgia's Relations with USA, Europe, Russia and Iran

In a geopolitical sense, Georgia's location is of key importance for the whole South Caucasus, especially if one takes into account the conflict between the two other

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[51] Ricky Lam and Leonard Wantchekon, *Political Dutch* Disease, http://www.nyu.edu/gsas/dept/politics/faculty/wantchekon/research/lr-04-10.pdf.

[52] Devdariani, "Georgia's Rose Revolution Grapples with Dilemma"; HRIDC, "One Step Forward, Two Steps Back: Human Rights in Georgia After the 'Rose Revolution'" *Human Rights Information and Documentation Center*. http://66.116.100.86/humanrights.ge/eng/files/REPORT.pdf.; Sands, "Georgia on a Wild Ride to Democracy"; Usupashvili, "Rose Revolution".

[53] Terry Karl, *The Paradox of Plenty: Oil Booms and Petro-States*. Berkeley, University of California Press.1997; Terry Karl and Ian Gary, "The Global Record", *FPIF-Petro Politics Special Report*, January 2004. http://www.fpif.org/papers/03petropol/development_body.html.2004

[54] Terry Karl, "State Building and Petro Revenues", *The Geopolitics of Oil, Gas, and Ecology in the Caucasus and Caspian Basin*. Conference Report, 1998, pp. 3-8. http://ist-socrates.berkeley.edu/~bsp/publications/1998_02-conf.pdf.

nations of the region, Armenia and Azerbaijan. Georgia made her strategic, pro-Western choice almost immediately after the restoration of independence.[55]

The beginning of this essay focused on Georgia's international economic function, the fulfillment of which is of vital importance for the maintenance and strengthening of the country's independence. It was also pointed out that one of the constituent elements of the international INOGATE project was the construction of the BTC pipeline, one of the key vehicles by which the Caspian oil could be transported to the West.

Due to its location in the midst of nations with systemic risk factors, such as flourishing corruption,[56] Georgia's attractiveness from the standpoint of potential investors is very low, although the implementation of the BTC pipeline and other related projects have opened new avenues for the extension of investment projects outside the energy sector.[57] As was pointed out above, the situation drastically improved after the "Rose Revolution" as a result of growing international confidence in the country that has proclaimed its loyalty to democratic values and willingness to boost post-revolutionary transformations.

Almost immediately after the emergence of the idea of transportation of the Caspian oil to the West and the construction of the BTC pipeline (by avoiding the territories of Russia and Iran), Azerbaijan, Georgia and Turkey formed one "team" that has enjoyed significant support from the United States.[58] This proved to be in perfect harmony with the key political objectives of the United States in the region: the isolation of Iran; the prevention of the re-establishment of Russia's monopolistic position in the region; encouraging Turkey in her efforts to increase her influence in the region; and supporting U.S. companies to invest in the region.[59]

After the tragic events of September 11, 2001, these objectives were supplemented with another, consisting in the U.S. support to such development of the countries

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[55] Alexander Rondeli, "The Choice of Independent Georgia" *The Security of the Caspian Sea Region*. Ed. by Gennady Chufrin. New York, Oxford University Press, 2001, pp. 195-211.

[56] Mark F. Brzezinski and Joseph C. Bell, "Systemic Risk Factors in Russia and Eurasia" *Russian-Eurasian Renaissance? U.S. Trade and Investment in Russia and Eurasia*. Ed. by, Jan H. Kalicki, and Eugene K. Lawson. Washington, Woodrow Wilson Center Press, 2003, pp. 284-285.

[57] S. Frederick Starr, "The Investment Climate in Central Asia and the Caucasus". *Russian-Eurasian Renaissance? U.S. Trade and Investment in Russia and Eurasia*, eds. Jan H. Kalicki and Eugene K. Lawson, Washington: Woodrow Wilson Center Press, 2003, p. 87.

[58] E.g. Kalicki, p. 122; Sergej Mahnovski, "Natural Resources and Potential Conflict in the Caspian Sea Region", *Faultlines of Conflict in Central Asia and the South Caucasus. Implications for the U.S. Army*, eds. Olga Oliker and Thomas S. Szayna, Santa Monica: RAND, 2003, pp. 116-117.

[59] Friedemann Müller, "Energy Development and Transport Network Cooperation in Central Asia and the South Caucasus", *Building Security in the New States of Eurasia. Subregional Cooperation in the Former Soviet Space*, eds. Renata Dwan, and Oleksandr Pavliuk, Armonk, M.E. Sharpe, 2000, p. 189.

of the region that could help the United States avoid new terrorist threats and promote the successful completion of the war on terrorism.[60]

At the same time, one needs to bear in mind the fact that the U.S. Government has raised the nation's energy security to the level of top priority which means that the U.S. international policy in the energy sector, including in the Caspian region, has become one of extraordinary importance.[61] The U.S. strategy in the region could be defined as the availability of "multiple pipelines", which means that the already existent pipelines should be supplemented with new ones.[62]

Nevertheless, the U.S. interests in the region are not limited to the energy sector.[63] The U.S. aim to support the former Soviet republics of the region in overcoming characteristic features of Soviet economy, developing market-based economy and private sector, laying a robust foundation for sustainable economic growth, establishing the rule of law, addressing social and environmental problems, and availing themselves of energy resources and multiple export pipeline routes.[64] It comes as no surprise that the U.S. policy in the Caspian region aimed at preventing the re-establishment of the Russian monopoly in the region is perceived as an anti-Russian policy. However, in fact, that is not true.[65] According to the official position of the U.S. Government, the Caspian energy resources are regarded as an area of potential cooperation with Russia.[66] In addition, potential cooperation between the U.S. and Russia may expand to include a number of spheres, such as the fostering of economic developments of the region's countries, and the prevention of religious and political extremism and international terrorism.[67]

It is cooperation and partnership, rather than conflict of interests between the U.S. and Russia,[68] that can ensure the achievement of maximum positive results in the exploitation of Caspian energy resources.

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[60] Toby T. Gati and Tapio L. Christiansen, "The Political Dynamic" *Russian-Eurasian Renaissance? U.S. Trade and Investment in Russia and Eurasia*, eds. Jan H. Kalicki and Eugene K. Lawson. Washington, Woodrow Wilson Center Press, 2003, pp. 450-451, 456-457.
[61] Kalicki 2001, p. 120.
[62] A. Necdet Pamir, "Is There a Future of the Eurasian Corridor?", *Insight Turkey*, Vol. 2, No 3, 2000, p. 40.
[63] Amy Jaffe, "US Policy Towards the Caspian Region: Can the Wish-List be Realized?" *The Security of the Caspian Sea Region*, Ed. Gennady Chufrin, New York: Oxford University Press, 2001, pp. 136-150.
[64] Steven R. Mann, "Caspian Futures", *Russian-Eurasian Renaissance? U.S. Trade and Investment in Russia and Eurasia*, ed. Jan H. Kalicki, and Eugene K. Lawson. Washington, Woodrow Wilson Center Press, 2003, pp. 159-160.
[65] Zeyno Baran, "Developing a Euro-Atlantic Strategy Towards Black Sea Energy: The Example of the Caspian", *A New Euro-Atlantic Strategy for the Black Sea Region*, eds. Ronald D. Asmus, Konstantin Dimitrov, Joerg Forbrig, Washington: The German Marshall Fund of the United States, 2004, p. 117.
[66] F. Stephen Larrabee,"The Russian Factor in Western Strategy Toward the Black Sea Region", *A New Euro-Atlantic Strategy for the Black Sea Region*, eds. Ronald D. Asmus, Konstantin Dimitrov, Joerg Forbrig, Washington: The German Marshall Fund of the United States, 2004, p. 152; Mann, "Caspian Futures", pp. 152-153.
[67] Gennady Chufrin, "The Caspian Sea Region: Towards an Unstable Future", *The Security of the Caspian Sea Region*, ed. Gennady Chufrin, New York: Oxford University Press, 2001, pp. 342-343.
[68] Vitaly Naumkin, "Russia's National Security Interests in the Caspian Region", *The Security of the Caspian Sea Region*, ed. Gennady Chufrin, New York: Oxford University Press, 2001, pp. 126-128.

The application of the principles of cooperation and partnership is within the best interests of the countries of the region too. Unfortunately, Russia has greater problems with the realization and practical application of those principles than anybody else in the region.[69] At the same time, well-known, so-called "frozen" conflicts in the territories of the countries of the South Caucasus region have significantly prevented those countries from developing economic (and not only economic) cooperation with each other.[70] However, this does not exclude the possibility of looking for ways of such cooperation.[71]

Recently, the Black Sea region has increasingly become an area of focus of the European Union.[72] In this connection, it must be emphasized that the TRACECA and INOGATE projects completely correspond to the European perception of the development of the South Caucasus.[73] The implementation of the BTC pipeline is considered an important constituent element of Europe's energy security.[74] Moreover, the Black Sea pipeline grid may be used as a significant ingredient of the EU's "Wider Europe" strategy and, in this context, the significance of Georgia and Azerbaijan, as potential candidates for membership of the European and Transatlantic structures is especially significant.[75]

Caspian energy resources may not only produce benefits to the South Caucasian countries, but may also threaten the region's stability. The latter may be predetermined by Russia's fear of the West's growing influence in the region, which allegedly may endanger Russia's national security and come into conflict with its interests.[76] What are the key economic interests of Russia in the region as far as the Caspian energy resources are concerned? These interests might be formulated in the following way: development of mutually advantageous trade and economic relationships with the countries of the region; using their transport capacities; participation in the production and shipment of energy resources.[77]

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[69] Vladimer Papava, "Strategic Economic Partnership in Caucasus". *Caucasica. The Journal of Caucasian Studies*, Vol. 2, 1998, pp. 189-197; Vladimer Papava, "On the Possibilities and Prospects for the Formation of an Economic System in the Southern Caucasus", *Central Asia and South Caucasus Affairs: 2002*, ed. Boris Rumer and Lau SimYee, Tokyo: The Sasakawa Peace Foundation, 2002, pp. 205-212; Vladimer Papava and Nino Gogatadze, "Prospects for Foreign Investments and Strategic Economic Partnership in the Caucasus", *Problems of Economic Transition*, Vol. 41, No. 5, 1998, pp. 79-88.

[70] Arif Yunusov, "The Southern Caucasus: Cooperation or Conflict?" *Building Security in Europe's New Borderlands: Subregional Cooperation in the Wider Europe*, ed. Renata Dwan, Armonk: M.E. Sharpe, 1999, pp. 147-172.

[71] Phil Champain, Diana Klein, and Natalia Mirimanova, eds, *From War Economies to Peace Economies in the South Caucasus*. London: International Alert, 2004.

[72] Heather Grabbe, "Towards a More Ambitious EU Policy for the Black Sea Region". *A New Euro-Atlantic Strategy for the Black Sea Region*, ed. Ronald D. Asmus, Konstantin Dimitrov, Joerg Forbrig, Washington: The German Marshall Fund of the United States, 2004, pp. 106-115.

[73] Rondeli, "The South Caucasus: Pipeline Politics and Regional Economic Interests", p. 52.

[74] Howard Chase, "Future Prospects of Caucasian Energy and Transportation Corridor: The Role of the Caucasian Energy Corridor in European Energy Security", *Georgian Economic Trends*, No 3, 2002, pp. 85-87.

[75] Baran, "Developing a Euro-Atlantic Strategy Towards Black Sea Energy: The Example of the Caspian", p. 120.

[76] Alexander Rondeli, "Pipelines and Security Dynamics in the Caucasus", *Insight Turkey*, Vol. 4, No 1, 2002, p. 13.

[77] Vitaly Naumkin, "Russia's National Security Interests in the Caspian Region", *The Security of the Caspian Sea Region*, ed. Gennady Chufrin, New York: Oxford University Press, p. 122.

One needs to take into account the fact that Russia generates roughly 50% of the country's total hard currency revenues from the oil and gas exports.[78] Naturally, Russia is not interested in letting other countries benefit from the Caspian energy resources without her control.

As the Russian experts have admitted, the construction of the BTC pipeline comes into conflict with Russia's interests.[79] To be fair, it must be noted that the pro-Russian and anti-American criticism of Georgia, including the implementation of pipeline projects within its territory, has been proclaimed by some western experts too.[80] However, these can by no means affect realistic evaluations of ongoing developments in the region, including the official attitudes of western governments.

Russian politicians have been having a hard time giving up the idea of restoring the old empire, at least in its modern shape, which was manifested in the concept of the so-called "liberal empire;" by expanding Russia's economic influence the latter was proposed to restore economic control over the whole post-Soviet space.[81]

Having said this, it comes as no surprise that the Russian party not only had no interest in the development of the transport corridor through the Georgian territory, including by the construction of pipelines in Georgia, but also used all possible mechanisms to prevent the fulfillment of those projects.[82]

Many experts in Russia share the belief that the Georgian public has allegedly exaggerated Russia's role in destabilizing the political situation in Georgia through pursuing the discontinuation of the pipelines construction projects linking Baku with the Black and Mediterranean seas; however, even those experts have admitted that Russia has taken negative actions against Georgia.[83]

In this context, certain amount of attention could be paid to a viewpoint according to which the future of the West's relations with Russia depends highly on the outcomes of the Russian-Georgian relations; more specifically, on what Russia

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[78] Pamir, "Is There a Future of the Eurasian Corridor?", p. 34.
[79] V.S. Zagashvili, "Oil, Transport Policy, Russia's Interests", *Russia and the Transcaucasus: Realities of Independence and new Partnership*, ed. P.M. Avakov and A.G Lisov, Moscow: Finstatinform, (In Russian), pp. 189, 192.
[80] Michel Collon, *Monopoly. L'OTAN à la conquête du monde*. Bruxelles, EPO, 2000; Simon Wheelan, "Georgia: 'Rose Revolution' Destabilises Southern Caucasus", *World Socialist Web Site*, 2003. International Committee of the Fourth International (ICFI) http://www.wsws.org/articles/2003/dec2003/geor-d29.shtml.
[81] Anatoliy Chubais, "Russia's Mission in the 21st Century", *Nezavisimaya Gazeta*, 1 October 2003. http://www.ng.ru/printed/ideas/2003-10-01/1_mission.html. (In Russian). Igor Torbakov, "Russian Policymakers Air Notion of 'Liberal Empire' in Caucasus, Central Asia", *Eurasia Insight*. Eurasianet, 27 October 2003. http://www.eurasianet.org/departments/insight/articles/eav102703.shtml.
[82] Rondeli, "Pipelines and Security Dynamics in the Caucasus"
[83] Natalia V. Zubarevich and Yuri E. Fedorov, "Russian-Southern Economic Interaction: Partners or Competitors?" *Russia, the Caucasus, and Central Asia: The 21st Century Security Environment*, ed. Rajan Menon, Yuri E. Fedorov, and Ghia Nodia, Armonk: M.E. Sharpe, 1999, pp. 138-139.

would like to see in Georgia – a prosperous and stable neighbor or still "a prisoner of its imperial past".[84]

As Russian experts have admitted, Russia's strategic partners that have been opposing to the formation of the transport corridor of Europe-Caucasus-Asia include Iran and Armenia.[85]

The coincidence of the Russian and Iranian interests with respect to the Caspian energy resources (and not only in that, but also in some other respects) has been reported by Russian[86] and Iranian[87] experts. Both almost entirely share skepticism about the economic aspects of the BTC pipeline.[88]

According to common belief, Iran has a geographic disadvantage as the key customers of the Caspian energy resources are mostly interested in the east-west infrastructure rather than the unnecessary extension of the oil transportation route through the Persian Gulf.[89]

In this connection, it must be underlined that with respect to Georgia Iran does have some realistic interests: Georgia represents a significant section of the transport corridor that links Iran with Europe.[90]

At the same time, we cannot agree with those who argue that oil and, in general, energy resources of the Caspian region will inevitably pave the way for the progress of the region's nations and that the US by their exclusion of Iran from the oil pipeline schemes have set up obstacles to that progress.[91] First of all, a number of nations serve as examples that oil and energy resources do not necessarily ensure such progress,[92] which has already been mentioned above; secondly, it cannot be taken for granted that the exclusion of Iran from and the inclusion of new nations in the pipeline routs will prevent the progress of these latter.

It must be noted that Iran has welcomed regional cooperation as a tool for peace and stability in the region, which, by itself, is a positive sign.[93]

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[84] Baran, "Developing a Euro-Atlantic Strategy Towards Black Sea Energy: The Example of the Caspian", p. 118.
[85] Zagashvili, "Oil, Transport Policy, Russia's Interests", p. 188.
[86] D.B. Malysheva, "Turkey and Iran: The Transcaucasus – Object of Old Rivalry"; *Russia and the Transcaucasus: Realities of Independence and new Partnership*, ed. P.M. Avakov and A.G Lisov, Moscow: Finstatinform, 2000, pp. 63-74. (In Russian).
[87] Abbas Maleki, "Does the Caspian Remain Important to All Actors?" *Amu Darya. The Iranian Journal of Central Asian Studies*, Vol. 8, No. 16/17, 2003/2004, pp. 47-76.
[88] Zagashvili, "Oil, Transport Policy, Russia's Interests", pp. 193-194; Maleki, "Does the Caspian Remain Important to All Actors?", p. 56.
[89] Muller, "Energy Development and Transport Network Cooperation in Central Asia and the South Caucasus ", p. 192.
[90] Malysheva, "Turkey and Iran: The Transcaucasus – Object of Old Rivalry", p. 67.
[91] Mehrdad M. Mohsenin, "The Evolving Security Role of Iran in the Caspian Region", *The Security of the Caspian Sea Region*, ed. Gennady Chufrin, New York: Oxford University Press, 2001, p. 176.
[92] Karl, *The Paradox of Plenty*; Karl, and Gary, "The Global Record".
[93] Mohsenin, "The Evolving Security Role of Iran in the Caspian Region", 174.

In conclusion, it may be stated without any doubt that the implementation of the BTC pipeline contributes to the growth of Georgia's role in both the Black Sea and the Caspian regions. At the same time, successful exploitation of its transitional function in the future will depend on irreversibility of democratic transformations, and consistent pursuance of the strategy of integration with the European and Transatlantic organizations.

6. The Baku-Tbilisi-Ceyhan Pipeline: Implications for Turkey

Zeyno Baran

Despite enjoying the myriad benefits of its strategic location – at the crossroads of Western Europe, Russia, the Caucasus and the Middle East – and of its significant mineral reserves and its young, dynamic population, Turkey is yet faced with a serious long-term strategic threat: energy dependence. Lacking major oil and gas reserves of its own, Turkey is nearly 65% dependent on imported energy supplies. Worse, this figure is expected to increase to 75% over the course of the next two decades. In order to contend with this growing threat, over the last decade Turkish policymakers have wisely chosen to take full advantage of their strategic location. Recognizing that control of energy transport corridors can be almost as important as control of energy supplies, they turned their attention towards one of the most important projects that Turkey has ever undertaken: the Baku-Tbilisi-Ceyhan (BTC) oil pipeline.

The pipeline, which will transport up to 50 million tons per year starting at the end of 2005, runs from the Azerbaijani capital on the Caspian Sea, up through Georgia, and down to the Turkish Mediterranean port of Ceyhan. Together with a parallel gas pipeline, it is undoubtedly the key link in the so-called "East-West Transportation Corridor" planned by Turkish and other government officials to connect the oil and gas fields of Central Asia and the South Caucasus with the markets of Western Europe.

For Turkey, the BTC pipeline project has from the start been seen as a project primarily of geopolitical importance. In fact, the issue of direct economic benefits to Turkey was barely even mentioned in the initial discussions. Despite the absence of strong economic arguments in favor of the project, the strategic and security advantages of BTC were widely recognized by the public. In turn the BTC pipeline was greatly supported by majority of the Turks and has encountered no perceptible political opposition.

This essay briefly discusses the geopolitical relevance of BTC for Turkey, including an overview of how and why Turkish decision-makers ensured its commercial viability. It then evaluates the prospects for direct and indirect

economic and social benefits to Turkey of the BTC project, before in the end addressing the impact of the BTC project on Turkey's relations with various players in the region as well as the EU and the U.S.

Geopolitical Pipeline

By the early 1990s, a consensus had emerged in Turkey regarding the necessity of constructing a major new oil pipeline on the East-West route. It did so for several reasons: first, following the Gulf War, the Kirkuk-Yumurtalik pipeline that had been transporting Iraqi oil to the Turkish Mediterranean port of Ceyhan was closed in August 1990 under UN Security Council resolution 661.[1] As a result, the Turkish economy suffered hugely from the loss of revenues. Realizing that the Ceyhan port, controlled by the state-owned pipeline company BOTAS, is a world-class facility at which large tankers can easily and efficiently load cargo and transport it to world markets, Turkey has long wanted Ceyhan to eventually turn into a major international oil hub.

The second reason was based on a realization that the potential value of Central Asian and Caspian oil reserves would be tremendously greater if Western consumers were to have access to them. Without a safe and secure route out of the landlocked Caspian Sea, these reserves have little value. With that safe and secure route terminating in Ceyhan, Turkey would also receive enormous leverage in the region.

A third and related reason was that, as a NATO ally and strategic partner of the United States and Western Europe, Turkey believed that it was best suited to enjoy such leverage. Unlike competing potential suppliers such as Iran and Russia, a Turkish partnership with the newly independent states would help to cement their future integration into regional and international institutions—and also increase Turkey's strategic importance. Indeed, this project has during the last decade been the anchor in U.S.-Turkey relations as well as the key glue of the Turkey-Azerbaijan-Georgia trilateral partnership.

As suggested, Turkey was not the only state whose thinking was rooted primarily in geopolitics. The Russian government pushed for the entirety of Azerbaijani and Kazakh oil production to be sent to markets via Russian networks (whether existing or newly-created) so that it maintained its monopoly over these countries' political and economic futures. For its part, Iran hoped to use its geographic location (the route across Iran to the Persian Gulf is the shortest distance to open waters from the Caspian) to achieve its geopolitical goal of greater influence over

[1] The Iraq-Turkey pipeline was only partially reopened in 1996, and returned to full capacity only in 2000. It has been shut down since 2003 due to regular attacks on the pipeline.

its northern neighbor. The young states were too weak to on their own resist the pressure and the temptation these two oil-producing countries offered.

At the same time, they knew that shipping their oil to markets via countries that themselves had huge oil fields would not provide them with long term energy security. Hence, the leaders of Azerbaijan and Kazakhstan decided that a routing through a non-oil-producing, NATO member country would provide them with the best long-term energy security. However, even with this decision, only direct, high-level U.S. involvement ensured that the BTC pipeline would work for Azerbaijan. As explained below, the Kazakhs chose the Caspian Pipeline Consortium (CPC) as their first major pipeline to carry Kazakh oil via Russia to the Black Sea, and Kazakhstan is currently in serious negotiations to send significant volumes of oil from Aktau to the BTC pipeline.

The decision of whether or not to invest in the BTC ultimately had to be reached by the oil companies operating the Azeri-Chirag-Guneshli (ACG) field in Azerbaijan. The Azerbaijani International Operating Company (AIOC) consortium clearly preferred the cheapest option for exporting oil to the markets and initially balked at the cost of the BTC, especially when they considered the shorter Baku-Supsa option.[2] This would entail the construction of a relatively short pipeline from Baku to the Georgian Black Sea port of Supsa, where the oil would be loaded onto tankers and then transported via the Turkish Straits to world markets. Turkey had initially promoted this route also, believing that any East-West option was preferable to shipment north to Russia or south to Iran. They hoped that once companies were accustomed to shipping oil westwards, it would then be easier to subsequently shift supplies to a BTC pipeline.

In 1995 the AIOC consortium chose Baku-Supsa as well as the Baku-Novorossiysk route (that would transport Azerbaijani oil to the Russian Black Sea port of Novorossiysk) as "Early Oil" pipelines to transport initial production to markets, thus satisfying both Russian and Turkish interests as well as their own commercial ones. The U.S. became actively engaged in the pipeline projects following the celebration of the beginning of the Early Oil project in Baku in November 1997, attended by the U.S. Energy Secretary as well as the Turkish and Russian prime ministers. The presence of such high-level officials clearly underlined the geopolitical importance of the projects.

Once these two shorter pipelines began operation, the Turkish Foreign Ministry began to strongly promote the BTC pipeline. One of Ankara's key arguments in favor of the rapid construction of the main BTC pipeline was based on the logistical, environmental, and security problems raised by a dramatic increase in

[2] The AIOC's first preference was to construct a pipeline from Azerbaijan to Iran, but the sanctions on Iran and tense Azerbaijan-Iran relations ruled out this option.

traffic through the Turkish Straits. With additional oil coming to the Black Sea from these two pipelines, as well as from the CPC pipeline, the narrow and overcrowded Turkish Straits linking the Black Sea and the Mediterranean would be clogged by increased tanker traffic—at levels which would eventually become unsustainable. In addition to the environmental health and security of the Straits themselves, the physical security of Istanbul, a city of close to 15 million people and of incomparable world cultural heritage, could be damaged in case of a major accident. The BTC pipeline would provide an alternative to transporting large amounts of crude oil through the Turkish Straits, and most importantly, directly through the heart of this huge city poised on both sides of the Bosporus. BTC would bypass this choke point, delivering oil directly to a safe, deep-sea port.

Hence, the Turkish approach was to consider the Turkish Straits not solely as a transportation corridor, but rather as a highly sensitive lifeline of Istanbul and the Black Sea region. The companies, on the other hand, considered the Straits to be commercially the cheapest option as opposed to pipelines for the transportation of Caspian oil. It took several more years for the companies internalize the risks associated with the Straits and recognize that the BTC pipeline was in the long term commercially a more sustainable option.

The BTC pipeline project gained momentum following the October 29, 1998 Ankara Declaration by Azerbaijan's Heydar Aliyev, Georgia's Eduard Shevardnadze, Kazakhstan's Nursultan Nazarbayev, Turkey's Suleyman Demirel and Uzbekistan's Islam Karimov, witnessed by then-U.S. Energy Secretary Bill Richardson. This declaration, which expressed strong support for the BTC main pipeline, was notable most especially because of Kazakhstan's participation. It was important because, at the time, it was unclear whether there was sufficient oil in Azerbaijan to justify a major new pipeline. (Today, such fears have been revealed as unwarranted—in fact, in order to accommodate eventual Kazakh participation over the next decade, the pipeline may need to be expanded.) For Turkey, the extension of the oil pipeline to Kazakhstan also meant that Ankara would have an important connection to Kazakhstan. (A second part of the Ankara declaration was support for the Turkmenistan-Caspian-Caucasus-Turkey-Europe gas pipeline project to enable Turkey to diversify its gas supply and turn itself into a major gas hub and transit country for European markets.)

Despite the political support behind the BTC project and the increasing understanding of the danger of the Bosporus chokepoint, the oil companies remained reluctant. They needed commercial incentives to commit to a complicated pipeline project that would cross three countries with various economic and political difficulties. They were relieved when the Baku-Supsa pipeline became operational without incident in April 1999, marking the completion of the first non-Russian East-West pipeline. After BP completed its acquisition of

Amoco in April 1998, it became the principal operator of the AIOC consortium—simplifying operations, as political leaders only had one main company to deal with. The strong commitment of the three countries to make the BTC pipeline commercially viable, as well as the continued close participation of the United States, played a huge role in the companies' final positive decision.

The Turkish government realized that, in order to convince the companies to agree to the pipeline, it needed to make serious concessions, especially a guarantee of coverage for cost overruns. While the Turkish section of the BTC, like the other sections, would be fully financed by the BTC investors, given that the pipeline is longest in Turkey (of the pipeline's 1,768 km, the Turkish section is 1,076 km in length), and that BOTAS was to be the turnkey contractor, Turkish concessions were key to make the project work.

After several months of negotiations, the intergovernmental agreement in support of the BTC pipeline was signed by Azerbaijan, Georgia, and Turkey on November 18, 1999, during the OSCE Summit in Istanbul. In addition, there were three Host Government Agreements (HGAs) supporting BTC investors in Azerbaijan, Georgia and Turkey, as well as a Fixed Price Lump Sum Turnkey Agreement and a Turkish Government Guarantee for the Turkish section of the pipeline. At the same summit presidents of Azerbaijan, Georgia, Turkey and Kazakhstan signed the Istanbul Declaration in further support of the BTC. President Bill Clinton of the U.S. witnessed the ceremony and later said that the completion of these agreements was one of his "most important foreign policy achievements of 1999".

Indeed, these agreements provided the political and commercial reassurance necessary for oil companies to take BTC seriously as it committed the governments to ensure that oil out of the Caspian Sea would be developed and transported along commercially viable, secure and environmentally safe routes in a timely manner. The IGA signaled the support of three governments for the project, ensured commercial terms for work in the countries, provided for the application of European-quality environmental and technical standards, and obliged each state to provide security for the project. The HGAs are more specific agreements reached between individual governments and the project investors to provide uniformity and consistency across the three countries in technical, environmental, safety and security standards. These agreements clearly placed regional cooperation ahead of extracting maximum commercial terms for each individual country, further underlining the importance of the BTC project to all three countries.

In the Turkish case, since BOTAS was for the first time going to be a turnkey contractor, the HGA also included the Turkish government's assurance to the investors on its performance. On October 19, 2000, the MEP participants signed the Turnkey Agreement with BOTAS that assigned it responsibility as the turnkey

contractor for the engineering, design and construction of the Turkish section of the BTC pipeline. The Turnkey Agreement is a lump-sum fixed price contract, and contains a $300 million Turkish government guarantee of compensation for investors in case of a cost overrun.

After these important agreements, studies were completed and financing was arranged, enabling construction to begin in 2002 in time for the first tanker to be loaded from Ceyhan in the fall of 2005.

As this brief background makes clear, the BTC project cannot be considered just as a commercial project, but is a key part of a broad vision for Turkey and its regional allies.

Economic Impact

The BTC pipeline was conceived and promoted by Turkey mainly for geopolitical reasons, with economic arguments largely absent from the decision-making process. Nevertheless, for Turkey the long-term economic outlook for BTC is positive; over the full 40-year term of the project, the economic benefits will gradually become visible.

Relative to the size of its GDP, the direct revenue that Turkey will receive from the project is admittedly small and is certainly not comparable to the impact it will have on the public finances of Azerbaijan and Georgia. Turkey is expected to receive between $140 and $200 million annually from transit and operating fees after the pipeline begins operation. However, this amount is guaranteed to increase after 16 years, to between $200 and $300 million per year. As shown in the table below, these fees are based upon the amount of oil transported. The maximum amounts are based on the pipeline's maximum capacity of 50 million metric tons per annum (MTA), which is approximately 1 million barrels per day.

Transit and operating fees payable to Turkey:

Years 1 – 16:		Years 17-40:	
35 MTA	$140 million	35 MTA	$204 million
40 MTA	$160 million	40 MTA	$234 million
45 MTA	$180 million	45 MTA	$263 million
50 MTA	$200 million	50 MTA	$292 million

Even at $300 million per year, however, these revenues will be relatively insignificant. For a $300 billion economy that recorded a 10% growth rate in 2004,

this revenue may barely register. In order to draw a more complete picture of the economic impact of BTC on Turkey, however, one must look beyond transit revenues. The Turkish national oil and gas company TPAO has a 6.5% share in the BTC pipeline and will also receive additional revenue from its investment. In addition to what BOTAS estimates will be an inflow of $1.4 billion in foreign capital, there will also be employment and other economic benefits from the construction and operation of the pipeline.

In fact, the construction of the BTC pipeline has had a very positive impact on unemployment. According to BOTAS figures, BTC employed over 5,000 people during construction. This is an important figure given high unemployment numbers in the eastern and southeastern parts of Turkey. Furthermore, 400 full-time positions will be retained once operations begin. In addition to direct employment, the construction and operation of the pipeline have stimulated the creation of jobs in support industries, as well as in the general economy.

A further long-term economic benefit will be infrastructure improvements. According to World Bank estimates, BOTAS is likely to generate significant profits. If invested wisely, these funds can turn BOTAS into a world-class pipeline operator, increasing its chances for participation in future major pipeline projects. Furthermore, the process of constructing and operating the pipeline will greatly improve the technological capability and know-how both of BOTAS and of other Turkish contractors, who for the first time ever are completing a project in full compliance with the highest international environmental, health, and security standards. They are likely to transfer this knowledge to many other domestic projects in the future.

The work has also thus far complied with international norms against corruption. As the single-most-scrutinized public-private partnership to date in Turkey, it has set a new standard. In the words of the BOTAS leadership, "This is the single most challenging project done by BOTAS: and we have done it for the most demanding client [BP] in the world." While corruption has been endemic to the Turkish energy sector, there are no serious reasons to doubt that the work of the BTC project has been carried out transparently and professionally.

One very important element of BTC for the broader Turkish economy will be the ability to purchase crude oil at a lower price thanks to reduced transportation costs. When the maximum capacity of 50 million tons per annum is reached, Turkey plans to purchase up to 20 million tons of oil for domestic consumption. It also plans to increase its strategic petroleum reserve capacity, which amplifies the value of BTC to supply security and price stability in the country.

Environmental and Social Impact

The BTC partners have conducted a detailed Environmental and Social Impact Assessment (ESIA) in accordance with the requirements of international financial institutions. Together with BOTAS, they tried to follow these guidelines as closely as possible, thus reducing any serious negative impact. In environmental terms, on balance BTC will be a net contributor to environmental health, since it reduces the volume of oil transiting the Turkish Straits, as mentioned above. The BTC companies have also made significant investments, as required by the World Bank and other international financial institutions, to ensure that the BTC pipeline is constructed with the "best available" environmentally-friendly technologies. Unlike other pipelines in Turkey, the BTC pipeline is buried, in part to minimize environmental damage. The project partners have also engaged in regular consultations with NGOs and with the local population. These meetings have served to increase local residents' awareness of environmentally sensitive issues that many had not considered before. This has, in turn, increased their commitment to protect their environmentally sensitive areas.

The key agreements and significant documents on local impact are available at the "Caspian Development and Export" website. This level of disclosure has made the BTC project the most transparent pipeline to date.[3] Since the posting of these critical documents in 2000, local and international NGOs have been able to study these documents and question the BTC Corporation, the Turkish government, and BOTAS when necessary. This level of openness has ensured that the project will maintain local support for the next four decades.

To promote sustainable social and economic development within the communities affected by the pipeline's construction, the BTC Corporation established a Community Investment Program (CIP) focusing on sustainable development, particularly agriculture. The CIP has allocated approximately $9 million for social and economic development along the pipeline's route in Turkey. This is a much-needed investment in one of Turkey's least developed regions.

The BTC pipeline has ironically also helped Turkey to deal effectively with international human rights NGOs who have tried to prevent the project on grounds of potential impact on Kurdish human rights. Following the war against the Kurdish PKK terrorist organization in Turkey, many human rights organizations have characterized the Turkish state's human rights record, especially regarding its Kurdish citizens, as rather dismal. After the prospect emerged of a major oil pipeline crossing ethnically-Kurdish parts of Turkey, these

[3] http://www.caspiandevelopmentandexport.com. See David Blatchford's chapter in this volume for a detailed discussion of this issue.

organizations immediately assumed that Turkish security forces would violate Kurdish human rights under the pretext of "pipeline security".

However, following the ESIA findings, the pipeline's route did not take it into the most sensitive areas in Turkey, and in areas where there could have been ethnic tension, the Turkish government has committed itself to following highest international standards. Turkey has signed onto the Voluntary Principles on Security and Human Rights within the framework of the international agreements to which it is party; these agreements have been entered into national legislation. Turkey, Georgia and Azerbaijan have also signed a joint statement on May 16, 2003 to reaffirm their commitment to the respect of human rights.

The three countries also have cooperated on pipeline security as part of their HGA commitments to ensure security in their own territories. The BTC pipeline is buried in all three countries, which is an essential element of pipeline security. All three states desire to prove to the international community that they will indeed be able to provide security, while simultaneously respecting internationally acknowledged human rights principles.

For Turkey, transforming its image as a human rights violator into one of a state that assures its security while conforming to international standards is also crucial as it proceeds with its EU accession talks, expected to start in October 2005.

Impact on Foreign Relations

By fundamentally altering the Central Eurasian energy architecture, the BTC project, together with a parallel gas pipeline, has had an enormous impact on Turkish relations with all the key actors in the region: the South Caucasus states (Azerbaijan, Georgia and Armenia), the Central Asian republics, the EU, Russia, Iran and the US.

In developing the pipeline, Turkey has formed a strategic partnership with Azerbaijan and Georgia that will tie the three countries more closely together over the course of the next four decades. This long-term linkage has caused all three states to be more cautious in their mutual interaction. Even at times of particularly harsh economic or political disputes, leaders have been trying to resolve them quickly. Thanks to regular meetings in each other's capitals, government officials from the three states have become much more familiar with one another. This familiarization process has been enhanced by a variety of additional measures, such as the extensive military and technical assistance Turkey has provided to both nations.

Azerbaijan

Throughout the ups and downs of Turkish-Azerbaijani relations in the 1990s, Turkish policy towards its related eastern neighbor has for some time been influenced by the possibility of the BTC project. In the early 1990s, when it was not clear whether the MEP would even be built at all, Turkish decision-makers acted with caution in relations with Azerbaijan, in order not to provoke a hasty "no" decision. At times, bilateral relations were so close that the leaders of the two Turkic countries would pronounce themselves to be "one nation, two states." There were also periods of tension, but then-President Suleyman Demirel of Turkey kept bilateral relations on an even keel due to his strong personal relationship with Heydar Aliyev. Demirel, always concerned about broader strategic issues, well understood that the loss of close relations with Azerbaijan would have meant the loss of access to the Caspian and Central Asia. Thus, Ankara has refrained from involvement in Azerbaijan's domestic affairs over the last decade, even during the latter's contested presidential or parliamentary elections.

Turkey has also provided military training to Azerbaijan under NATO's Partnership for Peace (PfP) program, and is a supporter of Azerbaijan's eventual NATO membership. There have even been talks of establishing NATO bases in Azerbaijan, given that there are Russian military bases in Armenia, and given America's post-September 11th desire to keep Azerbaijan as a key regional strategic ally. Turkey also supported Azerbaijan when in July 2001 Iranian military gunboats confronted a BP research vessel exploring the Araz-Alov-Sharg field in the Azerbaijani section of the Caspian Sea, which Iran claims as its own. The Chief of the Turkish General Staff, General Huseyin Kivrikoglu, visited Baku soon after the event. While his ostensible reason for visiting Baku was the Azerbaijani military academy graduation ceremony, the timing was such that when the show team of the Turkish Air Forces (Turkish Stars) made its display, it was perceived in Tehran (and in Yerevan) as a clear signal that Turkey was standing by Azerbaijan.

Georgia

Turkish relations with Georgia have also been very positively affected as a result of the BTC project. Following the breakup of the Soviet Union, Turkish political leaders were at first only interested in the Turkic and Muslim states of the region and did not pay much attention to mainly Christian Georgia. The General Staff, on the other hand, considered this country strategically important as a key buffer zone with Russia, its Cold War enemy. It quickly realized that any instability in Georgia would have a strongly negative impact on Turkey's ability to get to Azerbaijan and Central Asia, and could draw in Russia and NATO as well.

Considered to be the "weak link" in the East-West corridor, Georgia's stability and security was critically important to the success of the BTC pipeline as well.

Turkey provided training and equipment to the Georgian military and has modernized the Marneuli airbase south of Tbilisi. Together with the U.S., Turkey and Georgia have also formed a Caucasus Working Group for improved cooperation and coordination and further training for the Georgian military. Georgia has long expressed interest in NATO membership, and following the peaceful Rose Revolution in November 2003, it submitted its Individual Partnership Action Plan (IPAP) to NATO at its June 2004 summit in Istanbul.

While Turkey's relations with both Azerbaijan and Georgia are friendly, the quality of the relations has deteriorated since 2000. Demirel was the anchor of the trilateral relations and personally was interested in the BTC pipeline as a historic project that would change the geopolitics of the region. He also had close personal relations with his two counterparts. His successor, on the other hand, has not shown any real interest in these projects and the South Caucasus beyond the requirements of his post. In addition, the foreign-policy priorities of the current Turkish government, led by Prime Minister Recep Tayyip Erdogan, lie elsewhere. Changes in leadership did not help the project in either Azerbaijan or Georgia; the death of Heydar Aliyev left a huge vacuum in Azerbaijan, while current Georgian President Mikheil Saakashvili has also not expressed great interest in the BTC project.

With the most senior government leaders in the three countries not focused on the energy and transport corridor to the same degree as their predecessors, there is also less care in keeping relations at the same level of closeness. With Turkey hoping to enter the EU, Azerbaijan still unable to move beyond the Nagorno-Karabakh dispute, and Georgia trying to normalize its relations with Russia while moving closer to the EU, it may be only natural that the East-West corridor and its key anchor, the BTC project, would not forever remain on the agenda.

Armenia

Turkey has to a large degree tied its relations with Armenia to a solution of the Nagorno-Karabakh conflict between Armenia and Azerbaijan. In the midst of the war in April 1993, Turkey closed its borders with Armenia, and despite strong pressure from the EU and the U.S., will not open them unless Armenia and Azerbaijan reach some sort of an agreement first. Currently, after many years of negotiations, the two sides are close to an agreement, in which Armenia would relinquish several territories it holds outside of Karabakh, with the region's status to be decided at a later date.

At its inception, BTC was conceived as a Baku-Ceyhan direct pipeline, which due to reasons of geography would directly cross Armenia. Heydar Aliyev hoped to use the prospect of the pipeline crossing Armenia as an incentive for the latter to return Nagorno-Karabakh. When Yerevan refused, Azerbaijan (with support from Turkey) decided to deny Armenia integration into regional projects, and to deprive it of access to Western markets via Turkey. Clearly, Armenia has suffered a significant loss due to the fact that the Baku-Ceyhan pipeline now bypasses the country on the longer and costlier Georgian route.

Armenia has also been left out of other East-West pipeline and commercial projects, thereby leaving it increasingly dependent on Russian and Iranian support. This has caused serious concern in Turkey, especially among strategic thinkers and senior military officers. Believing Turkish policy towards Armenia to be held "hostage" to Azerbaijan, this group believes that Turkish influence in the South Caucasus is severely handicapped. This group may yet force change in Turkish policy; however, it remains likely that until an agreement on Nagorno-Karabakh can be implemented, Ankara will not resume relations with Armenia.

European Union

The East-West pipelines are also very important for Turkey (and even Azerbaijan and Georgia) as it proceeds with negotiations to enter the EU. On the one hand, Turkey has already adopted EU environmental, social and human rights standards during the several years it has worked on the BTC and the gas pipelines. The transparency and emphasis on community development brought by the extensive engagement of NGOs in the pipeline project are already working to transform Turkish society, bringing it closer to the EU.

The EU will also directly benefit from the East-West energy corridor, as it seeks to diversify its own energy sources—not just in oil, but also in gas. Turkey is in close proximity to 70% of world's proven gas reserves and is increasingly becoming a gas and oil hub for world markets. It is already receiving gas from Russia, Iran and North Africa and in the future will be obtaining supplies from Azerbaijan, Central Asia and even Iraq. Turkey, Greece and Bulgaria are already working on connecting their gas pipeline infrastructures to transport Caspian gas to EU markets; Austria, Hungary, Italy are just some of the countries interested in receiving gas from Turkey, thus increasing the security of their supplies.

What the East-West gas pipelines will provide the EU is gas diversification. Most European markets are controlled by the Russian gas monopoly Gazprom; there is a desire on the EU's part to diversify, which means finding cheap and reliable alternatives. Turkey clearly wants to present just such an alternative. While many in the EU bureaucracy have not fully appreciated the importance of the Caspian and Central Asian gas for their markets, the United States has, believing that an

East-West energy corridor would tie the two regions closer to Turkey, a NATO ally and EU candidate. Increased closeness between Turkey and the Caucasus/Central Asia would assist both with the EU's energy-security goals and the region's own reform processes. The challenge for the EU is to address Russian efforts to avoid losing its monopoly power. The German firm Ruhrgaz has a strategic partnership with Gazprom that it does not wish to upset; however, some new EU members, such as the Baltic states, Poland, and Hungary, have a different kind of relationship and experience with Russia and its use of energy leverage. These countries want to see a closer partnership with Turkey (and via Turkey, with the Caspian and Middle Eastern gas producers) for their own political and energy security and independence.

Russia

Turkey's relations with Russia at times became very tense due to the BTC agreements. The Russian government perceived the BTC pipeline to be 'against' Russian interests and opposed the project. Turkey feared that Moscow would prevent the pipeline's construction; after all, Russia was actively involved in all the major conflicts in the South Caucasus (supporting the Abkhaz and South Ossetian separatist forces against Georgia and assisting Armenia in the war with Azerbaijan over Nagorno-Karabakh) and could reignite them at any time, thus scaring away international investors. Moscow backed down on its vocal opposition to the BTC pipeline only after realizing the depth of the U.S. commitment to it. In fact, while accusing the U.S. of backing the BTC for political reasons and claiming the project has no commercial viability, the Russian government rejected the Russian Lukoil company's desire to participate in the BTC project. Now that the BTC pipeline is almost complete, Turkey still hopes that some Russian oil will flow through the pipeline—not because there is need for throughput, but rather to increase regional cooperation.

The Russian opposition to BTC was taken so seriously by the Turkish government that, in order to reduce bilateral tensions, it agreed to the massive Blue Stream gas pipeline to transport 16 bcm annually of Russian gas under the Black Sea to Turkey. The argument in favor of the project was that Turkey and Russia are two giant neighbors that would gain from cooperation instead of competition. Moreover, if Russia were left out of the regional energy developments, Moscow could lash out and create instability in the weak Caucasus region. Yet, by making this concession, Turkey endangered not only the diversification of its own gas supplies, but that of the EU as well.

Since 1991, BOTAS has been planning to transport Turkmen gas through Turkey to European markets. These plans bore fruit in 1998, when Turkmenistan agreed to supply Turkey with 30 bcm of gas annually, of which 16 bcm were for domestic

consumption, and the remainder to be transported to Europe. When Azerbaijan's Shah-Deniz field's major gas reserves were discovered, Turkmenistan-Azerbaijan relations became tense as Azerbaijan was no longer merely a gas transit country, but a gas producer with its own desire to export to Turkey and to the EU. The signing of the Blue Stream gas pipeline agreement at a time when the U.S., Azerbaijan, Turkmenistan and Turkey were actively promoting a major gas pipeline to transport Turkmen and Azerbaijani gas to Turkey was seen as a brilliant move by Russia to shut Turkmenistan out of the game; there simply would not be sufficient room in the Turkish market for two major gas deliveries.

Iran

Turkey's relations with Iran were similarly tense over BTC and also over the Caspian gas pipeline. Turkey and Iran were clear competitors for the MEP, but with U.S. sanctions on Iran, multinational oil companies were unable to seriously consider Iran as an alternative. The U.S. remains opposed to investment in the Iranian energy sector, so long as that country continues sponsoring terrorism, obstructing the Middle East peace process, and developing weapons of mass destruction. Turkey also opposed such investment, albeit for different reasons. Turkey also suffered from Iranian-backed radical Islamist terrorism, and offered Azerbaijan a much more secure option for the oil and gas pipelines. Relations over the gas pipeline became more complicated, especially after Turkey and Iran reached an agreement for a gas pipeline through Turkey to Europe—an agreement blocked by the United States. Yet, a solution was found: Turkey could receive Turkmen gas swapped for Iranian gas, so that Turkey would be unaffected by the sanctions.

United States

The BTC project and the overall East-West energy corridor were at the heart of the Turkish relations with the U.S. from mid-1990s until 2000. It is important to keep in mind that without close U.S.-Turkish cooperation, it would not have been possible to pull the multibillion-dollar BTC project together. One of the reasons behind the strong U.S. support for BTC was to ensure that Caspian oil reached markets via a stable NATO ally, instead of through Iran and/or Russia. Another reason was to help Turkey take some pressure off the already congested Turkish Straits. A third reason was to help Turkey compensate for the closure of the Kirkuk-Ceyhan pipeline following the Gulf War. In short, U.S. and Turkish interests in promoting the BTC pipeline were the same.

A second strategic project that is at the heart of U.S.-Turkish energy cooperation is the Shah-Deniz gas pipeline project to transport Azerbaijani gas again via Georgia to Turkey, and later on to Southeastern European markets. From a U.S. perspective, this project will help further solidify Turkish-Greek cooperation and

also help European countries with their own gas diversification. These two projects have brought Turkey to the center of energy politics and were seen by the U.S. as primary engines of growth for the Turkish energy sector. The expectation was that these two projects would bring in more foreign investment into Turkey's energy sector. Unfortunately, this has not materialized so far due lack of a coherent energy policy in Turkey.

Moreover, the AKP government that took office after the parliamentary elections of November 2002 showed little interest in keeping the East-West corridor on the world agenda. With Turkey's lack of visibility in the regional energy picture and its failure to keep energy issues on the bilateral agenda, Washington has gradually lost interest in the BTC project as well. For the project's long-term success, however, which hopefully will include sustainable development for Azerbaijan and Georgia, Turkey needs to work closely with the region and the U.S. to ensure ongoing active support.

Looking Ahead

While the BTC pipeline will help reduce oil tanker traffic through the Turkish Straits, Straits traffic continues to increase, posing continuing stress to Turks. A new vessel traffic system (VTS) has become operational in Turkey to provide safe passage to oil and other maritime traffic in the Turkish Straits; while the VTS system helps, it does not solve the problem.

The increasing amount of oil being transported from Russia and the Caspian has caused the Straits to become a chokepoint, stalling traffic in and out of this narrow body of water. In severe weather conditions, delays can last for up to 30 days, which is hugely costly for the oil companies.

Especially after September 11, increasing traffic of oil and gas tankers and other dangerous cargo through the Turkish Straits has forced Turkey to increase safety measures. Some of the restrictions Turkey has posed on tanker passage, especially the largest class allowed through the Straits (the Suezmax with 120,000-200,000 dead weight tons), has led oil shippers and a number of governments (especially Russia's) to claim that Turkey was politicizing the Straits. Yet most observers believe that the limit for trans-Bosporus oil traffic has been reached. When Russian oil companies increase production and when the CPC pipeline starts its second phase, traffic through the Straits may simply become paralyzed, necessitating a bypass pipeline out of the Black Sea.

Moreover, any incident that causes delays above and beyond those caused by traffic and weather would shut down the passageway for a considerable period, with devastating effects for all the countries in the region that rely on the Straits for transportation of imported goods and exported commodities. The occurrence of

such an incident, whether a major oil spill or a terrorist attack, is a serious possibility. After all, Istanbul was already hit twice by terrorists in November 2003 and is a frontline state in the war against terror. It is imperative that the Western alliance develop a strategy to ensure the safety of the Black Sea region's strategic chokepoint.

Once the East-West oil and gas pipelines are fully complete, Turkey will be a key energy terminal for oil and gas to be transported to Western markets. Following the start of the BTC pipeline later in 2005, Kazakhstan is likely to finalize agreements to send its oil from Aktau to the BTC pipeline. This would make perfect sense for the producers in Kazakhstan, especially Eni and TotalFinaElf, both of which are BTC shareholders.

As for the gas pipelines, the Shah-Deniz gas pipeline should not, and are not likely to terminate in Turkey, but to continue to European markets. Turkmenistan is once again expressing interest in sending its gas via the East-West route, and though this will not happen in the short term, it would make great commercial and political sense in the longer term for Turkmenistan, for the transiting countries, as well as for Western Europe. A Turkey that is an EU member, a close partner of Russia, and a strategic ally of the U.S. would, with the realization of these projects, have enormous political and economic pull for the South Caucasus and Central Asian countries that also want to be closely associated with the transatlantic alliance.

7. Environmental and Social Aspects of the Baku-Tbilisi-Ceyhan Pipeline

David Blatchford

The BTC pipeline project was predicated by the environmental and social objective of delivering Caspian oil to international markets without adding to the ever-increasing growth in shipping traffic passing through the Turkish Straits. These Straits form the link between the Black Sea and the Mediterranean and bisect Istanbul, a UNESCO World Heritage city with a population of over 10 million. At full capacity the pipeline will avoid around 400 additional tanker movements a year, which approximates 35% of current tanker movements through the Straits.

Historically, pipelines have proved to be a much safer means of transporting large volumes of oil over large distances than other viable alternatives such as shipping or rail.[2] In theory, therefore, they represent the best option from an environmental and safety perspective. In practice, evaluation of the relative merits of pipelines versus shipping and rail requires a comparative assessment of a) the actual impact of the construction of a pipeline together with the risk and consequences of a spill during operation, and b) the risk and consequences of a spill from shipping or rail. The outcome of such an assessment is in turn dependent on a range of variables including the pipeline route, the likelihood of a spill, the potential spill volumes and the resources potentially at risk from spills from all three modes of transport.

Consideration of all these factors concluded that a buried pipeline from Baku to Ceyhan presented the lowest risk of an oil spill. Even in the event of an oil spill this option was assessed as having the lowest expected overall environmental cost – where expected overall environmental cost was estimated using historical data from previous spills occurring worldwide and in particular, data relating to the cost of clean-up, third party liability and natural resource damage cost.

[2] Statistics from the US Association of Oil Pipe Lines (AOPL) show an average spill amount of around one gallon per million barrel miles – equivalent to less than one teaspoon per thousand barrel miles. The European experience has been similar, with CONCAWE (Conservation of Clean Air and Water in Europe) reporting an average net spillage (the residual amount of oil left in the environment following clean-up) of two parts per million (or 0.0002%) of the oil transported through up to 30,800km of pipelines over a period of 25 years (refer to A Safe Plan of Action, Oil Spill Response Planning for the BTC Oil Pipeline; www.caspiandevelopmentandexport.com)

Having developed the concept of an export pipeline for Caspian oil, the challenge was to design, finance, permit and construct a technically and commercially viable project that minimized additional environmental risks.

Many of the challenges were of a kind that would be faced to varying degrees by all trans-national pipeline infrastructure projects. Many, however, are unique to the BTC project and reflect the environmental, social, cultural, political and historical issues and legacies of the region, as well as the aspirations of the host countries as they seek to assert themselves in a socio-political era very different from their recent pasts.

The following sections of this environmental and social overview highlight some of the unique aspects of the BTC project, the associated environmental and social issues and interdependencies, and BTC Co's responses to challenges they present.

Governing legal and policy regime

Government Agreements and Project Policies

The BTC project is governed by a set of interrelated and mutually reinforcing agreements among the host governments of Azerbaijan, Georgia and Turkey in the first instance, and BP and its Partners in the second. The complexity is typical of all large resource projects although accentuated in this case by the fact that BTC is the largest and most complex cross-boundary infrastructure project currently being undertaken in the world. It also represents the single largest foreign direct investment in each of the three host states.

The legal arrangements for BTC are intended to provide stable legal protection for all stakeholders – governments, investors, employees, landowners and other affected citizens. To ensure this, the parties have created a special legal regime that is designed to provide legal rules that are clear and that conform to the highest international standards.

The overarching legal regime is the Inter-government Government Agreement (IGA) between Azerbaijan, Georgia and Turkey. Annexed to the IGA are unexecuted forms of the Host Government Agreements (HGAs), one between each host country and the project consortia. Once versions of the IGA were ratified in each host government parliament they became binding international law and controlling domestic law in each respective country. In Turkey the legal regime also includes the Lump Sum Turnkey Agreement and a Government Guarantee.

Existing national laws in each host country that pertain to environmental protection, safety and emergency situations apply to the extent that they do not conflict with the IGA and/or HGAs. This includes the provisions of International Conventions in force in the host countries.

In an effort to ensure a uniform application of environmental, health and safety technical standards across the three jurisdictions represented by the host governments, the IGA includes a provision that states that "[such standards will be] in accordance with international standards and practices within the Petroleum pipeline industry (which shall in no event be less stringent than those generally applied in the European Union, EU) and the requirements as set forth in the relevant Host Government Agreement, which shall apply notwithstanding any standards and practices set forth in the domestic law of the respective State". This general statement is elaborated in the respective HGAs.

The reference to EU standards effectively provides the benchmark for what is considered 'international standards and best practices' for the purposes of the project, although due to the need to partly debt fund the project, there is an additional requirement to conform to the environmental and social policies of a selection of International Financial Institutions (IFIs) including the World Bank Group (specifically the International Finance Corporation, IFC), the European Bank of Reconstruction and Development (EBRD) and various export credit agencies.

The project has also been developed in accordance with BP Corporate policies and the prevailing company goal of '*no accidents, no harm to people and no damage to the environment*'.

Project Compliance

In order to comply with the above requirements, the environmental and social approach to the project has been one of avoidance of adverse impacts and enhancement of positive impacts. Where it has not been possible to avoid adverse impacts, a sequential process of impact reduction, minimization, mitigation and where appropriate, offset compensation, has been followed. This has been achieved through an iterative engineering design process, environmental risk assessment and extensive public consultation, culminating in country-specific Environmental and Social Impact Assessments (ESIAs) and associated addenda also incorporated into the legal regime governing the project in each state.

These documents and the commitments contained therein were developed in order to further elaborate and apply the more general commitments set forth in the suite of Agreements, Conventions, laws, policies and guidelines referred to above. Following statutory periods of public review the documents were subsequently approved by the appropriate regulators, in some cases with conditions, and effectively form the license to operate. An additional set of documents that included, *inter alia*, an Environmental and Social Action Plan (ESAP), was prepared for the IFIs as part of the pre-conditions for project financing. The ESAP contains a detailed list of project environmental standards and guidelines.

Legal and Policy Challenges

Given the multitude of agreements, laws, international standards, best practices, norms and commitments applicable to the project, and their interpretation and implementation in three countries, it is not surprising that areas of uncertainty, confusion and in some cases conflict have arisen as the construction phase of the project has progressed. This is a result of many factors, some acting singularly, others in combination to varying degrees, but in all cases requiring additional attention - and in many cases action - by BTC. Key factors are as follows:

- *Environmental policy and management reform:* Azerbaijan and Georgia inherited from the Soviet Union a relatively developed command-and-control system of environmental laws, regulations and institutions. Under this system emission and discharge standards were typically developed as part of a 'fees and fines' mechanism to generate income for the State rather than provide a means of protecting the environment. It was also common for the responsibilities of various government agencies to overlap, creating conflicting activities and/or duplication of efforts. Furthermore, some environmental regulatory functions were delegated to organizations responsible for economic production.
- The transition to a market economy in Azerbaijan and Georgia is providing the impetus to integrate environmental concerns into new economic institutions and policies. But the pace of change has been slow. Meanwhile, Turkey's environmental policies are similarly undergoing reform but are being driven by a very different reason: to meet the obligations of EU membership (the so-called *acquis*). The fact that the most recent assessment indicates that the level of transposition (i.e., reform to EU requirements) with respect to the environment remains low, particularly in terms of air quality, waste management, water quality, nature protection, industrial pollution, risk management and administrative capacity, provides a noteworthy backdrop to the project.[3]
- *Role of the Member State in EU policy*: The European Community is driven to producing legislation that places obligations on the Member States to achieve desired results. This means that Community policy inevitably leaves some measure of discretion to the Member States. Policy only becomes truly functional when it is implemented in the Member States and has thereby become inseparably enmeshed with national policies and practices. This can be illustrated by the fact that many environmental Directives have taken the form of 'framework' legislation, leaving the

[3] Commission of the European Communities, 2004 Report on Turkey's Progress to Accession COM (2004) 656 final

Member States with considerable discretion regarding their implementation. Other Directives are binding in terms of the results to be achieved but similarly leave to the Member States the choice of form and methods. Given that none of the host countries is a Member State, the project commitment to meet EU standards has required BTC to effectively proceed in an institutional and administrative vacuum in terms of guidance, interpretation and application, and rely heavily on its own resources and initiative in order to achieve acceptable outcomes.

- *Infrastructure:* Each of the host countries is characterized by weakly developed environmental infrastructure. This situation is particularly acute in Azerbaijan and Georgia. Accordingly, the project has committed funds to a conditioning improvement plan for a municipal waste disposal facility in Georgia with the objective that it becomes EU-compliant. The project is also part of an effort to construct a EU-compliant non-hazardous waste site in Azerbaijan. In Turkey waste is transported 800 to 1000 km to a EU-compliant landfill at Izaydas. Case Study 1 provides specific examples of the difficulties BTC has faced in terms of waste management, and how it has responded.
- *International standards*: The project is committed to comply with international standards and in particular the World Bank Group Safeguard Policies. It is recognized that there are gaps and deficiencies among individual Safeguard Policies and the set of policies as a whole. There is also a lack of clarity between the current Safeguard Policies and international standards.[4] These deficiencies are partly due to the changes in attitude toward environmental and social issues since 1998 when the Safeguard Policies were last updated, and is particularly evident in the case of social issues where there has been a burgeoning increase in new initiatives that could be construed as best practice, notwithstanding differences in agenda and emphasis, and the resulting potential for conflict. As a result, IFC is revising the Safeguard Policies in order to improve their clarity, accessibility and implementation. They may also provide balance and direction with respect to social issues, although given the very nature of these issues there will always be scope for varied interpretation at the implementation stage. The revised and undated Policies are due for release at the end of 2006.

A number of issues relating to the interpretation of the IGA and HGAs have also been raised by various Non-Government Organizations (NGOs) with respect to the impact of the project's legal framework on the autonomy and policy-making discretion of the host governments. Issues have included public disclosure of

[4] IFC Compliance Adviser Ombudsman (2003): A Review of IFC's Safeguard Policies

project documents, security and human rights, third party access to local courts, compliance with evolving international standards and labor norms.

BTC responded to these concerns with the development and public disclosure of a Joint Statement,[5] forming part of the legal regime established by the provisions of the IGA and HGAs. The human rights issue was further addressed via the *BTC Human Rights Undertaking*, an irrevocable and legally binding instrument that will, *inter alia,* prevent BTC Co from seeking compensation from a host government for breach of the applicable HGA in circumstances where that host government was acting reasonably to fulfill an obligation under an international labor, health, safety, environment or human rights treaty, to which it is a party.

Route selection and pipeline design

Delivering Caspian Oil to World Markets: Transportation Modes and Route Options

The Caspian region has abundant oil and gas reserves. For most of the 20th century the Caspian resources were developed to meet the needs of the former Soviet Union. With the dissolution of the Soviet Union in December 1991, the Caspian Basin was opened to the outside world, both in terms of direct foreign investment into the region and resource exports to world markets under a regime of independent states. Supply exceeds the domestic demand for oil in the Caucasus and Central Asia, and local demand is unlikely to grow significantly in the near future. All increased production is therefore likely to be exported.

The development of Azerbaijan's hydrocarbon resources had been prevented in the first instance by the absence of sufficient sources of capital, experience and technology to develop the offshore and onshore reserves. Development had also been constrained by the virtual land-locked geography of the Caspian Sea, the limited capacity of pipeline and rail networks serving the region, and the reliance of these networks on export via the Turkish Straits.

A principal consideration in establishing an export supply route was to develop a commercially viable option that minimized environmental risk – primarily through avoidance of the Turkish Straits – and delivered the oil to an appropriate location to enable its sale on world markets. The route needed to be analyzed in consideration of its long-term security prospects and also required the ongoing support of both Azerbaijan, as the sovereign owner of the oil resources, and of the countries whose territories it crossed.

A number of options were reviewed to test these considerations: a route directly to the eastern Mediterranean; a western route via Georgia to the Black Sea; a northern

[5] Joint Statement on the BTC pipeline project, May 16, 2003 (refer to project web site: www.caspiandevelopmentandexport.com)

route to the Black Sea through Russia and a southern route to Iran. Both the western and northern options only delivered oil to the Black Sea, and would necessarily involve onward passage through the Turkish Straits. These options were therefore deemed unacceptable. A southerly route through Iran was dismissed due to external political considerations. Therefore, a route via Turkey was considered the best alternative with Georgia selected as the transit country to enable the pipeline to reach Turkey, as political considerations ruled out both Armenia and, as noted above, Iran.

An independent Environmental Risk Assessment commissioned by BP and conducted by Woodward Clyde in 1997 examined the relative risks and expected environmental costs associated with the transportation of oil from Baku to a common point on the Mediterranean, accessible via Turkey. This was subsequently refined to the port of Ceyhan for reasons of access, safety, and existing infrastructure.

It was recognized that the potential environmental and social impact of oil pipelines ultimately depend on the final route selected and a wide range of project-specific details that can only be assessed on a case-by-case basis. Accordingly, definition of the actual pipeline route and design involved a multiple-stage, iterative process whereby a 10km corridor of interest was defined before being narrowed down to a final 8m-wide pipeline corridor that will be maintained throughout the operating life of the pipeline.

Route Refinement and Design Optimization

The overriding principle that applied throughout the corridor evaluation process was one of problem and issue identification and avoidance. The corollary to this principle was a detailed knowledge of constraints and sensitivities along and adjacent to the corridor of interest. This was developed through a detailed assessment of a range of issues including terrain, environmental and social constraints, archaeological and cultural sites, geohazards, safety, technical feasibility, constructability, security, access, cost, schedule, and operability. Government and NGOs, local and international scientists and technical experts, and communities located along the length of the pipeline were consulted throughout this process and proved to be valuable sources of information.

The key considerations and constraints associated with route selection altered and were refined as the route was narrowed from a 10km wide Corridor of Interest to the Construction Corridor (terms defined in the HGAs), with the emphasis shifting from one of avoidance to one of optimization and minimization of impact, and mitigation. A key outcome of the route selection process was that the route avoids all settlements and households, thereby ensuring that no people required physical displacement or relocation.

In parallel with the route refinement activities, conceptual engineering design evolved through a series of iterations into detailed engineering design, with the specification of critical pipeline elements such as depth of burial, pipeline diameter, pipeline wall thickness, the number and location of pump stations, pump driver selection including choice of fuel, and number and location of valve stations. Environmental and social issues were major considerations in all respects.

Despite efforts to avoid impacting the physical and social environment through route selection and design modification, some residual impacts and risks are inevitable for a project of this size. In southwestern Georgia, for example, the presence of a dominant ethnic Armenian enclave and related administrative district, supported by a strong Russian military presence centered around Akhalkalaki, effectively created a 'no go' area due to security concerns. To avoid this area the route had to pass further to the north and through the Borjomi region, an area renowned for commercial and economic activities including skiing and bottled mineral water companies. The Borjomi case study (Case Study 2) explains the background to this decision and illustrates the range of additional impact prevention, mitigation and contingency measures adopted in recognition of these sensitivities.

Land acquisition and compensation

Processes and Issues

A key project objective was to avoid the physical relocation of dwellings. While this was achieved, the project will disrupt land use activities and the livelihoods of a large number of households to varying degrees.

The pipeline construction Right of Way (ROW) affects approximately 4,100 households in Azerbaijan and a further 1,800 in Georgia. In Turkey the ROW passes within 2 km of 296 villages and affects more than 13,000 parcels of land, the majority of which are privately owned. As many as 62,000 individual land shareholders will be affected, of which approximately 20% are absentee owners.

Land required for the project will either be purchased or leased. Landowners are being compensated for the permanent acquisition of land as well as economic losses equivalent to the value of the improvements and standing crops on their land. Tenants and other land users are being paid for three years of lost crop production, as determined by the scheduled time required for construction and reinstatement. In most cases the disruption to land use and livelihood will be less than three years, with land users resuming normal activities once the construction phase has finished and the ground reinstated.

Some restrictions will apply for the life of the project but in terms of agriculture these will generally be limited to a narrow strip of land immediately overlying the buried pipeline. For example, the cultivation of deep-rooted plants or trees will be disallowed within the 8m-wide zone referred to above, whereas the construction of buildings for example will be disallowed within specified distances from the pipeline (defined as a 58m-wide corridor for the BTC/SCP ROW and 4-15m from the pipeline centerline in Turkey. Cropping and grazing will generally be allowed to proceed unimpeded.

The land acquisition and compensation process has been in accordance with World Bank Group requirements relating to involuntary resettlement (which includes economic displacement), the HGAs and laws and regulations of the host countries. Particular attention is being directed towards vulnerable and disadvantaged groups such as those without formal title to land and others defined in terms of gender, age, ethnicity and religion. The process has also involved extensive consultation and public disclosure activities, as defined in country-specific Public Consultation and Disclosure Plans and Guides to Land Acquisition and Compensation.

BTC has taken the additional step of involving independent NGOs in each country to provide third party verification of the fairness and transparency of the land acquisition proceedings. Here, the intent has been to assist project–affected people in understanding their rights and obligations, and provide advice during negotiations where necessary.

Grievances and Disputes

Grievance and dispute resolution mechanisms were established in each country in accordance with the IFC requirement 'that projects sponsors ensure that procedures are in place to allow affected people to lodge a complaint or claim (including claims that derive from customary law and usage) without cost and with the assurance of a timely and satisfactory resolution of that complaint or claim'[6]. These mechanisms were not intended in any way to usurp the rights of affected people to seek recourse through various avenues provided for under local law. Rather, the intent was to offer a mechanism to achieve prompt redress for complaints at a project level, without prejudice to the complainant's right to apply to the courts directly. The nature of grievances and effective performance of the redress process is subject to internal and external monitoring, with the outcomes being publicly disclosed on a quarterly basis.

[6] IFC Handbook for Preparing a Resettlement Action Plan (2001)

Host Country Laws and Establishment of Resettlement Action Plan (RAP) Funds

It was recognized at the outset that there were significant differences in host country law with respect to land title, land acquisition and compensation rights. In Azerbaijan it was necessary for the State to lease land required for temporary purposes from the individual landowner and then grant usage rights to the project for the three-year construction period. Land required for permanent facilities was purchased by the State with usage rights being conferred to the project until the termination of the HGA and abandonment of the facility.

In Georgia the project has been required to purchase the land directly from the landowners, rather than leasing land from the State or landowners, because Georgian law does not provide lease rights that would give the project the legal certainty to construct and operate the pipeline.

In Turkey, Botas[7] will temporarily or permanently acquire the required land, depending on the intended use of the land, and transfer these rights to the project.

Other differences in the land acquisition and compensation process presented more significant challenges for the project. In Georgia and Turkey, special measures had to be implemented to compensate people who, under local law, had no legal entitlement, yet were eligible in accordance with international standards (in this case the World Bank Group Safeguard Policy OD 4.30, Involuntary Resettlement).

BTC responded by establishing RAP Funds in both countries in order to cover situations where local law does not provide for compensation, and supplement other household compensation entitlements for loss of land, assets and livelihood. Other special groups unique to each country also qualify under the terms of the Fund, for example those groups in Georgia who would normally receive communal grazing fees (the *sakrebulos*) from herders affected by construction activities, livelihood losses experienced by fishermen operating in the vicinity of Ceyhan Marine Terminal, who under local law are not entitled to compensation, and private landowners who are facing difficulties due to the complexities of the cadastral system.

The Georgia RAP Fund has allocated $1.1 million to provide compensation to eligible people while the Turkey RAP Fund has a $2 million budget. These sums are in addition to the minimum compensation amounts required under relevant national laws.

In Azerbaijan there has been no need to establish a RAP Fund as the government has agreed to compensate affected people and groups according to Work Bank

[7] Botas is the State-owned Turkish pipeline transportation company that is contracted to BTC under the terms of a Lump Sum Turnkey Agreement to design and construct the pipeline and facilities in Turkey

Group principles, even in cases where these exceed requirements under Azerbaijani law.

Major Challenges

Perhaps the single most significant challenge relating to land acquisition and compensation was the identification of legal title and the rights of informal users (e.g., communal grazers) and absentee owners, particularly in villages without cadastral records (see below). This challenge lies at the heart of most of the land-related claims before the host government courts and the land-related human rights allegations raised by NGO against the project.

Other major challenges included:

- Assessment of the level of compensation payments with limited historical market data
- Ensuring that individuals entered into land acquisition contracts freely, well informed and aware of their legal rights
- Preventing land speculators, illegitimate claims, extortion and corruption
- Return of usage rights and/or ownership rights[8]

An indication of the complexity of these issues in the three host countries can be illustrated by reference to land ownership laws in Turkey, its policy and legislative framework for the acquisition of and compensation for land and assets, and their combined effects on the project.

Land in Turkey may be held by private owners in one of two forms: by registration of the ownership and the issuance of a deed reflecting title to the land (i.e., registered ownership), or by customary use and occupation of land (i.e., customary ownership). Of the private lands to be acquired the project has identified 6,737 private land parcels and 2,598 customary owned land parcels. Determination of the ownership of registered land is complicated by factors such as multiple ownership, out of date deeds, and conflicting customary and registered ownership claims. Additionally, villages typically have usage rights on common lands (particularly pasture land) although the legal owner of the land is the State.[9]

In terms of land acquisition (formally referred to as expropriation in Turkey), the Constitution requires that the project can only gain access to the land and commence construction after the rightful owners/users are fully informed of the need for expropriation, are provided opportunities to voice their concerns, have

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[8] Refer also to Caspian Development Advisory Panel, Interim Report on Azerbaijan and Georgia, August 2003, p83; www.caspsea.com

[9] Caspian Development Advisory Panel, Report on Turkey and related Security and Human Rights Issues in Azerbaijan, Georgia and Turkey, December 2003, p60; www.caspsea.com

reviewed and challenged the valuation of their affected assets and have received full payment of their entitlement deposited in a national bank in the name of the owner. Also, all owners are entitled to compensation irrespective of whether they have title deed or customary ownership of land.

As noted above, approximately 20% or over 12,000 of the 62,000 individual land shareholders affected by the project are absentee owners. The task of identifying, locating and then informing these owners in accordance with the above requirements has presented the project with a major exercise with significant scheduling implications.

Under Turkish Expropriation Law there are generally two ways to acquire land: through amicable agreement or through a court process. Every effort was made by the project to settle acquisition through an amicable agreement, however due to the issue of multiple landownership and poor maintenance of title deed records the project was only able to settle 61% of private land parcels through amicable agreement. In lieu of amicable agreement, the BTC project applied to the courts for urgent expropriation under Article 27 of the Expropriation Law.

Article 27 is effectively an expedited alternative to the ordinary process for the exercise of eminent domain[10] and has been applied during the BTC project in instances where land owners were absent and a) could not be located, b) could not complete the registration process due to multiple ownership issues or c) have not provided Powers of Attorney to their relatives who remain in the villages.

In response to concerns from some international NGOs and others on the greater than expected reliance on Article 27, the project modified the process by allowing more time for the identification and notification of owners, and ensuring that, following acquisition, owners receive their share of compensation as soon as they complete the deed title registration process, even if absentee part-owners have yet to come forward.

Sustainable Investments, Offsets and Related Initiatives

Creating Lasting Benefits

The BTC project is predicted to bring significant social, economic and community-related benefits to Azerbaijan, Georgia and Turkey. These will be manifested in the form of employment and associated investment in the development of employees, purchase of goods and services from local businesses, development and enhancement of local infrastructure and generation of revenues for the host

[10] Refer to: Caspian Development Advisory Panel, December 2003, p65; ibid

governments, which in turn can serve as a catalyst for the countries in addressing key social and economic needs.

BP and its partners recognize that, historically, 'traditional' benefits accruing from natural resource development projects such as those outlined above have not always resulted in a lasting positive legacy in the host countries, particularly at the local community level. A variation of this theme is the creation of 'boom and bust' economic conditions whereby sudden stimulation of local economies and high demand for labor during construction falls away sharply at the commencement of operations.

To redress this situation and demonstrate its long-term commitment to the region, BTC, in conjunction with the South Caucasus Pipeline project (SCP), has implemented a number of sustainable development initiatives that are capable of delivering benefits that extend well beyond the construction phase of the project. These are additional to the numerous programs and initiatives that are being implemented to mitigate predicted and potential environmental and social impacts. Offset projects have also been developed to compensate for impacts that cannot be mitigated.

In developing the sustainable investment program, the BTC and SCP projects appreciate the challenge, not least because of the geographic spread of the projects across three countries, the number of communities that could potentially benefit from such initiatives and their expectations, but also because of the need to strike a balance between creating the seeds for projects that have the potential to be self-perpetuating and provide lasting benefits, and creating the perception (or indeed expectation) that the initiatives replace the role of government. It was also important not to create a situation where communities benefiting from such initiatives developed a dependency on their ongoing funding.

The sustainable investments take one of three forms: the Community Investment Program, the Environmental Investment Program and the Regional Sustainable Development Program. Each is discussed briefly below. The Offset Program is also briefly described, although it was conceived for different reasons and has a slightly different purpose.

Community Investment Programme (CIP)

The overall objective of the CIP is to fulfil BTC's and SCP's commitment to generate "economic benefits and opportunities for an enhanced quality of life for those whom our business impacts". The CIP aims to improve:

- Living conditions and access to basic needs, such as clean water, electricity, schools, health and sanitation facilities through the rehabilitation of social and economic infrastructure without the need to create parallel structures

- Utilisation of production facilities and inputs through technical improvements, credits, management and training, and marketing support in the agricultural and service sectors
- Income-earning and economic opportunities for local people through access to micro-credit schemes, training and capacity building

The capacity of communities to self-organise, manage and self-initiate community driven development through community mobilisation initiatives and activities[11]

It is proposed that these aims will be achieved through interventions that focus on sustainable and long term benefit, through participatory methodologies that empower communities to solve their own problems and through interventions that are needs-driven and "owned" by community members.

In each of the three countries the community projects have been designed in consultation with local communities and a range of other stakeholders. In Azerbaijan, CIP is active in about 107 communities, in Georgia 80 and Turkey 285 villages, with 43 to be added in the near future. Implementing Partners (IPs) have been selected through a Request for Proposal process. In Azerbaijan and Georgia the IPs are international NGOs partnered with national NGOs. In Turkey the IPs are two national NGOs, a university and a consultancy.

The dominant themes at the heart of CIP match the needs of communities close to the pipeline route and typically fall into the following categories:

- Economic opportunities and income generation
- Strengthening rural and agricultural systems
- Strengthening community institutional capacity
- Improving access to training and education
- Health and sanitation
- Rehabilitation of existing social and economic infrastructure

Some examples of specific projects being conducted in each of the host countries are as follows:

- Azerbaijan: community mobilization and capacity building; health care; micro-finance
- Georgia: renewal of rural infrastructure; agricultural support; support for income generation through micro-credit (see case study below); energy efficiency; social services; capacity building; school improvements, including infrastructure rehabilitation and teacher training

[11] Refer to project web site: caspiandevelopmentandexport.com

- Turkey: employment and income generating activities; agriculture support activities (vaccinating cattle, sheep and chickens; artificial insemination programs; training of farmers and trainers in animal husbandry, improvements in crop management; and orchard management); social infrastructure improvements; capacity building

The CIP is independently monitored and the results publicly disclosed. The overall CIP budget allocation is $25 million, comprising $8 million each for Azerbaijan and Georgia and $9 million for Turkey. The third Case Study illustrates how the BTC project is as much about people living comparatively simple lives with modest expectations but with dignity and strong will power, as it is about geopolitics, Oil Funds and export supply routes. It describes an example of where the CIP is not only stemming the flow of people who are leaving a Georgian village as a result of decaying infrastructure and dwindling opportunities, but is helping to build for the future. CIP implementing partner CARE is completing the project.

Environmental Investment Programme (EIP)

The EIP aims to promote and conserve biodiversity, where possible by supporting existing national and regional strategies. The program is being implemented via a series of projects that collectively aim to fulfill the following objectives:

- To provide additional benefits (i.e., additionality) that go further than just mitigation of impacts
- To address areas of key stakeholder concern as identified in the ESIA consultation process
- To respond to ongoing biodiversity-related initiatives, issues and suggestions raised by stakeholders during the consultation process
- To promote involvement and commitment of people living in the vicinity of the project in the conservation of biodiversity though public awareness and education[12]

Unlike CIP projects, EIP projects tend to be more regional than community-based because they concentrate on particular species and habitats. For example EIP is looking to fund a Cross Caucasus Project that addresses the socio-economic, political and institutional threats to, and opportunities for, conservation and biodiversity in the region, within the framework of national biodiversity strategies and international conventions to which the host countries are parties. Habitat projects include conservation and restoration of Tougay forest, semi desert conservation and management, and forest habitat enhancement.

[12] Refer to project web site: caspiandevelopmentandexport.com

As with the CIP, the EIP is being implemented via IPs (typically International NGOs). Where possible and relevant, local communities are involved.

As at the end of 2004, four EIP projects were in the planning phase, six in the definition stage while 15 have progressed to implementation. The EIP will be independently monitored and the results publicly disclosed. The overall EIP budget is $9.3 million.

Regional Sustainable Development Programme (RSDP)

The RSDP is a $25 million pledge to regional development over a ten-year period starting in 2005. It will form the core of BP's commitment to the people of Azerbaijan, Georgia and Turkey to create sustainable benefits for local communities over the longer term and to make a central contribution to the responsible use of revenues generated as a result of the company's activity. The RSDP at present comprises two main activities:

- The Regional Development Initiative: This is envisaged as a large-scale, country and region-wide program. It will include projects that will endure and have an impact for some time. These projects will be designed to cover the lifetime of BP's projects. The programs will be aligned with government policy in each country and will be partnered by multilateral development agencies, IFIs and BP's project partners. The focus will be on enterprise development, good governance and improving access to energy. Capacity building and educational/vocational training will be intrinsic to all three themes.
- The Future Communities Program: This is envisaged as the main vehicle for the BP's future relationship with, and investment in, those communities (limited to the four kilometer BTC/SCP pipeline corridor and settlements near terminals and pump stations) most directly affected by the project's operations. It will build on the construction-phase CIPs and will be driven by themes and projects identified by the communities themselves with an emphasis on community mobilization and capacity buildingOffset projects

In order to ensure compliance with World Bank Group Safeguard Policies OP4.04 on Natural Habitats and OPN 11.03 on Cultural Property, BTC has committed to implement offset mitigation where significant residual impacts[13] have been identified for natural habitats and cultural property. For example, where the pipeline ROW has been unavoidably routed through a forested area, the area of forest removed is being recreated at a nearby location as compensation for the fact

[13] Defined as those impacts occurring *after* the application of mitigation measures

that the forest cannot be restored in its original location because of planting restrictions that apply to the ROW following reinstatement.

To facilitate project management and to exploit potential synergies with EIP, a number of the Offset projects are managed as part of the EIP. There are eight Offset projects with a combined budget of approximately $2.5 million.

Transparency

Corporate Commitment

Transparency has been a theme that has affected the BTC project at all levels and reflects BP's corporate commitment to open accountability as a means of strengthening governance and reducing corruption, conflict, and poverty.

This commitment has been manifested in many forms. First and foremost, BP took the unprecedented step to publish the full text all of the agreements BTC has entered into with the Host Governments on the project website. Additionally, BP and the Azerbaijan government are committed to honor the principles embodied in the UK government's Extractive Industries Transparency Initiative (EITI), to which BP has publicly committed. EITI is intended to increase transparency associated with payments by extractive industries to governments and government-owned industries. The Azerbaijan government has piloted this initiative and formed a commission to assist in its implementation. BP Azerbaijan has been involved, along with other foreign and local extractive industry companies and a coalition of NGOs, in defining the procedures it will follow.

The Azerbaijan government has recently published the first Azerbaijan EITI report. Meanwhile, BP has just published its first Azerbaijan Sustainability Report and, in response to EITI, includes aggregated and disaggregated data relating to the amount and nature of financial transfers associated with its various operating entities, including BTC.

Other highlights that reflect BTC's corporate commitment include the public disclosure of the Production Sharing Agreements, the IGA and HGAs (including a citizen's guide), as well as the environmental, social, technical and safety standards that will apply. The company has also held a series of workshops, briefings and seminars with local media, covering aspects of the oil and gas industry such as the principles of the Production Sharing Agreements and the fundamentals of tax. These initiatives are designed to help the local media report BTC's activities in an informed and objective way, thereby stimulating a more open and transparent public debate.

A wide range of project-specific activities compliment the corporate initiatives outlined above. Of these, three themes illustrate the scale of BTC's commitment to

transparency: public consultation, disclosure, and monitoring. These are outlined below.

Public Consultation

Consultation with stakeholders has underpinned all project activities from the outset as BTC strived to meet the following self-imposed objectives:

- All stakeholders should have access to project information
- The information should be easily understood
- Locations for consultation should be accessible to all who want to attend
- Measures are put in place which ensure that vulnerable or minority groups are consulted
- A high level of awareness among communities and other stakeholders about the nature of the project, its likely impact and proposed mitigation measures, should be established
- Input from stakeholders on proposed mitigation measures, in particular through consultation with a representative sample of communities along the pipeline route and in relation to specific types of project activities, should be achieved
- Expectations among communities and other stakeholders should be managed

In order to meet these objectives, as well as HGA and IFI requirements, formal Public Consultation and Disclosure Plans were developed for each country. These documents were appended to the ESIAs and made available to the public in relevant national languages.

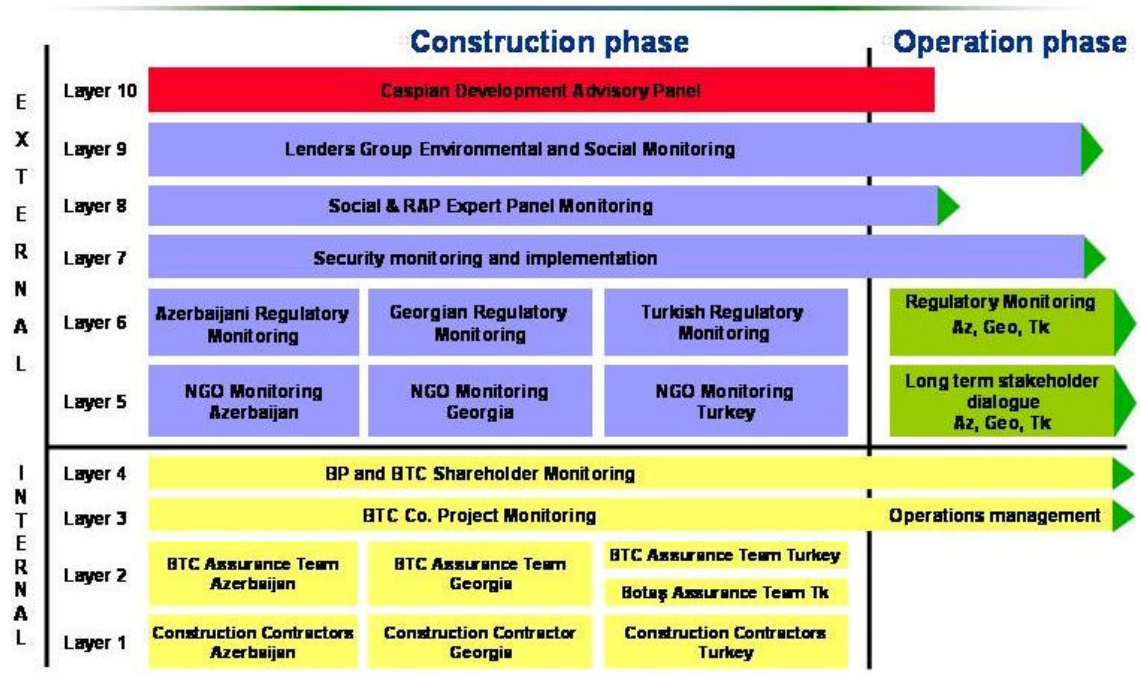
A critical element of the consultation process has been the day-to-day, grass-roots consultation with project-affected communities by dedicated Community Liaison Officers. These people provide the critical link between BTC and the communities along the route of the pipeline and around the facilities.

Disclosure

Since the public release of the ESIAs in 2002 and the submission of the ESAP to the IFIs in 2003, disclosure activities have continue unabated with the results of various internal and external monitoring activities (see below) continuing to be communicated in a variety of forms, fora and languages, depending on the intended audience. A summary of activities is published quarterly, via hard copy and on the project's website. The Executive Summary of each Quarterly Report is also translated into the multiple languages spoken in the host countries.

The scale of the disclosure effort is illustrated in Case Study 4. Here, a selected list of statistics is presented for Turkey. Comparable disclosure activities were undertaken in Azerbaijan and Georgia.

Figure 1. Monitoring, Assurance, and Oversight of BTC



Monitoring

The project's monitoring activities are extensive and can be categorized as either internal or external, as illustrated by figure 1, above. Internal monitoring refers to monitoring that is carried out by contractors (self audit), BTC/Botas personnel, or external (independent) third parties on behalf of the aforementioned parties. Reports from internal monitoring are not normally published externally. They are however available for review by external monitors.

On the other hand, external monitoring is carried out at arms length from the project through third parties (e.g., government, or Lenders) and is always viewed as independent. Reports from external monitoring are normally published externally, except in the case of regulatory monitoring.

One aspect of the external monitoring process that merits explanation is the role of Lender's Independent Environmental Consultant (IEC). The IEC has been appointed to act on behalf of the Lenders to assess and report to the Lender Group on the compliance of the project with the ESAP, the associated Contractor Control Plans (see below), Contractor Implementation Plans and Procedures, and BTC/Botas management plans and systems. During construction the IEC team has

generally comprised two teams consisting of two specialists. Each team spends approximately two weeks every quarter auditing the project, and reports non-compliances against the ESAP as well as verifies closure of BTC's responses to non-compliance raised during previous audits. IEC reports are publicly disclosed on the project's website.

Social aspects of the project are similarly audited by the Social Resettlement Action Panel although the frequency of audits is six monthly.

Contractors and Environmental & Social Resources

Formalizing Environmental & Social Standards and Expectations

The environmental and social impacts associated with a pipeline of the size and complexity of BTC are considerably greater during construction that during normal operations. The selection and management of engineering, procurement and construction contractors therefore represents a critically important element in the process to deliver a world-scale project to international environmental and social standards.

BTC's approach was to prepare an Invitation to Tender that set out the policies and requirements that needed to be met by each contractor during the contract term. These policies and requirements reflected BP's standards and expectations on a range of environmental, social and ethical issues. Because the Invitation to Tender was part of the contract between BTC and the contractor, the contractors were committed to implement the policies and requirements therein. Failure to do so represented grounds for termination by BTC of the construction contract.

The situation in Turkey is somewhat different given that the project is being designed and constructed under the terms of the HGA, and a Lump Sum Turnkey Agreement between BTC and Botas, backed by a Government Guarantee. While the terms of the Turnkey Agreement require Botas to assume responsibility for implementing the provisions of the environmental and social management plans, contractors working under Botas are responsible for implementing and adhering to all of the mitigation measures outlined in the EIA and the associated management plans. BTC's role is therefore one of project assurance rather than direct supervision and control, and this has made the task of upholding the exacting standards of the project more difficult.

Contractor Control Plans (CCPs)

Given the importance of the role of contractors in building a project to international environmental and social standards, BTC developed the concept of CCPs to improve the link between the impact assessment theory and the practical

fulfilment of project commitments during construction, thereby improving the environmental and social outcome of this phase of the project. The CCPs also assisted by adding transparency as well as facilitating overall project assurance.

Contractors are traditionally provided detailed and often complex environmental and social impact assessments. They are then left to generate method statements that ensure all commitments are fulfilled. More often than not, this is a weak link in what is arguably the most important phase of the environmental and social assessment process, with the contractors not having the background knowledge, technical expertise, time, and sometimes incentive to develop method statements from such large, diverse documents. The net result is that the avoidance and mitigation measures detailed in ESIAs are often not implemented effectively, do not meet desired environmental and social outcomes, or cost more through contractual disputes, non compliance actions and/or follow-up remedial works.

The CCPs adopted a performance driven approach and maximize the chance of ensuring that project commitments (on which the regulatory approval is based) are achieved both cost effectively and on schedule, as the contractor can clearly identify what has to be done.

Performance criteria to be met by the Contractor when implementing the mitigation measures are described in the CCPs, and the procedures to ensure that these criteria are met or exceeded are outlined. The means by which these performance criteria are met are determined by the individual Contractors, and described in detail in complimentary Contractor Implementation Plans and Procedures. This inherently flexible approach accommodates individual Contractor preferences and experience, local conditions etc.

The CCPs were an integral part of the ESAPs prepared for the Lenders as part of the loan requirements and now form the basis of the IEC External Monitoring programme described above.

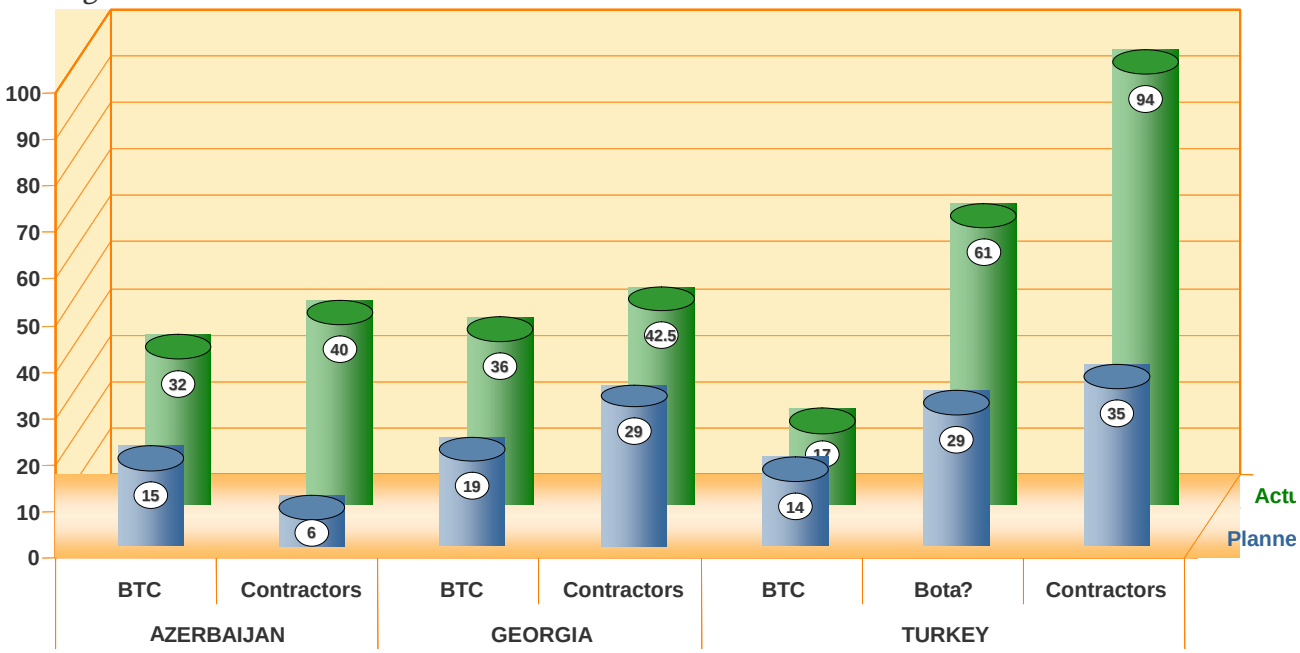
Environmental & Social (E&S) Staff Resources

One measure of the scale of the project and level of commitment regarding environmental and social performance can be seen from data relating to E&S staff resources, figure 2. These data show the original level of commitment, as given in the ESIAs, compared with actual numbers 18 months into the construction phase. For BTC, 51 E&S staff were budgeted for the three countries. This number has almost doubled to just less than 100.

The growth in contractor E&S staff has been even more pronounced having more than doubled from approximately 100 to 237. The data indicate that Georgia has approximately twice the number of E&S staff resources when calculated on a

person/km of pipeline basis (0.31) compared with Azerbaijan and Turkey (both 0.16).

Figure 2: Number of Environmental & Social Personnel



NB: Excludes Core Management Team – planned 3, actual 9

From BTC's perspective, the growth in demand for E&S resources can be attributed to five main factors:

- Preparation of a large volume of material for Lender Group as a pre-condition to project financing. (In June 2003, IFC and EBRD approved a package of E&S documentation comprising some 11,600 pages for public disclosure containing several thousand commitments).
- Additional supervision of contractors
- Preparation, participation and follow-up with respect to the 10 layers of monitoring referred to in Figure 2
- Technical support to contractors, particularly with respect to waste management (e.g., waste water treatment plants, incinerators)
- A general underestimation of the resources needed to ensure effective implementation of all commitments

From the contractor's perspective, the principal reasons for the large difference between the planned and actual numbers of E&S staff probably indicates a lack of experience in applying international environmental and social standards to large infrastructure projects and therefore, under-scoping and under-resourcing at the outset.

Conclusion

The BTC project is a complex, world-scale project that is being executed within a legal framework that conforms to the highest international standards.

The varied and complex historical, political, institutional and cultural setting of the project, along with transitioning national environmental and social policies, constantly evolving international standards, and ever-increasing expectations has presented BTC with significant challenges in the design, planning and construction of the project. This is particularly true given the company's demanding self-imposed goals and recognition of the opportunity (and arguably need) to set new environmental and social standards for multinational, private sector infrastructure investments in developing and transition countries, given the recent and ongoing debate on extractive industries and their effect on the economic and social welfare of their host countries.[14]

Although the majority of the environmental and social commitments identified in the ESIA for the construction phase have been fulfilled, both BTC and their contractors found the full implementation of some a significant challenge, particularly at the outset of construction. This can be attributed to the following main reasons:

- *Application of EU legislation in non-Member States.* This has lead to considerable debate on the interpretation and application of some legislation under local conditions, a role normally performed by Member State governments. In hindsight, more environmental and social technical input into the drafting of legal frameworks may have alleviated some of the difficulties that were encountered, without compromising outcomes
- *Weakly developed environmental infrastructure in the host countries* This has lead to difficulties conforming to selected EU requirement, particularly waste management
- *Variable interpretation of international standards by IFIs, Export Credit Agencies, NGOs and BTC*: In finalizing the ESAP with the IFIs, policies and standards were variously interpreted, reflecting in part inconsistencies in the standards (including conflicts with local law) as well as their necessarily generic form (particularly in the case of social standards)
- *The sheer number of commitments.* Several thousand commitments were needed to ensure compliance with all the laws, policies, standards and conventions, and inevitably resulted in detailed and onerous implementation plans. Two key lessons are:

[14] Refer: eireview.org

- Ensure commitments are not overly theoretical and difficult to apply in the real world
- Avoid conflicting and ambiguous commitments

Notwithstanding these challenges BTC has remained firm in its resolve to honor the provisions of the various project agreements, the ESIAs, the ESAP and BP's corporate policies, while the scrutiny of regular external audits and the visibility this provides has given additional emphasis to finding solutions to difficult issues.

Case Study 1: Establishing Waste Management Infrastructure in Georgia and Azerbaijan

The Inter-Governmental Agreement signed in November 1999 included a requirement to achieve EU standards for environmental protection. One of the areas in which this commitment posed the greatest challenge to the Project was waste management.

At the outset of the Project there was no existing waste infrastructure in either Azerbaijan or Georgia that met, or came close to meeting, these stringent requirements. Other challenges to achieving the goal included a lack of qualified waste management contractors and recycling facilities. Established practices for dealing with wastes were very different from those envisaged for BTC and it was apparent that a great deal of training would be required to change conventional behaviours. In Turkey facilities were available, albeit at some distance from the pipeline, for handling most waste streams.

As the generation of wastes was seen as an integral project activity BTC elected to assign direct responsibility for achieving the required standards for waste management to the main Construction Contractors, via strict requirements in the contract. Contractual requirements included the implementation of waste tracking systems under Duty of Care principles, establishment of Project dedicated waste facilities and a description of the legislation of relevance.

Construction contractors embraced these requirements in different ways. For example, in Azerbaijan the pipeline contractor sourced and purchased an incinerator, which was specified to meet EU standards, at a cost of almost $1 million. They recouped some of the capital cost by reaching an agreement with the facilities contractor that would also see waste generated at the facilities being incinerated in this unit.

Initially the incinerator suffered a significant amount of downtime and it proved difficult to consistently achieve the emissions standards specified for the equipment. However, after a significant input of time, resources and additional

funding by BTC Co, the reliability and performance of the unit improved dramatically.

During the periods of incinerator downtime it was necessary to find an alternative disposal route for organic putrescible wastes, which could not be stored due to the health risk posed to workers. The only available solution was to dispose of these small waste volumes to a Government approved Municipal landfill site that did not meet EU standards. As offset mitigation for this non-compliant disposal of wastes, and in order to ensure long term security in waste disposal to an acceptable standard, BTC has contributed to several initiatives to improve the waste management infrastructure of Azerbaijan.

Firstly, BTC contributed to the upgrade of the Municipal landfill used for contingency disposal of organic wastes. Upgrade works centered on improving basic management of the site and the ability to properly handle wastes. In addition BTC contributed to the design, construction and operation of a new, EU compliant non-hazardous waste landfill in Azerbaijan. It is anticipated that this facility will be operational in 2006 and will be available to third parties.

The contractor in Georgia also purchased an incinerator that was installed at one of the pump station sites. This unit proved to be even more problematic than the one installed in Azerbaijan. Despite repeated interventions by BTC it was not possible for this unit to achieve the emissions standards claimed by the manufacturers and required by the Project.

Alternative reuse or recycling solutions were found for the majority of waste streams, however the Project was left with the issue of where to dispose of putrescible organic wastes. In consultation with the Government of Georgia it was decided that the best environmental option would be to utilize an existing Municipal landfill. As a way of improving conditions and waste management practices at this existing facility BTC funded the development and implementation of a conditioning plan for the landfill, as per the EU Landfill Directive, to be delivered in 2005.

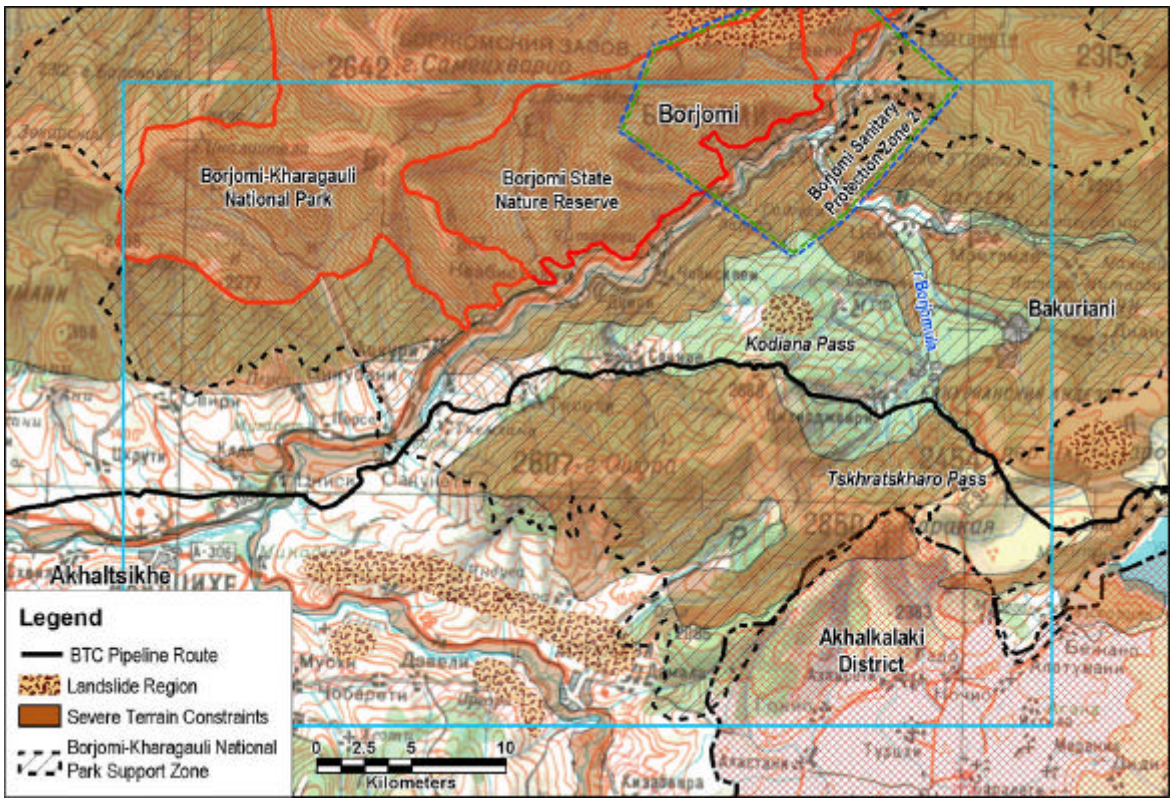
BP is also addressing longer term waste management issues in Georgia through a number of initiatives, for example, BP is funding the development of a EU-compliant non hazardous waste landfill for dealing with future wastes generated by BP. Alongside this BP has proposed to undertake a strategic waste management review for Georgia and to work with the Government of Georgia to improve the national capacity for waste management.

All hazardous wastes generated in both Azerbaijan and Georgia are currently stored in secure, project-dedicated areas, until such time as EU compliant disposal options become available. In Georgia several options are being pursued, including export of wastes in accordance with EC Council Regulation No. 259/93.

In Azerbaijan it is envisaged that hazardous wastes will ultimately be disposed of to a recently opened, World Bank financed, hazardous waste landfill.

Case Study 2: Route Selection Through the Borjomi Region of Georgia - the Kodiana Pipeline Section

Identification of a pipeline route through Georgia that minimizes environmental and social impacts was the subject of much debate and took several years. Early in the process one of the main options evaluated was to route the BTC pipeline through southern Georgia, which had the benefit of minimizing the length of the pipeline. However, this would have meant passing through Akhalkalaki District, with its population of predominantly Armenian descent and proximity to a Russian military base. The Georgian government was particularly concerned about the security risks imposed by the presence of the military base and instructed BTC not to route the pipeline through Akhalkalaki, views which were shared by international security advisors. This security concern forced the BTC pipeline route considerably further to the north, into an area of high mountain terrain - an area known as the Borjomi region.



Defining the route

The area in Borjomi, from Tskhratskharo Pass to Kodiana Pass (the 17 km Kodiana Section, refer to map), quickly developed into the most sensitive area along the entire BTC pipeline route due to a combination of real and perceived factors

associated with the natural characteristics and resources of the area. Four main issues dominated the route definition process:

Geohazards / terrain evaluation. A terrain evaluation and geohazard assessment was undertaken, consisting of a desk top study followed by a multi-disciplinary field trip looking at geohazard, environmental and constructability constraints. Landslides, debris flows, difficult relief, aggressive soils and river flash floods and scours were some of the specific geohazards identified and mapped, and subsequently ranked in order of severity.

Flora and fauna. This section of the pipeline route encroaches on the Support Zone of the Borjomi-Kharagauli National Park, which acts as a buffer to the more sensitive National Park. The vegetation of the Support Zone near the proposed pipeline is extremely diverse and is made up of alpine meadows, sub-alpine tall herbaceous communities, near-timberline vegetation and fragments of high-mountain forests. The mature forest blocks of the region provide habitat for a number of large mammals, including, wolf, brown bear, fox, hare, marten, wild cat, lynx, roe deer and wild boar. The region also forms part of the migratory link between the Greater and the Lesser Caucasus. The Support Zone also has many streams, rivers and small ponds, which are important for a number of endemic and Georgian Red Data Book-listed species of amphibians and reptiles. The areas also provides valuable habitat for a wide range of bird species.

Groundwater. From Tskhratskharo Pass to Kodiana Pass the route lies within the surface water catchment of the Borjomula river, where surface springs and thermal mineral springs discharge into the river. Water from the springs and the groundwater is widely sold as Borjomi bottled water, a resource regarded with a great deal of national pride in Georgia. Concern was raised over the potential effects on the groundwater of an oil spill during operation of the pipeline, however specialist consultants concluded that this was not possible for a number of reasons including the lack of a hydraulic connection between the rocks crossed by the pipeline and the mineral water bearing rocks, and the fact that the water bearing aquifer is pressurized. This issue has been considered very carefully in the project design (see below).

Tourism. The town of Borjomi which is some 15 km from the pipeline and village Bakuriani provide a centre for tourism activities in the region. Whilst this has decreased since Soviet times, tourists are still drawn to the area for such attractions as the downhill and cross-country skiing at the Bakuriani resort, the mineral water health spa at Borjomi and the other natural resources offered by the National Park. During the routing study the entire area was examined in a great deal of detail to find a route that did not traverse the Akhalkalaki District and which minimized the environmental and social impacts associated with these main issues.

Pipeline protection measures – design and management

The entire BTC pipeline system has been designed to meet or exceed the relevant international codes and standards, and to this end best practice leak prevention and detection methods have been incorporated into the design. In addition, further mitigation measures that go well beyond industry norms were put into place in the Borjomi section of the pipeline. Supplementary measures include the installation of additional block valves, burying the pipeline to a greater depth and numerous security measures to detect and deter casual or intentional access to the pipeline. Over and above this, BTC is discussing with the Government of Georgia additional secondary containment measures that could be constructed to help contain oil in the unlikely event of an oil spill.

Long term integrity of the pipeline will be ensured by inspection and planned maintenance activities. During routine pipeline operations, the pipeline will be regularly inspected by foot, vehicle or horseback patrols, to check on its physical condition and to ensure that no construction or excavation work in the area could inadvertently damage the pipeline. Additional resources will be utilized for surveillance in the Borjomi area. To facilitate a rapid and effective tactical response, an additional oil spill base has also been located in the Borjomi area.

Conclusion

BTC has recognized that a successful pipeline project is dependent on the implementation of all the commitments in the ESIAs. BTC has worked with the construction contractor to ensure that detailed method statements exist for all activities. Environmental awareness training has been provided dedicated to the Kodiana section of the pipeline.

The overriding aim of the project is to avoid damaging valuable environmental resources wherever possible and to reduce any unavoidable impacts to the minimum. In the Borjomi area in particular, potential impacts have been recognised and reduced through careful design to ensure that the pipeline presents as close to zero risk as possible.

Case Study 3: Helping to Create Conditions for Sustainable Development - Recreating Hope and A Future in Moliti Village, Georgia

The village of Moliti sits at 2,400m in the Borjomi region of Georgia, one of the highest points of the pipeline route. With a population of only 267 people and 65 families, it is a small village that was facing an uncertain future. One of these villagers is Armik Arutunyan, an ethnic Armenian, born in 1966 in Moliti. He had always said to himself, "If I get any amount of money in my hands I will take my family and go someplace else to live." His two brothers, one sister and their

families have done so. They left Moliti village and now live and work in Krasnodar, Russia. Armik was feeling abandoned.

A short while ago things started to get to the point of despair. "I was losing my staying power and also wanted to leave." He had nothing here, no water, the school was falling apart, and animals were dying. "I had made up my mind, it was time to go." He sold his tractor and a few cows and sheep to get money together to take his family and leave.

The many departures from Moliti are understandable as life in such an isolated village is not easy. "We never had any contacts with a NGO in the past we only heard stories of other villages getting help. Even the former government told us to move someplace else if we wanted to improve our situation."

Then the pipeline projects started and a CIP staff member, Zura Ioanidze, came and gave him hope to stay. "CIP helped not only on paper but with real things that were destined to help the whole village. It was the first time any promises were kept. Throughout my life here in Moliti I have seen promises made and then unfulfilled."

In addition to the water rehabilitation, projects to improve agriculture have provided direct benefits to people's lives in Moliti. CIP has imported and provided new seed potatoes to many farmers in Moliti. The new early variety of seed stock is well suited to the area. In the past the village's seed potatoes were old, genetically mixed and very vulnerable to pests. With the new seed, proper application of fertilizers and appropriate pest management, today's yields have increased 5-6 times from those in the past.

Armik insists on digging up one of his potato plants to display his crop. The enthusiasm is plain to see, in his and his children's manner. His youngest son, Gagik picks up one of the largest, robust potatoes of the lot and places a firm adoring kiss on its skin. "These are the nicest potatoes ever to come out of Moliti." Armik has good reason to be proud. The agriculture training that has been provided by CIP has not only allowed his potatoes to flourish but the whole village now has the feeling it will prosper.

CIP is also teaching the village how to work together to bring the benefits to everyone in the community. Armik and two other local farmers have established "demonstration farms" they have received 100kg of the new seed potatoes from CIP. After his harvest in a few weeks, he and another "demonstration farmer" will distribute 20 kg each to 10 neighbors who in turn will provide 10 kg to a vulnerable family or individual. They have learned a lot with CIP and have grown together as a community.

Armik also has seven cows, three calves and twenty sheep. In the years before vaccines became available, an average five or six of his sheep died each year. Three years ago an unknown virus made many animals in the village sick. Sadly twelve cows and more than one hundred sheep died that year. This is no longer a problem in Moliti now that CIP has provided training in proper livestock keeping. A regular visit by a veterinarian supplies vaccines to the livestock being raised, which has greatly improved the life expectancy of many animals. Pointing to the burnt spot where lightning struck his stone barn a month ago. "It's strange" Armik says with a shrug of his shoulders, "I lost one sheep to lightning this year and none to illness."

The many benefits provided through BTC and SCP seems to be reversing the migration that had become so familiar to Moliti. Previously the village was being drained of its younger generation, many of them leaving for greener pastures. Last year no young people returned to Moliti, but this year young people started to come back looking for houses. "15 years ago two of my best friends left with their families and went to Akhaliki region. This year they returned and are making a go of it."

Armik's outlook for the future and that of the whole village is bright. The people have hope that they can survive in Moliti. "Things are going forward. We now feel we are not so isolated and on our own. I am getting happier with my life here in Moliti" Armik says with an unshaven grin. "With the help of CIP we now all have the hope to carry us through the long Moliti winters."

Case Study 4: Public Disclosure In Turkey: Selected Summary Statistics

Environmental Impact Assessment

Full Draft EIA (90 copies) to:

- 20 State Authorities
- 10 Provincial governments
- 35 District Sub-governorship offices
- 8 National and 6 local university libraries along the pipeline route
- 3 main public libraries in Ankara and Istanbul

Full Draft (CD) EIA (288 copies)

Non Technical Summary (7000 copies) to:

- National and local NGOs and media
- 35 Public libraries in the provincial and district
- Centers along the pipeline route and Muhtars (village heads)

Community pamphlet (15,000 copies) to:

- Project-affected communities along the pipeline route, and those in the vicinity of the marine terminal (370 settlements)

BTC website: Full disclosure

Direct Engagement

- 10 Provincial governors
- 22 district sub-governors
- 208 Muhtars
- 1734 households representing 8,961 people interviewed through questionnaires
- Local NGOs and interest groups
- National NGOs, press and interest groups
- Fisherman, fishing industry representatives and other stakeholders in the vicinity of the marine terminal
- Settlements in the vicinity of the four pump stations
- and pressure reduction station

Resettlement Action Plan

- Ministeries
- Offices of Provincial Governors (10)
- Offices of District Governors (32)
- National universities (12)
- Regional universities (7)
- National libraries (3)
- Project website

The availability of the RAP was also publicized through press releases in the print media, and in public places by 23rd December. Press release was sent to all of the National newspapers (approximately 150) and televisions (approx 20) in Turkey and local newspapers along the pipeline route (23 local newspapers).

Guides To Land Acquisition & Compensation

- 87,000 copies of guides distributes to private/customary owners
- Public libraries in the district and provincial centers along the pipeline route
- University libraries in the provinces along the pipeline route
- Local and national NGOs Project website

Supplementary Consultation On Acquisition & Compensation

- First round of consultation and negotiation meetings with all affected settlements: 291 villages visited between November 2003 and January 2003
- Additional address/owner identification meetings in affected villages
- Second round of consultation and negotiation meetings in every affected settlement
- Consultation meetings with non-eligible users to develop RAP Fund
- Consultation with the users during user/crop identification study and crop assessment payments
- Consultation meetings with users of common lands to develop compensation methodology