The Baku-Tbilisi-Ceyhan Pipeline and BP:

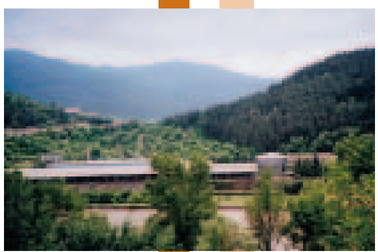
A Financial Analysis

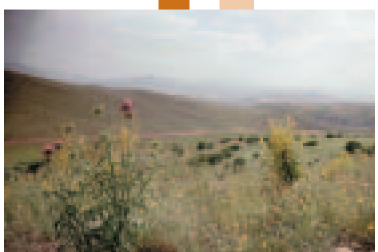
BUILDING TOMORROW'S CRISIS?

Mark Mansley

Claros Consulting

May 2003





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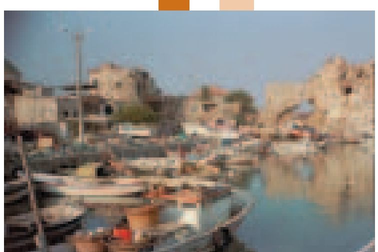

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Baku-Tbilisi-Ceyhan pipeline (BTC) project aims to take oil from Azerbaijan, on the Caspian Sea, to the Turkish Mediterranean port of Ceyhan. It is being developed by a consortium led by BP. This report conducts a financial analysis of the project, considers the risks involved and looks at the implications for BP shareholders, project financiers and international financial institutions.

Our assessment of the project is as follows:

- The project looks marginal on financial return, even assuming all goes to plan. Total return may be around 10.9%, less than BP's target rate of return on capital. Without Kazakh oil supplementing that from Azerbaijan, the return is likely to be significantly less than this – around 8.7%, even with high transit fees.
- BTC is a profoundly political project – its desirability is more from a particular set of political circumstances than from a clear economic rationale. Changes in those circumstances will seriously impact on its viability. Indeed, were the project more commercially viable, it would be less susceptible to political shifts.
- The pipeline is fundamentally a speculative project in that it does not have the secured oil revenues to make the project viable – the only oil that is committed to the pipeline and where there is financial approval for development is for Phase 1 of BP's Azeri-Chirag-Guneshli (ACG) oil project in offshore Azerbaijan.
- The BTC project is likely to require significant volumes of non-ACG oil to make the returns reasonable, particularly to equity investors. With Azerbaijani oil finds failing to live up to expectations, BP has had to look for Kazakhstan to identify sufficient volumes. While some Kazakh oil is probable, it is far from certain – BTC does not provide an ideal long-term solution for exporting Kazakh oil.
- The benefits to the host countries are small, and potentially even negative, highlighting the risks to the project, as local support, both political and practical, may not be reliable. Public international financial institutions, such as the World Bank, are essentially being invited into the project to relieve the consortium of risk, with little opportunity to pursue their mandates of supporting development.

Financing of the project has been delayed, and closure will probably not be achieved before September 2003 at the earliest, with indications now appearing that further delays are likely. Yet the consortium has already started construction with its own money – sponsors' equity making up 30% of the finance package, an amount that will expire in late 2003. BP and its partners have thus left themselves exposed to unknown availability and terms of financing. If there were a further delay, the consortium would either have to up the stakes, putting in yet more of its own money, or begin to demobilise contractors on the construction, thus incurring penalty payments and further costs and delay, or restructure the whole project. Meanwhile, the haste sends an unwelcome signal, particularly to the development banks whose support it hopes for.

Given the marginal nature of the project return, it is worrying that substantial risks exist with the project:

- The largest risks include political risks arising from succession changes in Azerbaijan and Georgia, and regional tensions. All three host countries, as well as Kazakhstan, are subject to substantial fiscal instability. There is also concern over legal and construction risks. Recent news reports indicate significant problems with the Turkish section, which could lead to reassigned contracts (with cost increases and delay) or even the pipeline being diverted to the Black Sea port of Supsa.

- Of particular concern is the potential interplay for one risk to exacerbate another.
- There is a significant possibility of delay, cost over-run and reduced volumes – each with the potential to push the project return well into single figures.
- The current Iraqi situation is unlikely to benefit BTC – if stability is restored and tension is reduced; the oil price is likely to fall. This would reduce the return on investments in Caspian oil, potentially to the point where they cease to viable. If instability continues, especially in the Kurdish regions, it could directly increase the risks to the project. Most importantly, politically, BTC has slid down the list of US priorities.
- BP has made great play of the social and environmental sensitivity of BTC, to the extent that it has chosen a more expensive route. However, BTC still traverses some high-risk terrain in political, social, environmental and physical terms.

CONCLUSIONS

- Returns on the project for BP are unlikely to be satisfactory, especially given that BP itself will probably need to provide significant loans to the project consortium to make the financing work. And the probability of high transit cost in early years to repay the banks will reduce its margins on the ACG development, potentially until after 2010.
- For investors in BP the project highlights BP's increasing focus on high-risk areas in its development strategy. Worryingly, after the "safe decades" in the North Sea and Alaska, BP is now going back to risky countries – which nearly proved its downfall in the 1950s.
- BP investors should also be wary of the reputation risks – particularly given the way BP is emphasising its green credentials. Arguments about the benefits of avoiding the Bosphorus should be treated with caution – a pipeline bypassing the Bosphorus (receiving oil from tankers crossing the Black Sea) would be a cheaper way of realising the benefits – and the Bosphorus will soon be forgotten if controversy arises with BTC.
- Banks providing project finance should be very conservative in any lending they provide and ensure that risks are reflected in the conditions they impose. For example, due diligence should take a broad view of the risks and consider the stresses in the contracts and their robustness in the broadest terms.
- Development Banks particularly need to carefully consider their involvement. The consortium appears keen to bring them into the project for political reasons, almost more than for the finance they bring. However, the development benefits in many respects may be modest, and development banks should consider how well they fit in with their fundamental mission. Furthermore, supporting a project, which has already started, and where there is decreasing scope to influence project development, sets a very dangerous precedent.

INTRODUCTION

The Baku-Tbilisi-Ceyhan (BTC) pipeline is a major infrastructure project passing through Azerbaijan, Georgia and Turkey to bring oil from Azerbaijan to the Mediterranean coast of Turkey. It is being developed by an international consortium, which is led (and dominated) by BP, who is intrinsically identified with the project. The project has attracted a certain amount of controversy and debate both over its financial viability and its social and environmental impacts. This report analyses the financial and risk implications of the pipeline for its sponsor BP and its shareholders, as well as for commercial and development banks involved in the project.

Sometimes referred to as the Main Export Pipeline (MEP), the BTC pipeline provides a route to market for Caspian oil with two key advantages:

- It avoids the Bosphorus, thus avoiding the environmental risks of shipping more oil through such a narrow and busy stretch of water, and the strategic risks of blockage or other disruption.
- It provides a route to market that is independent both of the Gulf states (notably Iran) and the Russian pipeline system.

As such, the BTC pipeline concept has long had considerable political support, notably from the USA, as it is seen to contribute towards greater security in oil supply.

However, the BTC pipeline has not been without its critics, and indeed, it has a number of disadvantages and challenges:

- For a long while the BTC pipeline was seen as an expensive option compared with the alternatives. On top of its length, the pipeline runs through difficult and mountainous terrain and through an area of high seismic activity, creating problems in both construction and operation. Even the most complex option – shipping the oil from Azerbaijan to the Georgian Black sea coast, then across the Black Sea by tanker, then via a "Bosphorus Bypass" pipeline to the Aegean Sea, and thence to market – is potentially cheaper than BTC, but with both the advantages above.[1] At least three such options are already being developed.[2]
- The total amount of oil that the pipeline needs in order to recover its investment costs is substantial, and for a long while it was unclear whether oil reserves were sufficient.
- Both Azerbaijan and Georgia are countries where there are significant political, security and corruption risks. The Control Risks Group[3] assesses both Georgia and Azerbaijan as high political risk, and Georgia, together with Azerbaijan-Armenia border areas, are seen as having high security risks for international investors.
- The pipeline runs through or near areas of significant conflicts – particularly Armenia and Azerbaijan are in a state of near hostility, with the edge of the disputed area of Nagorno Karabakh (currently occupied by Armenia) only 15km from the pipeline. In Georgia, there are several areas of conflict, notably South Ossetia and the Pankisi Gorge. In Turkey the pipeline deliberately avoids the majority Kurdish southeast but nonetheless runs through areas where Kurds make up about 30% of the population – and indeed, areas where the armed Kurdish PKK guerrilla group has been active in the past. It could be a target if the current cease-fire breaks down.

BASIC INFORMATION

	TOTAL	**Azerbaijan**	**Georgia**	**Turkey**
Length	1768km	443km	249km	1076km
Profile	Summit 2800m	Mostly Flat rising to 300m at border	Rising sharply to ~2500m before falling to 1000m then rising	Mostly around 2000m, but several 2500m+ summits before falling steeply to coast
Pipe Diameter	Mostly 42", 46 and 34	42"	46"	Mostly 42" final section 34"
Pump Stations	8 + 1 pressure	2	2	4 + 1 reduction
Operational Staff	850	250	250	350
Hydraulic Power Requirement	130 MW	40 MW	40 MW	50 MW

Capacity: 1 million barrels oil /day (50 million tonnes per year)

Cost: $2.95 billion contract / $3.6 all inclusive

Consortium:

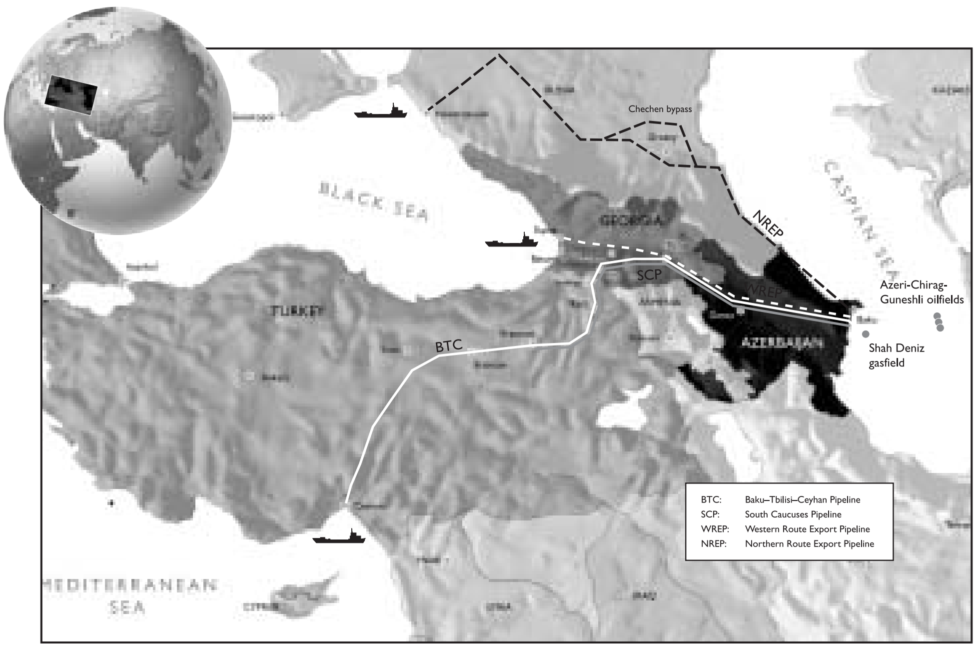
BP: 30.1%	TotalFinaElf: 5%,
SOCAR: 25%	Agip (ENI): 5%
Unocal: 8.9%	Itochu: 3.4%
Statoil: 8.71%	Conoco Phillips: 2.5%
Turkish Petroleum (TPAO): 6.53%	INPEX: 2.5%
	Delta Hess: 2.36%

South Caucasus Pipeline:

Terminus: Erzurum

Length: 1000 kilometres (621 miles)

Capacity: 20 Million m^3 of gas/day



- The pipeline has been accused of benefiting only political elites in the three countries, while doing little or nothing for people living on the route.[4]

For these reasons, the BTC pipeline struggled to gain support for many years. However, a number of changing factors – the recovery in the oil price, an increase in the reserve estimates of BP's Azeri-Chirag-Guneshli oil fields in offshore Azerbaijan, the discovery of major oil fields in Kazakhstan and a very competitive offer from the Turkish pipeline company to construct the Turkish portion of the pipeline at a very low fixed price — have served to renew interest in the pipeline.

Nonetheless these challenges and risks remain significant, and any evaluation of the project must take them into account in determining its viability, and whether the returns the project can generate are adequate.

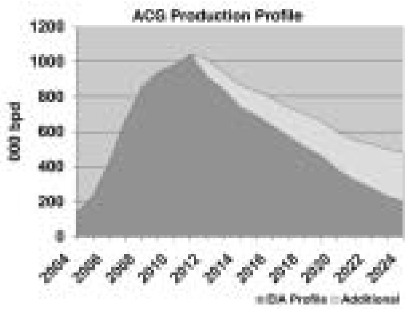
The BTC pipeline is potentially being complemented by a parallel gas pipeline, the South Caucasus Pipeline (SCP), to take Azerbaijani gas to Erzurum in central turkey. This pipeline, while shorter, would follow the same route. There are synergies between the BTC project and the SCP, however the two are essentially separate projects and we focus in this report on the BTC pipeline. BP recently lost operatorship of SCP to Statoil.

THE KEY FACTORS

The return on an oil pipeline project depends on the amount of oil to be pumped along the pipeline (and its profile over time), the amount charged, operating costs and transit fees, and construction costs. In order to evaluate the pipeline we start by looking at these factors, and make appropriate assumptions to feed into our model.

OIL QUANTITY

The oil for BTC can come from a number of sources. Of primary importance is the oil from the Azeri Chirag Guneshli oilfields. Other sources of oil include primarily other Azerbaijani oil fields, and oil from Kazakhstan on the other side of the Caspian. Against this must be set other routes to export the oil.



ACG oil supply

The only guaranteed volumes for the BTC pipeline are from the Azeri Chirag Guneshli (ACG) oilfields, which are being developed by the Azerbaijan International Oil Company (AIOC) consortium, led by BP. The Environmental Impact Assessment (EIA)[5] provided a production profile for the fields, displayed right. Since then, BP has raised its estimate for total reserves in the field by some 15% to 5.3bn (from 4.6bn). BP has said this will probably smooth out the production profile, after peak production, shown as the "additional" area in the graph.[6]

According to BP, the field is being developed in a number of stages:[7]

Early Oil:	Chirag field (now) 140 kbpd
Phase 1:	Central Azeri Field (early 2005): total 350 kbpd
Phase 2:	East & West Azeri (first oil 2Q 2006): total 420 kbpd
Phase 3:	Deepwater Guneshli (mid 2008)

Which comes first – the pipeline or the oilfield?

Developing a pipeline and developing an oilfield present a classic "chicken and egg" problem. Developing the oil field would best served if the oil already had a way to market and there are no risks on this front. In contrast, building the pipeline would be best served if there were plenty of oil to ready to pump as soon as the pipeline is available.

However, the scale of the investment required for the oil fields is much greater than for the pipeline, and so it is makes more sense to ensure the pipeline is developed before committing extra sums to the oil field (and in particular, ACG phase 3). One consequence of this is that the amount of oil in the early years is likely to be less than optimal. Another is that for the oil companies there is an "option value" in developing the pipeline first – it will enable them to decide the appropriate way to develop the oil field in later years. Banks and others, who are solely interested in the pipeline, and thus have no interest in any options the pipeline may give them elsewhere, need to consider whether their risks are adequately aligned with the oil field developers, particularly when it comes to promises of possible oil field development. Existing routes can more than handle this capacity. AIOC's Baku-Supsa pipeline will continue to export 160 kbpd. TransNeft's Baku-Novorossiysk line has capacity of about 100 kbpd. At present, half the capacity is contracted for, but the rest may not be used. (Note that those members of the ACG consortium but not members of the ACG consortium will have some 130kbpd of oil to transport at peak production.)

Up to phase 2 has been "sanctioned" by BP. By the financial close of BTC, full financing is only likely to be in place only for Phase 1 (finance for this stage is being co-ordinated with the BTC pipeline) – with the other phases expected to follow later. Nonetheless, this means there is a degree of contingency over the later stages of the oil field development – the principal risks are either unrest in Azerbaijan or a lower oil price.

There is some prospect for additional oil to come from ACG – considerable "probable" reserves have been identified and oil fields can expand as additional wells are drilled (although the record in Azerbaijan is not good). However, much of this may help boost the longer-term prospects for the field, and to help maintain production post 2015. It is oil in the first few years of the project that would be particularly useful in terms of making BTC viable, and there seems to be less scope for this. Indeed, delays may be likely, particularly if political or technical problems arise.

In terms of the supply to BTC, it is also worth noting that ExxonMobil (8%) and Pennzoil (5.6%) are partners in the AIOC but are not members of BTC Co, and so may decide to send their oil by more competitive routes if alternatives exist. In terms of BTC, ACG oil should be sufficient to use most of the pipeline's capacity between 2009 and 2014. Thus other sources of oil are of particular interest if they can act as "early oil" (before this period) or "late oil" (after 2015).

Other Azerbaijani oil and other pipelines

Azerbaijan has been struck by a series of disappointments in its oil resources. Previously thought to be a major new province, numerous fields have been found on closer examination to be not viable. As a result, some major players – including Chevron and Shell – have left the country altogether, preferring to focus instead on the more promising Kazakhstan in the north-eastern Caspian.

Other Azerbaijani oilfields (aside from ACG) are currently producing 190 kbpd, of which 140 kbpd are consumed internally, giving a surplus for export of 50 kbpd.[8] This might at most be increased to 100 kbpd (see Appendix 1 for a discussion of other Azerbaijani oil prospects), or less if Azerbaijan's consumption increases (which there are calls for, with major refinery over-capacity).

Thus volumes of Azerbaijani oil for BTC will be between 60 kbpd and 260 kbpd less than ACG's profile, with the larger amounts arising if the growth of Azerbaijani fields is less than expected, or Azerbaijani consumption increases, or Baku-Novorossiysk is used to full capacity. In our model we assume net flows are 120kbpd less than ACG production.

Kazakhstan

A major potential source of oil for BTC is Kazakhstan. Three large fields, Tengiz, Karachaganak and Kashagan, mean the total oil finds in Kazakhstan are substantially larger than Azerbaijan. We discuss Kazakhstan oil in more detail in Appendix 1. Kazakhstan oil is even more remote than Azerbaijan oil. A number of routes or potential routes exist for Kazakhstan oil, of which BTC is one. Potentially, by 2011, Kazakhstan will have 700,000 bpd more production than export capacity.[9] However, the big problem for the BTC pipeline is this coincides with ACG's peak production, so **there is no significant capacity available in BTC just when Kazakhstan needs it**. As a result, Kazakhstan is likely to need another export route, which will form its development priority. From Kazakhstan's perspective, BTC may offer some flexibility in timing oil field development, and some negotiating potential (e.g. when dealing with the Russians). Thus the Kazakh government has indicated some willingness to ship some oil down BTC, but firm contracts appear some way off.

Overall the prospect for extra early oil for BTC appears moderate – if the Kazakh oilfields develop to schedule (or ACG encounters delays) there may be some potential but it looks far from certain. Tanker capacity across the Caspian is also an issue if significant volumes are to flow. We assume a modest amount of oil – 50kbpd in 2007 and 2008 – is available. More is possible, but does not seem to be certain.

The prospect for late oil from Kazakhstan appears more reasonable, although it will depend on several factors including what other export routes are developed and the rate of oil field development. If all proceeds to schedule, Kazakhstan will in any case need to build a new export route by 2011; if it builds one big enough for all of Kazakhstan's excess capacity, there would be no contribution to BTC. However, in our model we assume that this does not happen, and that Kazakhstan oil starts flowing through BTC in 2012 and steadily increases to a level of some 400kbpd by 2016 at which it remains until 2035.

COST AND TIMESCALES

The cost of the BTC pipeline has been estimated at $2.95bn by BP. However, figures from the IFC cite a total project cost of $3.6bn[10]. The discrepancy is explained by the IFC including factors such as interest accrued during the construction period, services provided by the sponsors, and financing charges. It is the IFC figures that are the most appropriate for the financial analysis and are what we use in our model.

While we can assume considerable effort in cost control by BP, there is clearly some upward risk in this figure – and BP's record in the region is not good, with three out of four major BP-led projects having gone or going over-budget. The Baku-Supsa pipeline, built by BP-led AIOC in 1999, went over budget by 87%, costing $590 million, compared to an initial estimate of $315m.[11] The full field development of ACG has gone over budget by $1.5 billion, from $13.5 billion to $15 billion.[12] And the Shah Deniz gas development was delayed in September 2002 when cost estimates escalated – albeit pre-sanction and pre-construction – from $2.7 billion to $3.2 bn.[13] Such cost increases in constructing pipelines are often associated with corruption and difficult regimes, precisely the scenario in Georgia and Azerbaijan. A variety of scenarios could lead to a cost increase – delays in one area (e.g. financing) meaning compensation payments are required elsewhere, contractors could go bust, or be forced out for political or technical reasons.

In Turkey, the risks are lower, because the consortium has signed a fixed price agreement with BOTAS, the Turkish pipeline company. However, it is not beyond the bounds of possibility that this contract could be challenged or revised, especially since commentators have suggested that the contract is underpriced by some $600m,[14] creating significant "contract stress". Indeed, compared with the other sections, the Turkish section does look cheap – accounting for 47% of the contract costs but 61% of the pipeline length (and none of it with the advantage of using an existing route). On a pro-rata basis the

Turkish section should cost around $2.3bn. BOTAS has said publicly[15] that BP expects it to be late in delivering and to that end BP has negotiated a penalty clause on delays. Whether it would be successful in enforcing it is far from guaranteed. We look again at the BOTAS commitment under risk factors, but for now assume the contract holds.

The timelines on BTC are tight, with the project completion planned for early 2005. One area of concerns is that delays in reaching financial close could start to risk other project timelines. The winter weather is also a significant factor – temperatures can fall to –30°C in the Turkish and Georgian highlands, and construction work in these mountains is impossible for at least five months of the year – as a result, a delay of a few months could easily translate into a year, if the weather window is missed. And of course failure to complete any section of the pipeline on time will result in delay. We assume the pipeline is completed in the first half of 2005, but make a cautious forecast for the amount of oil that is pumped that year.

TARIFF

The revenue of the pipeline clearly depends on the tariff charges per barrel. Here a number of figures have been quoted ranging for $2.58 to $3.30 / barrel, and indeed BP has confirmed that it will vary within this range.[16] The price may vary depending on the timeframe and whether or not the oil belongs to a member of the consortium. Some reports indicate that the tariff may be adjusted to protect returns to investors and meet revenue targets, and indeed this may be both possible and desirable to a degree.

There may be some competitive pressures on the tariff (e.g. compared with the cost of shipping via Baku-Novorossiysk), although these will be most relevant to oil from Kazakhstan (see appendix) where a greater range of alternative routes exist. Figures at the upper end of the price range risk a total production cost at the tanker port of in excess of $7/barrel, which would make Azerbaijani oil expensive and potentially deter future investment in the Azerbaijani oilfields. Such factors could become particularly important if the oil price falls. These will serve to put an upper limit on the transport cost. For calculation purposes we have used an average figure of $2.80 per barrel.

OPERATING COSTS & TRANSIT FEES

Little information is available on operating costs, except that BP has stated it expects operating costs to be around $30m a year in both Georgia and Azerbaijan, and $70-90 m a year in Turkey.[17] These figures seem broadly in line with the numbers employed by the pipeline and the energy requirements for pumping. There is a risk that the costs will rise, for example if employment costs increase as the countries develop. There are also likely to be some central costs not included in the above figure, including insurance and management charges, which we estimate at some $20 million a year.

Figures for the per barrel transit fees payable to the host governments have been published and are shown in the table, right. They rise from 32 cents a barrel, to 44 cents during the key production period to a peak of 54 cents.

BTC transit tariffs, $ a barrel[18]

	2005-2009	2010-2020	from 2021
Azerbaijan	0	0	0
Georgia[19]	0.12	0.14	0.17
Turkey	0.20	0.30	0.37
Total	**0.32**	**0.44**	**0.54**

RETURN IMPLICATIONS

Using the assumptions outlines above, we can calculate an approximate internal return for the pipeline project. Our estimate is **10.94%**. While not disastrously low, this is below the return BP typically expects in terms of capital employed (of around 12%), and in particular seems inadequate for the nature of the project, the substantial risks in the project, and in particular the political risk profiles of the countries involved. Furthermore, this figure includes a substantial amount of oil from Kazakhstan, which is not guaranteed. Without this oil, our estimated returns collapse to 5.42% – clearly insufficient. In this case it would become necessary to increase the per barrel shipment cost to say $3.2/barrel. Even this would increase the return to only 8.76%. We must therefore deduce that **the BTC pipeline looks to be a highly marginal investment.**

This analysis is confirmed by the comments of other commentators and researchers who have looked at the pipeline. For example, Richard Osborn of WoodMackenzie, said in July 2001: "At the moment the economics work, but they are marginal. More volumes would bring economies of scale and that means a lower tariff."[20] In June 2001, Gavin Graham, regional VP for Shell considered that BTC needed 100,000-300,000 bpd more at an early stage to be viable.[21] *The Economist Intelligence Unit* boldly stated in February 2002: "Construction of the BTC pipeline before 2008 therefore appears untenable, owing to lack of sufficient throughput, unless alternative sources of oil are made available. This makes it likely that construction of the BTC pipeline will be delayed beyond 2005."[22] This year, the *Nefte Compass*, reported "The doubters insist there is not enough oil to fill the line, with future production at the BP-operated Azeri, Chirag, and Guneshli (ACG) fields insufficient to meet BTC's capacity. This is certainly true for the initial stages of BTC, when up to 500,000 b/d of additional oil will be needed to get the line running at full throttle."[23]

BP has indicated that it expects a potentially higher return – of some 12.5% over 20 years – just in line with its return targets. To achieve this would require some positive assumptions such as more early oil or high transit tariffs. It may just be achievable, but would appear to assume that most key factors have positive outcomes. In contrast, in our analysis we have tried to take the most likely scenarios. And, of course, worse outcomes are also possible.

SENSITIVITY ANALYSIS

The returns we have generated have been developed on one set of assumptions. However, considerable variations are possible. Below we identify a number of factors that could impact returns, and identify their impact based on certain assumptions. We also give a number of reasons why the factor could arise. Note that actual magnitude of the factors could vary significantly, with a corresponding impact on returns. Furthermore, the last three factors could also operate in the other direction – for example, more early or late oil could be found (notably if Kazakh oil development proceeds better than we have anticipated.), which would improve returns.

The sensitivity analysis is not particularly encouraging for the project. The potential for increasing the returns looks modest – most useful would be some early oil, while there is considerable potential for return reduction.

Sensitivy analysis – BTC return

Factor	Return Impact	Assumption	Possible Reason
Delay	-0.63% (10.31%)	6 month delay *Delay of at least this if weather window missed*	● Bad weather ● Contractor problems ● Legal Challenges ● Technical issues ● Civil or military unrest
Cost overruns	-1.31% (9.63%)	Cost increase of $400m. *Could range up to $1bn or more*	● Resulting from delays ● Contractor problems ● Technical Issues
Interruption	-1.31% (9.63%)	6 months without oil (in 2009), operating costs continue *Could range from 1-12 months*	● Major earthquake ● Legal injunction ● War with Armenia ● Political violence
Reduced Early oil	-1.70% (9.24%)	100kbpd lower oil in 2007 and 2008 *Could range from extra early oil if developments go well to substantially less oil if delays.*	● Delays in developing ACG oilfields due to political, technical or economic problems ● No early oil from Kazakh (half this impact)
Reduced Late oil	-0.89% (10.05%)	Late oil profile lower by 100kbpd (from 2014) *Late Oil could be from 400kpd less (no Kazakh oil) to 5–600kpd more if pipeline filled.*	● Kazakh oil sent by alternate routes ● Kazakh oil not developed ● Low oil price delays ACG investment ● Technical factors in oil fields
Operating costs	+1.39% (12.33%)	Increase in transit costs of some 20cents *Could range from an increase of 50 cents to a decrease of 20 cents*	● Driven by poor returns! ● Limited by oil price

RISK FACTORS

In considering the return on the projects it is worth identifying some of the risks the project could face. A number of specific risk factors can be identified, all of which could have a material impact on the project.

The BTC pipeline project is widely recognised as more of a political than a commercial project – and without political backing it would never have been pursued, with far cheaper routes through Georgia, Russia or Iran being developed instead. As such it was conceived and developed under a set of political circumstances that pre-date in particular the conflict in Iraq, pre-date the Bush Administration's more assertive foreign policy, and pre-date a souring of relations between the USA and Turkey. As the political context has change, so too has the commercial viability of this largely political project. Furthermore, as an international project involving the collaboration of at least five states (the three host states, plus Kazakhstan and the USA), it is inevitably politically complex, and susceptible to policy changes in any of those five states. It is against this background that the extent of the following risks must be considered.

1 AZERBAIJAN SUCCESSION

It is likely there will be a change in leadership of Azerbaijan in the near future. President Aliyev is ageing fast, rumoured to be seriously ill (he collapsed twice at a recent televised event[24]) and facing election later this year. While he is thinking about his succession and is keen to make his son his prime minister, with a view to taking over from him, it is far from certain that such changes will go smoothly and as planned. There has been widespread suppression of the media, and significant resentment of Aliyev among the population, particularly the poor. The promised oil wealth has so far only benefited the rich elite, exacerbating tensions, as seen in the civil disturbance in June 2002.[25] Azerbaijan is also ranked by Transparency International as the 8th most corrupt country in the world.[26] The attitude of Russia in any succession may be pivotal. From the project perspective, there are number of specific risks that arise:

1 The project agreements could be challenged or changed by a new regime.

2 The business climate could deteriorate significantly, with corruption and logistical difficulties increasing significantly.

3 BP is specifically identified with the Aliyev regime – BP is seen as having assisted Aliyev's rise to power. Thus a regime change could directly result in BP oil concessions and other involvements being challenged.

4 A specific risk concerns the Azerbaijan construction contractor. They are seen by the Azerbaijani nationalists as being pro-Armenian, and could be replaced causing significant delays.

5 There is also concern, from the IMF among others about the use of the Azerbaijan Oil fund to support BTC, and calls for the fund to be placed under parliamentary control, which could impact on equity finance for the project.

2 CONFLICT IN ARMENIA / AZERBAIJAN

Political relations between Armenia and Azerbaijan remain tense, with the Nagorno Karabakh area of Azerbaijan under de facto Armenian control. Tensions are likely to remain high through 2003 with elections in both countries. There is a real risk that these tensions could erupt again into war at some stage. Clearly the BTC pipeline, which will run just 15 km from Armenian-controlled areas of occupied Nagorno Karabakh, is likely to form a direct target in such conflict. Even a moderate increase in tensions could lead to a deteriorating business climate (and possible contractor changes – see above). More major conflict could lead to significant and potentially prolonged problems with the pipeline operation and even oil production, with serious impacts on the returns.

3 GEORGIAN SUCCESSION/TENSIONS

Similarly the president of Georgia, Shevardnadze, is aging, and facing elections in November 2003. He is closely identified with the pipeline and has made it his mission to see it through. A regime change is almost certain, with Shevardnadze's popularity at an all-time low. There is widespread corruption and the security situation is very poor. BP is seen as having helped thwart the democratic process over the pipeline routing through the sensitive Borjomi region.[27] A less supportive regime is quite possible, which could either require its own inducements to support BTC or challenge the terms of the legal agreements for the pipeline itself, holding out for a better deal. Although the HGA attempts to prevent this, it could still be challenged. This could increase costs and possibly generate delays. It is worth noting that while the construction work will bring some income into the country, the transit fees are not as substantive as some have made out – they are likely to be only to average $23m over the first five years of the project, and with the project providing only 250 jobs the scope for disillusionment to develop is considerable.

4 TAXATION CHANGES

Given that many people in both Azerbaijan and Georgia feel they got a poor deal from the pipeline tariffs, the change of government in both countries may bring pressure to revise the fiscal structure upwards. Kazakhstan – on which BTC seems to depend for volumes – is highly fiscally unstable, as the government has tried several times to change production contracts, to the extent that both existing fields (Tengiz and Karachaganak) have been suspended during disputes, and the one under development (Kashagan, which would feed BTC) has threatened it (see Appendix 1). Even Turkey, the most stable of the three countries gives cause for concern, in that it has reneged on "take or pay" gas contracts with both Russia (Blue Stream, completed 2003) and Iran (Tebriz-Erzurum, completed 2001) – the fear is that it may use the same argument of economic hardship to alter the terms of the BTC Turnkey Agreement.

5 KAZAKH OIL

As outlined in the appendix, there is a real risk that Kazakh oil may not materialise in sufficient quantities, both as early oil and as late oil. Changing politics, with regard to Russia, Iran and Caspian oil generally make it difficult to predict how Kazakh oil will be developed. And internal political pressures may impact on the development of the oil resources there. Nothing is guaranteed at present. In March 2003, two Chinese oil companies, CNOOC and Sinopec, joined the consortium developing Kazakhstan's largest field, Kashagan – increasing the likelihood that some of its oil will be exported to China. Yet Kazakh oil appears critical to the BTC project achieving acceptable returns.

6 CONFLICT IN THE KURDISH AREAS

Significant risks to the pipeline could arise from tensions in this region of the world, arising from Kurdish claims for independence. The ceasefire between the Kurds and the Turkish state is very fragile, and a recent statement by KADEK (successor to the PKK) effectively threatened an end to its unilateral ceasefire.[28] Developments in Kurdish areas of Iraq post Saddam Hussein could be a potential trigger e.g. if Turkey attempts to limit Kurdish autonomy there. If conflict in some form results, the BTC pipeline is likely to be a target – especially as the PKK has frequently targeted oil infrastructure in the past. Once the pipeline is completed, the most likely consequence is for damage and disruption to the pipeline, which could disrupt operations and increase costs. However, if the regional situation deteriorates in the near term as a result of aftermath of the Iraq war, it could very easily create circumstances where the project becomes difficult to complete as planned.

7 LOW OIL PRICE

A potential risk is that the oil price could collapse, possibly as a result of current events in the Gulf. Caspian oil is relatively high cost source of oil once transportation costs are included and a lower price would make it far less profitable. A low oil price would make investment in the region less attractive and projects such as ACG phase 3 or some Kazakh oil could be put on hold until the oil price recovers. This would then reduce volumes for the BTC pipeline and undermine the economics.

8 PRE-COMPLETION LEGAL RISKS TO HGA

The project could face significant legal challenges before completion. This could take the form of a challenge to HGAs or the role of International Financial Institutions. As an initial indicator of the risks, the US export credit and investment agencies, EXIM Bank and OPIC, are currently facing a legal injunction against supporting greenhouse gas emitting projects without assessing their contribution to global warming and their impact on the U.S. environment as required under key provisions of the National Environmental Policy Act.

9 POST COMPLETION LEGAL RISKS

Legal risks do not end once the pipeline is completed. There is a real risk that if operational incidents affect people along the route they could take action to seek redress. While the HGAs seek to limit the risks of this to the consortium, there is a significant risk they could be challenged in the courts – in Britain or in host countries. One example might be under human rights legislation. If the courts find in favour of the plaintiffs, then the protection that the HGA are meant to provide would be undermined and more fundamentally there is a risk they could be ruled invalid all together. Overall, anyone assessing the risks of the project should not assume that the protection provided by the HGAs is absolute.

These risks are significantly increased by the interest of a number of western and local NGOs in the region and the pipeline. They have the capacity to provide access to legal advice and expertise. Furthermore, many of these organisations have long-standing links to the region and are unlikely to leave after project completion or lose interest in the project.

10 BOTAS, CORRUPTION AND THE TURKISH ECONOMY

The fact that the Turkish pipeline company BOTAS has agreed to construct the Turkish part of the pipeline at a fixed cost, and at a level substantially below that which many thought it would cost has been a significant factor in making the pipeline viable or nearly so. However, with the Turkish economy in difficulties, and with the IMF becoming involved, there is a risk that these contracts could come under threat of review or revaluation. BOTAS could be privatised or pressure placed to review the contract to a more economic level. It may be of relevance to note that the Turkish government (through BOTAS) reneged on two international gas contracts, with Russia (Blue Stream) and Iran. In both cases, Turkey / BOTAS had signed take or pay contracts; once the pipelines were built, Turkey refused to honour them, claiming that it could not afford the agreed price – Russia and Iran both had no choice but to renegotiate a lower price.[29]

In addition, BOTAS is becoming involved in a number of corruption cases. On 22/1/03, the Ankara public prosecutors' office filed suit against a former director and five other officials of BOTAS, alleging fixing in construction tenders for the Blue Stream Russia-Turkey gas pipeline under the Black Sea. A separate Turkish investigation in alleged corruption in state energy agencies, dubbed White Energy, is also progressing in Turkey, casting doubts over many of the country's energy practices in recent years. Reports in the Turkish press that the Energy Ministry was also investigating BOTAS in regard to the BTC pipeline contracts prompted BOTAS general director Gokhan Bildaci to issue a public denial on January 23 that any investigation was underway.[30] Furthermore, political support could vanish for the project if it becomes clear that the BOTAS underbid, and the limited benefits become apparent – transit fees to Turkey will amount to only around $300m in the first five years of the project.

Recent reports suggest that the BTC consortium itself may be becoming worried over BOTAS's role and seeking to act pre-emptively. An article in the Turkish press[31] suggests that the consortium is very concerned about the progress BOTAS has made, and held a high level meeting with the government where the consortium threatened to take the project away from BOTAS (which would increase the project costs, although the consortium would endeavour to recover them from the Turkish Government) or even divert the pipeline to Supsa (on the Georgian Black Sea cost), avoiding the Turkish section.

11 SEISMIC RISK

The pipeline runs through an area of substantial seismic activity. Major earthquakes in the region include the two earthquakes in Erzincan right on the pipeline route, one in 1992 which killed 653 people and measured 6.3 on the Richter Scale, and the even more devastating 1939 event – the eighth biggest earthquake in the twentieth century, which killed 33,000 and measured 7.9. There have been at least 17 major earthquakes directly on the pipeline route since 1924, measuring from 5.5 to 7.9. The highly destructive 1988 Armenian earthquake was also not far from the pipeline route. While moderate damage is likely to be readily repairable reasonably quickly (and insurable) the more significant risk is from a major earthquake that not only damages the pipeline but also disrupts infrastructure and economic activity in the region for some time. In this region, the possibility of such an event is not insignificant. It could impede operation for months and involve substantial lost revenue and increased costs (including possible liabilities from spilt oil).

12 REPUTATION RISKS

Even where events do not end up in court there are substantial reputation risks to both BP and the backers of the project, if the pipeline incidents affect human rights or the environment. Again the presence of NGO networks and links to the West means that any incident will be in the public eye and reported to the western media. BP experiences in both Alaska and Colombia with controversial pipelines could be repeated and even magnified in BTC.

BP has been making much of the fact that the pipeline has environmental benefits as it bypasses the Bosphorus, thus avoiding increasing tanker traffic there (but not reducing it). However, if environmental or social incidents do occur, this will be forgotten and the focus will be on BP itself. Also the tanker traffic has only been diverted to Iskenderun Bay, an ecologically sensitive area over which WWF is deeply concerned.

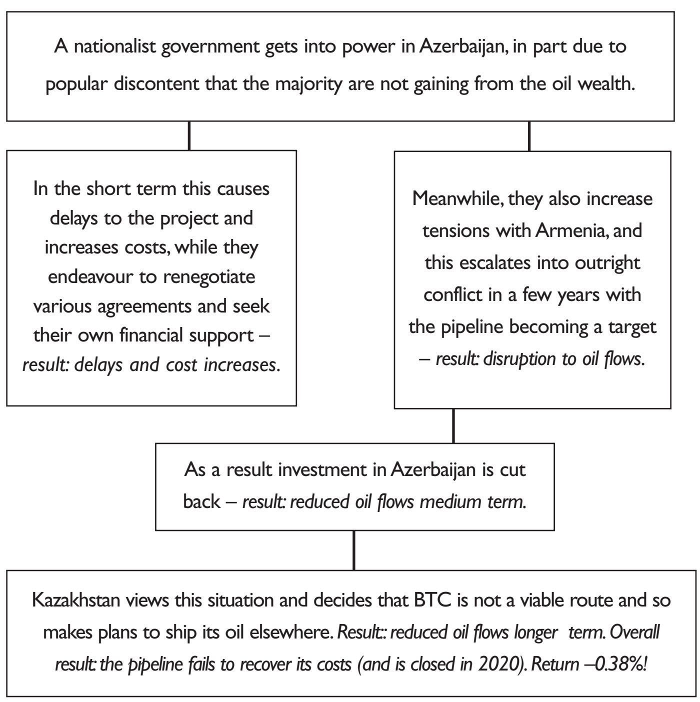
Reputation risks are also focused by the possible threat to Borjomi water, which has become a *cause celebre* in Georgia and increasingly elsewhere. There has been growing media concern[32] over the way BP appears to have pressed ahead despite concerns over the threat to a major Georgian resource, and national brand.

Additionally, there are major reputation risks regarding the human rights situation along the pipeline. Security is in the hands of government forces that have been widely criticised (for instance, rulings have been made against the Turkish gendarmerie by the European Court of Human Rights). BP and other project partners are likely to be held responsible for their actions by the court of public opinion. Highlighting this concern is the recent pronouncement by Ilham Aliyev – First Vice-President of the State Oil Company and son of President of Azerbaijan – threatening opponents of the project on national TV. This vividly makes clear the nature of the regime in Azerbaijan and the risks to reputation to any companies doing business there.

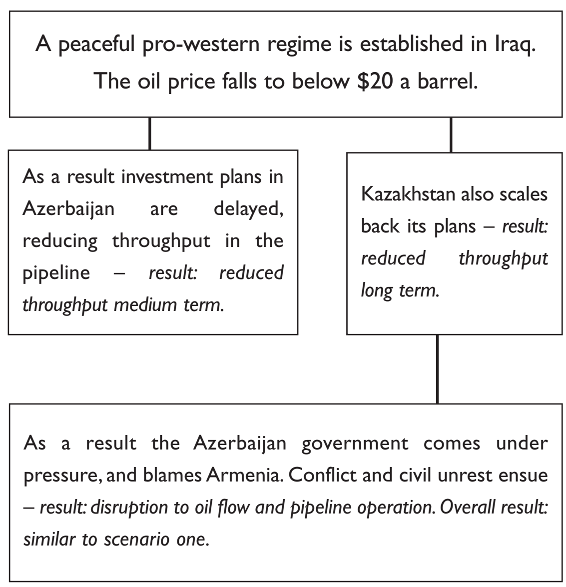
SCENARIO ANALYSIS

Of particular significance to anyone looking at the project must be that these risks in many cases are not independent and manageable separately, but instead **they appear linked and have the potential to combine in dangerous ways**. The result of these sorts of combinations is that not merely that returns could be slightly lower than anticipated but for the whole project viability to be at risk. While predicting such scenarios is always uncertain, what is worrying for BTC is the way a number of such scenarios could unfold.

Scenario one – Azerbaijan crisis



Scenario two – Peace



FINANCING BTC

Finance is the key to the development of BTC. While BP and the other major oil companies could finance the project out of their own resources if required, there are a number of reasons the project is seeking to involve banks and debt finance. Firstly, the Azerbaijan oil corporation, SOCAR, may have trouble finding the funds (it is already controversially having to use the Azerbaijan Oil Fund to finance its equity stake). Secondly, involving bank finance potentially could increase the returns to equity investors (although this may at the cost of increasing risks and be on a somewhat speculative basis, depending on the factors such as the amount of Kazakh oil transported). Thirdly, and perhaps most importantly, involving banks and particularly international financial institutions (IFIs) – the multilateral development banks and export credit agencies - would draw global financial organisations into the project and thus significantly reduce some of the risks, particularly of unfavourable political actions (e.g. nationalisation), as the countries involved would not want to lose access to such institutions by threatening a project they were supporting.

Confirmation of this comes from BP's CEO Lord Browne's statement that the BTC pipeline would not be possible without "free public money". What he appears to mean is that with extensive risks of fiscal instability, conflict and even expropriation, the margins simply do not justify the investment – unless of course those risks are partly carried (or reduced) by someone else.

Thus, the BTC Co consortium intends to finance the project on a 70-30 debt-equity basis. The 30% equity will come from the consortium members, in proportion to their shares in the project. The 70% debt will come from a range of sources, approximately as follows:

BTC Debt Allocation

International Finance Corporation (IFC)	$300 million
European Bank of Reconstruction & Development (EBRD)	$300 million
Export Credit Agencies (ECAs)	$600-800 million
Commercial Banks	$400-500 million
Senior Sponsor Loans	up to USD$600 million[33]
Total Project Debt	**$ 2.3–2.5 billion**

The leaders in the debt package are essentially multilateral development banks, the IFC (part of the World Bank group) and the EBRD. Each is expected to syndicate half ($150m) of their contribution to the commercial markets. Their role is particularly important in that commercial banks are unlikely to enter into any commitment until the international financial institutions (especially IFC) have signed up.

Interest has also been expressed by MIGA (also part of the World Bank Group) and by the export credit agencies – of the USA (EXIM and OPIC), Japan (JBIC), the United Kingdom (ECGD), France (COFACE), Germany (Hermes) and Italy (SACE), particularly if some of these countries will be providing substantial exports for the project. They too would prefer the IFC to take the lead in supporting this project.

THE DILEMMA OF "PUBLIC MONEY"

However, use of MDBs such as the IFC itself alters the nature of project financing. The IFC and other MDBs and ECAs, as publicly owned institutions, are accountable to the public in a way that commercial banks are not. As a result, their decisions are guided by principles and standards to ensure that lending is in the public interest, especially that they support economic and social development in the target countries. And with board members accountable to governments there is also a political element in deciding what to support. This exposes BTC to a range of challenges in getting MDB approval – at political, strategic and operational levels.

BTC has always been partly about politics – other routes such as through Iran or Russia might have been cheaper, but were rejected for political reasons, essentially the antagonism of the US towards Iran and its desire to establish a route to market for Caspian Oil independent of Russia. BTC has also attracted some political support as it is seen as good way of interlinking the various economies with each other and with the West. However, the situation has become more complex, notably with the fact that the US is trying to get World Bank support for reconstruction of Iraq, which means that BTC is no longer as much of priority for the US and indeed could become a victim of political horse-trading at the World Bank. Arguably, the Clinton era focus on alternative sources of oil to the Middle East has given way to a Bush era focus on securing the Middle East itself.

There is also considerable concern that the project could help entrench the existing undemocratic elites in power, as well as unease over the way that Host Governments seek to constrain the powers of future governments in areas such as taxation and environmental regulation (see Appendix 2). These latter points will be of particular concern to the EBRD, whose mandate is to facilitate the transition of former Soviet Bloc countries to democracy.

At a strategic level, the World Bank Group is itself currently reviewing its financing of oil and gas projects, with serious questions about whether they generally have an overall positive impact on development. There is growing debate about the "Paradox of Plenty" or the "Curse of Oil" as it sometimes referred to, and the World Bank has set up an Extractive Industries Review to examine the issue. Most recently in April 2003, a report by the Bank's internal review body, the Operations Evaluation Department, found that exploiting natural resources is "more often associated with poor economic performance", and that World Bank encouragement of such industries is likely to "lead to bad development outcomes when governance is poor" for "many if not most of the Bank's clients". The report recommends, "The Bank should not support increased investment in countries whose governments lack the capacity to benefit from or manage such investment".[34] On development grounds there are serious questions about the just how good for development the pipeline will be – see box.

At an operational level, the bank has developed a range of guidelines and procedures for the development and conduct of projects to address many of the concerns that may arise. Major divergences between the implementation of BTC and these guidelines have been revealed by NGOs scrutinising the project (see Appendix 2), in key areas such as the Environmental Impact Assessment, consultation and compensation. Until the IFC and others are satisfied in these key areas they are likely to have substantial difficulty supporting the project.

The IFC and World Bank will be especially sensitive following their involvement in the controversial Chad-Cameroon oil pipeline, whose construction was completed in 2002. The World Bank was heavily criticised by NGOs, and even internal reviews[39], for supporting the project while it undermined development and democracy within the

BTC and Development

	Positives	Negatives
Turkey	● Peak transit fees of $110m ● $1.4bn of investment ● 350 long term jobs ● Development of oil shipment centre at Ceyhan	● Probable loss on BOTAS contract of at least $600m, PLUS any further cost over-runs[35] ● Additional compensation payable if delayed ● Cost of security, and legal liabilities ● Increases tension in NE from militarisation ● Threat to EU membership
Georgia	● Peak transit fees of $50m/year ● Approx $650m investment ● 250 long term Jobs	● Threat to Borjomi Mineral Water, which accounts for 10% of the exports of Georgia[36], both directly from spill, and indirectly from damaged reputation ● Legitimisation of undemocratic regime ● Cost of security, and legal liabilities
Azerbaijan	● Approx $850m investment ● 250 long term jobs ● Development of oil industry	● Legitimisation of undemocratic regime ● Cost of security and legal liabilities ● No revenue from pipeline ● Corruption etc. may negate benefits of oil development[37] ● Undermining of indigenous oil refining capacity – which has already contracted by half – with impacts on jobs and balance of payments (due to import of oil products) ● Possible misuse of Oil Fund[38]

countries, and caused major environmental damage. The bank staff have told NGOs that they are particularly keen that "BTC should not be another Chad-Cameroon"

Overall, given the questionable development benefits from BTC for the three countries, IFIs will have to assess very carefully whether their involvement is justifiable. There is a danger that their role could end up appearing to be mainly one of relieving a private sector consortium of risk – essentially a form of corporate welfare. This view is reinforced by the fact that BP and the other consortium partners have more than enough resources to fund BTC themselves (BP's capital expenditure alone is over $10 billion a year), so what is the real need for the IFC?

Going forward, the project could create major dilemmas for the IFIs, for example if development considerations were to favour higher taxation and more effective environmental regulation – as the IFIs would be supporting a project which is underwritten by legal agreements to prevent taxation and regulation increases. In addition, the IFIs will need to consider the reputation risks they face, given the extent of NGO scrutiny of the project.

A further problem for the IFIs comes from the possibility that the BTC consortium is pressing ahead with construction prior to financial close. The IFC in particular has made much of how its involvement in the project can influence it for the better, forcing BTC to meet certain development, environmental and human rights criteria. With the project being half built by the time IFC financing is considered, opportunities for influence are obviously limited. Furthermore, IFC may feel that it is being railroaded into the project – if failure to participate led to the project collapse the IFC might be blamed.

Overall, it is clear that BTC presents a difficult decision for the MDBs. They will want to be sure that their participation adds something in development terms. We would expect them to exercise considerable caution over the project, and as a result delays in approval are likely. And a decision not to participate cannot be entirely ruled out.

FINANCE AND TIMING

Construction of the BTC pipeline is due to begin in April-May 2003. BTC Co had originally planned to achieve financial close by the end of first quarter 2003. However, in December 2002, BP was forced to announce that this would be delayed until the end of the third quarter. At the time, BP commented "To understand and satisfy the differing requirements of these organisations is a significant challenge".[40] It was later reported that the IFIs were still examining costs, technical challenges and environmental and security concerns, while EBRD announced in January 2003 that it was "still evaluating the project on a number of grounds, including environmental and social, as well as financial and economic".[41] As the IFC has not yet formally accepted BTC's application and not started the 'disclosure phase' of 120 days, necessary before the IFC's Board of Directors can consider whether to offer finance, the earliest BTC could achieve financial close is early September.

Meanwhile, BP was very keen not to delay the construction – partly because of the crucial summer weather window (it is not possible to build in the Georgian and Turkish mountains for at least five months of the year), and partly because BP needs the timing of the BTC pipeline to match that of the ACG oilfields. Therefore, the construction is continuing, paid for out of the consortium members' equity shares, amounting to about $1 billion.

BP announced in January 2003 that the consortium had already committed to $2.2 billion of expenditure, and that it was spending on average $4 million a day.[42] At this rate, the $1 billion of equity would be exhausted within 250 days, in August/ September. BP has declared elsewhere that the equity will last until the end of 2003,[43] but even this would leave little room for manoeuvre.

This leaves BP and its partners very exposed. Should the financing decision be delayed again (of which there are already indications[44]), the consortium would have to either (a) up the stakes, putting in yet more of its own money (and would be difficult for SOCAR), (b) begin to demobilise contractors on the construction, thus incurring penalty payments to the contractors, further costs due to delay, and possibly having to re-tender, or (c) consider radical options, such as diverting the pipeline to Supsa and abandoning the Turkish section.

Thus overall, the financing situation is a far from a foregone conclusion and could have a significant impact on the project, in terms of its viability, timing and final structure.

CONCLUSIONS

BP SHAREHOLDERS:

As an investment in its own right BTC does not look value-enhancing for BP in its own right –the returns may be just about adequate, but carry a high level of risk. Clearly BTC is intimately linked with BP's Azerbaijani Oilfields – and here the important point is that the demands of financiers may increase transit costs in the first few years, significantly reducing margins on Azerbaijani oil.

More broadly, BP has abandoned its original production output targets to a more sophisticated multiple target based approach, with a focus on key areas. However, BTC highlights a key difficulty with this new strategy – it creates a much higher risk profile: growth will depend on a six areas (Angola, Azerbaijan, Russia, Deepwater GOM, Trinidad and Asian LNG) of which at least four have significant political risks associated with them. To some extent this marks a return to BP strategy in the first half of the 20th Century, when it was focused on high-risk regions such as Iran, in contrast to the lower risk areas (Alaska, North Sea), which the company concentrated in the 70s and 80s.

It also contrasts BP with ExxonMobil and Shell. While income and return are broadly similar across the companies, ExxonMobil and Shell have a far more diversified strategy and with greater exposure to lower risk regions. Thus, BP arguably has a much higher risk profile, and investors should reasonably expect higher returns to compensate.

Finally, BP has worked hard to build up its reputation and has tried hard to build up positive relationships with various NGOs such as Amnesty and WWF. BTC risks undermining these relationships, and becoming a major reputation sore for BP. As an indication of the risks a complaint has just been lodged for an alleged breach of the OECD guidelines for Multinational Enterprises. And indeed it appears difficult to reconcile the HGAs with the basic policy in the guidelines that multinationals should *"Refrain from seeking or accepting exemptions not contemplated in the statutory or regulatory framework related to environmental, health, safety, labour, taxation, financial incentives, or other issues."* Worryingly these challenges coincide with other reputation troubles for BP, with disinvestments by major socially responsible investors and the major problems it faced last year with the Trans Alaskan Pipeline. Note too, that just as problems on the Alaska pipeline have been monitored and intensified by dedicated NGOs who have monitored any incidents and alerted the public, the BTC pipeline is likely to be monitored by a range of NGOs who will ensure that any incidents are brought to the attention of the western media and help connect any affected locals with legal advice.

BANKERS:

For project financiers the questions are as ever the risks of the project and the terms to lend on. Earlier we identified some of the risks of the project in some detail and these might help form a useful checklist. While usual issues for analysis such as costs, delays and political risks are all significant here, one key area to focus on may be the reliability and extent of the volume of oil to be transported – there is considerable uncertainty, which directly affects the riskiness of the project. Overall we feel banks should take a cautious approach to any involvement in the project – specifically being cautious over lending on a long-term basis or for a high proportion of the project.

Particular care will of course be needed if the IFIs do not come through with funding to the extent expected. In this event in particular (but also more generally) Banks should be aware of the reputation risks that BTC could create for them.

INTERNATIONAL FINANCIAL INSTITUTIONS (IFIS)

For International Financial Institutions, and in particular the development banks, BTC raises some difficult questions. The first key issue is whether the project has been developed in accordance with their own guidelines, and more generally is likely to contribute to development. One this issue there are very considerable concerns, as discussed earlier.

The second issue is what the role of the development banks really is – given that most of the consortium can fund the project themselves. There is a danger that the real role of the IFIs is essentially to relieve risk from a consortium dominated by western multinationals, rather than to provide finance itself. The involvement of the IFC and others make it much more likely that the governments involved will honour their commitments to the pipeline, as failure to do so could significantly affect their ability to raise finance from these institutions in the future. Of the consortium partners only the Azerbaijani oil company SOCAR might have problems raising finance internally, although this could probably be overcome with a little financial structuring among the consortium partners (BP's own capital expenditure of some $10bn a year alone dwarfs the project cost). Development banks are increasingly likely to question whether this is an appropriate use of their funds, and whether they should be lending essentially to wealthy western oil companies.

Finally, the development institutions will want to consider the broader implications of supporting a controversial project that has already started, and of endorsing the controversial Host Government Agreements. By pressing ahead with the project, before finalising the financing, the consortium is putting the Development Banks into a very difficult position. With the project underway already the scope for the banks to influence the project or set conditions is very limited – the route has been set, contracts awarded etc. This would set a very worrying precedent. And similarly implicitly endorsing the HGAs, which limit the scope of the Host Governments to pursue development objectives, appears dangerous for the development banks.

If these hurdles are overcome, the viability of the project will be an issue. Here the key issue is transit fees can be raised to improve returns – albeit at the cost of reducing the net margins on the oil for the companies producing it. And here again the role of development banks could be questioned – the effect of their involvement could be to reducing the level of the transit fees and thereby boost the margins of the companies extracting oil in Azerbaijan – essentially subsidising their profits.

Overall BTC presents a difficult decision for development banks – not least because of the considerable risks its presents to their reputation. And of course political factors are likely to be crucial in any approval process – with the key question perhaps being just how much does the US want BTC now?

APPENDIX 1 – PROSPECTS FOR FURTHER OIL VOLUMES

OTHER AZERBAIJANI OIL

There is a possibility of some additional supply from other Azerbaijani fields. The only certain fields are those that have an existing production – currently about 190,000 bpd. However, Azerbaijan consumes 140,000 bpd. So far the other fields that potentially have significant amounts have given disappointing exploration results, with no major finds to date.

Indeed one feature of Azerbaijan oil exploration generally to date is that it has failed to live up to its potential. Azerbaijan has signed 13 offshore and 9 onshore Production Sharing Agreements. The onshore ones are all relatively small, and mostly in production already – so are not going to produce substantially more than current levels. Of the 11 offshore fields other than ACG and Shah Deniz, 4 (Lankaran-Talysh, Absheron, Oguz and Kurdashi-Araz-Kirgan Daniz) gave poor results in exploration wells and 1 (Inam) is suspended due to high pressure. Another 5 (Nakchivan, Lrisk-Jenab-Savalan-Dalga, Zafar-Mashal, Atashgah and Yalama) are all smaller and are operated by non-members of the BTC consortium.[45]

Apart from ACG the other one field with potential is Alov / Araz / Sharg, which is blocked because Iran claims ownership. Indeed it has brought out gunships to drive away exploration vessels. There is no sign of imminent resolution of the issue of how to divide the Caspian between the littoral states – although the resolution of the Iraq situation may have a bearing. Furthermore, as part of any resolution, an agreement may be reached to ship oil via Iran. Thus, this field is unlikely to help with early oil, and is a speculative prospect for late oil for BTC.

Another minor contributor is the Shah Deniz gas field, will give a small amount of condensate (25,000–50,000 bpd), but there is some uncertainty over development because of costs and market concerns. In total, other Azerbaijani fields may provide 50–100,000bpd of extra oil, which will help but is unlikely to make a substantial difference to returns.

KAZAKH OIL

The key to longer-term viability of the BTC pipeline may well be Kazakh oil. Oil finds in Kazakhstan are substantially larger that Azerbaijan. They are focused in three main fields, summarised below.

	Tengiz	**Karachaganak**	**Kashagan**
Reserves	9 bn barrels[46]	2.4 bn barrels condensate[a]	7-10 bn barrels proven[47,48] 13 bn barrels[49] recoverable
Current oil production	260,000 bpd	106,000 bpd of condensate	Initial production (2005): 100,000bpd
Profile	480,000 bpd by mid 2006. [50]	end 2003: 200,000bpd of Condensate	2006-2010: ~450,000 bpd 2010-2013: ~900,000 bpd; 2013-2018: ~1.2m bpd[51]
Peak potential	800,000–1m bpd[52]	Liquids 260,000 bpd	1.2m bpd
Consortium	ChevronTexaco50% ExxonMobil 25% Kazakhoil 20% Lukarco 5%	BG plc 32.5% ENI 32.5% Texaco 20% LUKoil 15 %	ENI 16.7%; Exxon Mobil 16.7% Shell 16.7%; TotalFinaElf 16.7% CNOOC 8.3 %; Sinopec 8.3 % ConocoPhillips 8.3 %; Inpex 8.3 %

a http://www.bg-group.com/international/int-kaz.htm

Routes to market

The challenge for Kazakh oil has always been how to get it to market. Even more remote than Azerbaijan, it has depended on the Russian pipeline system in the past. Recently the development of a route from Tengiz to Novorossiysk – the Caspian Pipeline Consortium (CPC) has provided Caspian oil with a significant route to market, specifically for Tengiz oil. Current capacity is some 560,000 bpd, expandable to 1.4m bpd, with successive expansions planned in 2006, 2008 and 2010.

The BTC pipeline could take Kazakh oil – although it would need to be shipped across the Caspian, and there is limited tanker capacity at present. (A pipeline is possible, but would require significant volumes to be viable, added to which the Kazakh government has made clear that it would not consider a pipeline until the territorial division of the Caspian between the five littoral states is resolved – of which there is no immediate prospect). Even the strongest proponents of BTC accept that a trans-Caspian pipeline is unlikely in the near term.

Other options also exist for Kazakh oil. It can be transferred through the Russian Pipeline system, possibly even to the Baltic. While at present this would mean competing for capacity with Russian oil, and could be expensive, there are various options for upgrades or new construction. The likelihood of at least some oil being exported this way is good.

A key possible route is to Iran, either to the gulf coast or to Teheran in conjunction with oil swaps. This route is one of the more economic, and indeed is favoured by several members of the Kashagan consortium and of the Kazakh government, but is clearly full of political difficulties, given American opposition to the regime in Iran. Nonetheless, its development is not impossible, either as a result of regime change or a non-US backed development. Ironically, the development of BTC could make an Iranian pipeline more acceptable to US interests – an Iranian pipeline in conjunction with BTC and CPC is a very different situation to one where Caspian oil depends on Iranian access only.

Finally, there are possibilities of a pipeline to China, or a pipeline through Afghanistan and Pakistan. Chinese oil companies have joined the Kashagan consortium raising the possibility of the former. In both these cases oil routes may be developed in conjunction with gas pipelines, possibly from Turkmenistan. Both of these are potentially quite expensive, but the governments involved are exploring the potential.

Analysis

Matching production with export capacity is a key issue for Kazakhstan, particularly as volumes increase. Whether BTC provides a useful route for Kazakhstan, and whether Kazakhstan can supply BTC with either the early (2005-2009) or late oil (post 2015) when BTC has surplus capacity, appears somewhat speculative.

Potentially by 2008, Kazakhstan could have will have 300m bpd more production than export capacity, creating the potential for some early oil for BTC. However, it could bring forward the planned CPC expansion, as this will be needed anyway. By 2011, Kazakhstan will have 700,000 bpd more production than capacity, even with the CPC expansion. But the big problem for the BTC pipeline is this coincides with ACG's peak production, **so there is no significant capacity available in BTC just when Kazakhstan needs it**. So in any case Kazakhstan will need a new export route around 2010, or have to delay production increases. Such an alternate route is likely to have priority for the "late" Kazakh oil, although there may be some potential for some overflow if the production volumes are high.

Given range of options, the Kazakhstan government and the Kashagan consortium appear to be delaying committing to any particular major long-term export route for Kashagan until as late as possible. Similarly, the consortium appears split on whether to put its early oil through CPC or BTC. Some consortium members are also members of BTC; others are members of CPC. Chinese companies CNOOC and Sinopec joined the Kashagan consortium in March 2003, raising the possibility of the Chinese export route to the east, in the medium term.

The BTC pipeline may be particularly useful to Kazakhstan as an alternative to CPC as it increases competition (Russia has been trying to raise tariffs on CPC, especially for non-Tengiz oil). The Kazakhstan government is in negotiations with Azerbaijan, aiming for an intergovernmental agreement by late 2003 (committing to anything from 100,000 bpd to 400,000 bpd).

Note too, that there are a number of risks in Kazakhstan, which could in particular delay the production of early oil. The investment climate (especially fiscal stability) is widely recognised to have worsened over recent years, with the government trying to get better terms from its contracts, especially since the discovery of Kashagan puts it in a stronger bargaining position. The Chevron-led Tengiz consortium suspended all development on the field in November 2002, over a tax dispute with the Kazakh government; this was resolved three months later, but only at the expense of knocking confidence in the country. The Karachaganak field was also shut down for three weeks in September 2001 due to a tax dispute. Following these experiences, the Kashagan consortium too has said it would suspend work on Kashagan unless the Kazakh government stopped trying to revise agreements unilaterally after they had been signed.[53] There is even an outside chance of expropriation or nationalisation in the medium term.

Kashagan also faces significant environmental problems (notably being very close to the last remaining breeding ground for Beluga sturgeon), and local protests against the terminal development.

Finally, Kazakh President Nazarbayev is the subject of criminal investigations in the US, alleging that he took bribes during the award of oil contracts in the ’90s, and that he later tried to obstruct an enquiry into payments.[54]

Overall, we conclude that although there is a strong possibility of some Kazakh oil being available for the BTC pipeline, either for early or late oil or both, it is far from certain, with a number of outstanding problems. And overall potential for Kazakh oil to boost BTC revenues substantially is more modest than might be hoped, and at risk from a number of factors.

APPENDIX 2 – NGO CRITICISMS OF BTC

[Note: the reports of the Fact-Finding Missions, plus analysis of the legal framework for the BTC project, and other publications, can be found on www.baku.org.uk]

A large number of non-governmental organisations (NGOs) have been publicly campaigning against the BTC pipeline. 77 NGOs from 38 countries signed a critical letter to international financial institutions in May 2002.[55] Major NGOs including Friends of the Earth, Amnesty International, Worldwide Fund for Nature (WWF) and Oxfam have also been involved.

FINDINGS OF NGO FACT-FINDING MISSIONS

Several of these international NGOs have carried out three Fact-Finding Missions to the pipeline route, to investigate the implementation of the Environmental Impact Assessments (EIAs), the consultation procedures and the land acquisition and compensation measures, along with broader human rights, development and legal issues.

The Missions found severe deficiencies, placing the project in violation of a number of World Bank standards, in particular Operational Directives OD 4.30 (Involuntary Resettlement) and OD 4.20 (Indigenous Peoples), Operational Policies OP 4.01 (Environmental Assessment) and OP 4.04 (Natural Habitats), and guidelines, including the IFC Manual on *Doing Better Business Through Effective Public Consultation and Disclosure and Handbook on Preparing a Resettlement Action Plan*. In Turkey at least, the Missions found that compensation measures for the BTC project appear to fail to comply with the Turkish domestic Expropriation Law.

Two Missions to Turkey, in July / August 2002 and in March 2003 found:[56]

- A pattern of serious and ongoing human rights abuses and violations along important sections of the pipeline, including a marked rise in detentions, arbitrary arrests, surveillance and harassment by state and military officials. There is a strong likelihood that the human rights situation in the region would be worsened by the introduction of the pipeline, particularly due to militarisation via the use of the gendarmerie as the main security force;
- A pervasive atmosphere of repression and lack of freedom of speech in these regions which precluded dissent about the BTC project and thus rendered invalid the processes of consultation which BTC Co. have undertaken;
- Fundamental flaws in both the design and the implementation of crucial project documents like the Environmental Impact Assessment (EIA) and the RAP, including widespread inadequacies in consultation of appropriate NGOs and social groups;
- Information disseminated on the project to communities was insufficient for respondents to evolve an informed view on the project. The wording of the community questionnaires discouraged frank expression of concerns about the pipeline's impact. Up to half of the communities listed as consulted in the project documents had in fact, not been consulted. Even where consultation had taken place, villagers remained full of questions that had not been answered.
- Repeated suggestions that BOTAS, the pipeline contractor, is not carrying out the process of compensation in the manner claimed by BTC Co. These included allegations of paying well below a fair market value for land, imposing rather than negotiating prices, failing to compensate certain groups of landowners and users, misleading affected people about their rights and failing to inform them

of the many potential negative impacts of the project – failures which are producing growing anger among affected people;

- The failure of the project to take sufficient account of the differential impacts of the pipeline on vulnerable groups, including ethnic minorities, women and the poor, or to mitigate those problems appropriately.

The Mission to Azerbaijan and Georgia in June 2002 found in Azerbaijan:[57]

- The distribution of information and availability of official documents was inadequate and inconsistent. Communities and NGOs were not informed about the ESIA or the process for contributing comments, and the Host Government Agreement, while reportedly a public document, in practice was not available to the public during the consultation period.
- There are allegations of harassment of, and human rights abuses against, anyone who criticises the government, making open debate on the project difficult.
- Despite this, public opposition to the AGT pipeline project was clearly evident in local communities along the pipeline route. Many local communities are sceptical about the impact BTC would have on them, because they have already had negative experiences of the Baku-Supsa 'Early Oil' pipeline, built by BP-led AIOC along the same route, in 1997 to 1999.
- Implementation of the project – and especially the Community Investment Programme – is being carried out in a highly centralised fashion from Baku, and hence restricting the opportunities for regional development.
- Many Baku-based organizations have serious concerns about the value of the AGT project for Azerbaijan and about the centralized control by the government and the companies: corruption is a significant problem in Azerbaijan; oil funds that were meant for social and non-oil industry development are now being used to fund more oil development.

In Georgia, the Mission found:[58]

- In the eastern section of the pipeline, where the BTC pipeline would continue along the route of the Baku-Supsa pipeline, project-affected communities clearly communicated negative experience with the Baku-Supsa oil pipeline project. Local communities complained about roads that were damaged and left in disrepair, and a cavalier attitude by the companies to other damage such as broken water pipes. Promised jobs did not materialize, and communities saw no benefit from community investment programs. The baseline survey and ESIA are missing important and widespread negative attitudes.
- In the central and western section of the proposed route, project-affected people have received little detailed information from the government and project sponsors, and generally lack enough information to make a considered opinion about the project. Many affected people are not even sure of the exact pipelines route, nor have landowners and users been provided with clear information about compensation. Figures on expected employment opportunities are vague, feeding rumours and false expectations.
- The majority of villages the Mission visited had not been consulted about the project, or even given any information about it.

- The companies' baseline survey of the Borjomi district is wholly inadequate. Project sponsors seem to have dismissed impacts of an oil pipeline operation to the tourist potential of the Borjomi natural areas and to the spring water industry, posing serious threats to one of the few areas of medium-term economic potential for the country.
- Confusions in the institutional framework of the project is generating conflicts between and within jurisdictions, and is weakening project-affected communities' already low level of trust in both central and local government's project management.

LEGAL ANALYSIS OF PROJECT DOCUMENTS

The BTC project is being implemented within the framework of an Inter-Governmental Agreement (IGA) between the three countries through which the pipeline would pass. The IGA includes specific Host Country Agreements (HGAs) that define the fiscal and legal regime under which the BTC Project is to be developed. Both the IGA and HGA constitute binding international law. NGOs have reviewed the HGA for the Turkish section of the pipeline. However, the agreements are roughly equivalent for all three countries.

Under the Turkish HGA:

- The project agreement prevails over all other current or future domestic law (other than the constitution) that may conflict with it or prejudice the economic interests of the consortium. The Turkish Government has thus limited its powers to protect Turkish citizens from potential environmental damage and associated health and safety hazards. Any conflict between the HGA and other current or future Turkish law would be resolved in favour of the HGA as otherwise the Turkish Government would be in breach of contract and a claim for damages would be open to the consortium.
- This has real potential to place Turkey in direct contravention of international and European laws by which Turkey is currently bound or would be bound in the future. The Turkish Government is thus put in a position where in practice it is not to be able to regulate or control the construction and operation of the pipeline. By way of comparison, in the UK such agreements would probably run counter to the fundamental principle that a Parliament cannot bind its successors.
- The consortium has the power to terminate the contract at any time and thus the Turkish Government would not be able to demand compliance with new regulations or to ensure de facto oversight of the operation or construction of the pipeline. In the case of a material breach of contract by the consortium, the consortium has no obligation to address and/or cure that breach unless and until the time the Government has proven knowing and persistent failure or frustration of contract – requirements that would be difficult to satisfy.
- The consortium is granted an effective right to restrict the geographical development of villages, without compensation. It would be for the consortium to decide whether it can build structures over the buried pipeline regardless of how severely those structures interfere with the use of the adjacent land (for example, by blocking movements of livestock). In essence, a strip of Turkey a thousand kilometres long is transferred to the legal control of BP and other oil companies.
- Local populations will be able to demand access to water of sufficient qualify and quantity only to the extent that their demands do not conflict with demands

of the project as stated by the consortium. The polluted water resulting from hydrostatic and other testing may be disposed of at the same location without any determination of responsibility and liability.

- The preservation of the stability of the project prevails over any other considerations except where there is an imminent, material threat to public security, health and the environment. Thus the project has power over the state in the relevant area. It is unclear as to what would be allowed as constituting an "imminent and material threat" and who would decide if such a threat existed. The high threshold of damage required before action is taken is at odds with any recognised concept of precaution in matters of environmental protection. Local populations would have no redress where the Government has not acted or has failed to act to protect its interests.
- Turkey guarantees that the Project will not be bound by any law that creates environmental or social protection standards that are higher than those generally adhered to in the industry even where such laws are enacted by a regional authority with the authority to require such compliance (including potentially the European Union). Serious questions arise about the compatibility of such a provision with Turkey's progress towards accession. Local populations would not be able to seek redress in accordance with regional legislation to the extent that the latter conflicts with the project.

The NGOs also attempted to assess the project's compliance with international private and public laws. On a preliminary analysis, it would appear that the HGA places the project in potential violation of the European Convention on Human Rights, European Union laws and regulations and other international law instruments.

OTHER ISSUES

NGOs have also raised the following issues:[59]

- The poverty alleviation benefits of the project are questionable, especially due to limited revenues from the project, limited jobs for local people, and the failure to provide much-needed energy for communities.
- The pipeline risks increasing the host countries' sovereign debt, through extensive liabilities connected with the project, especially in Turkey.
- The Azerbaijan Oil Fund, which is designed to channel oil revenues into development of non-oil sectors of the economy, is now being used to finance BTC, in direct contravention of its purpose.
- The project stands to overwhelm institutional capacity, entrench corruption and undermine the transition to democracy in Azerbaijan and Georgia.
- Given extensive corruption in all three countries, impacts and benefits of the project would not be fairly distributed.
- The pipeline would increase militarisation and potentially exacerbate conflict in the region.
- Security arrangements for the pipeline could lead to human rights abuses against local populations.
- Transport of one million barrels a day more of oil to western markets runs against the international obligations of western countries to cut back their greenhouse gas emissions.

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