# Corruption and the Energy Sector

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**Abstract**

The energy sector is a prime target for, and source of corruption, in part because of the time-sensitive nature of energy resources, the possibilities of generating considerable economic rents from energy extraction, transformation and use, as well as the need for large capital investments and a central role of government agencies to oversee virtually all aspects of the energy sector – whether privatized or not. The forms of corruption depend on features of the supply chain of specific energy sources, the significance of these sources in the local and national economy, the sociopolitical and institutional context within which extraction, transformation and use occur, the number of individuals participating in decision making, and the cultural environment within which decisions are made. A lack of transparency of decisions and accounting methods, as well as a lack of effectiveness of legal systems may help hide and sanction abuse of power by decision makers. Efforts to reduce corruption need to simultaneously consider each of these issues in order to be effective. This paper lays out various causes and forms of corruption in the energy sector, and identifies a set of anti-corruption strategies. General observations and conclusions are illustrated with specific cases from around the world.

## Introduction

Structure of the Energy Sector

Energy is central to socio-economic activities. It powers machines in all sectors of the economy – from agriculture and households to manufacturing and transportation. Those individuals and institutions that control access to the sources, transformation and distribution of energy hold significant power. Among the various sources of energy, the fossil-based fuels coal, natural gas and oil dominate world energy production with approximately 79.8%, followed by nuclear energy (11.1%) and alternative sources (9.1%)[1].

Extraction of fossil fuels and radioactive materials for nuclear power generation, as well as transformation of these extracted materials into usable forms of energy are typically carried out in large scales at a few locations. Similarly, locations with ample riverine flow for hydroelectricity, sufficient solar influx for photovoltaic conversion into electricity geothermal vents for district heating or electricity generation, and significant amounts of biomass for energy conversion are limited. Because of the need for energy and limited sources of supply, governments both have natural monopolies in the energy sector and high interests to protect their energy supply from disruption. The supply chain from energy extraction to transformation and use typically involves complex infrastructure systems, many institutions and jurisdictions, and potentially a large number of end users. Opportunities exist for high profits and resource rents[2], and for individuals to engage in corrupt practices to gain access to, or use the power associated with access to energy.

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[1] International Energy Annual, 2000 < http://www.eia.doe.gov/emeu/iea/table29.html> US Department of Energy

[2] Mauro, P. (1996), "*The effects of corruption on growth, investment, and government expenditures*", IMF Working Paper 96/98, International Monetary Fund, Washington, D.C.
Mauro, P. (2002) "*Corruption: Causes, Consequences, and Agenda for Further Research*", Mimeo, International Monetary Fund, Washington, D.C.

The rest of this section briefly discusses corruption in the energy sector. Following that, details on corruption-related issues in the extraction sector, and in the transformation and distribution components of centralized energy systems are discussed. Each of these sections concentrate on (1) the causes of corruption, (2) the forms and extent of corruption, and (3) the opportunities and constraints to address corruption. General observations are substantiated with reference to specific cases, where appropriate. The paper closes with a brief summary and conclusions.

## Corruption in the Energy Sector

Corruption has been defined by Robert Klitgaard[3] as "the abuse of office for personal gain". Corruption takes many forms, ranging from grand corruption – the capture of high office of government by elites and the uses of these offices for private gain – to "petty" corruption – the use of bribes or other "facilitating payments" to provide services, bend or break laws[4]. The ways in which either form of corruption expresses itself is in part a function of the political and economic features of a country[5]. Countries with strong private interests and political and economic competition (e.g. the United States of America and many western European countries) are susceptible to *interest group bidding* that is largely non-systematic and carried out on an individual basis. This may thus include bribes to gain assess to markets. In contrast, countries with limited political competition and an *elite hegemony* (e.g. countries of the former Soviet Union and several Asian countries) may be susceptible to

[3] Klitgaard, R. (1988) "*Controlling Corruption*", Berkeley: University of California Press.
[4] Azfar, O. (2002) "*Corruption*", Chapter prepared for the Encyclopedia of Public Choice, Draft, IRIS, University of Maryland, College Park.
[5] Johnston, M. (1996) "*Public Officials, Private Interests and Sustainable Democracy: When Politics and Corruption Meet*", Conference of Corruption in the World Economy, institute of International Economics, Washington, D.C., Chapter 3, p. 71

individuals and groups selling political access to enrich themselves at the cost of the state.

The key role that the energy sector plays in society and economy make it vulnerable to corruption. Individuals in the public sector may find opportunities for personal gain due to the powers they hold over access to, and transformation and distribution of energy, including procurement for the development, operation and maintenance of energy system components. In cases where energy systems are being privatized, new opportunities may arise from differences in availability of, and access to information by the public and private sector. For the same reason, individuals in the private sector may have economic and personal motivations to offer bribes to gain access to energy sources, build and maintain transformation and distribution systems, or influence outcomes of privatization efforts. Where energy systems or system components are already privatized, private sector decision makers may have considerable power over regional or even national socioeconomic growth and development, and thus opportunities to abuse that power for personal gain. Lack of budget transparency and oversight – in public and private energy sector components – provide opportunities to hide corrupt activities.

Since the mid-1990s, Transparency International has produced various annual corruption rankings of countries and since 1999 has provided information on both the "demand side" and "supply side" of corruption. The Corruption Perceptions Index (CPI) combines information from at least three different sources to gauge the level to which individual countries are perceived to be corrupt. Conversely, the Bribe Payers Index (BPI) is a survey-based index intended to reflect a country's presumed propensity to pay bribes.

The CPI takes on a maximum score of 10 for countries considered not corrupt. Of the 32 leading mining countries – where, among others, extraction of

coal, oil, natural gas, and uranium take place – only nine have a score above 5.0 and the remaining twenty-three have scores of 4.8 or below[6]. The most recent BPI contains sector-specific as well as country-specific information[7]. It indicates that many of the sectors associated with energy systems (such as mining, oil and gas, power generation, transmission, public works, and construction) are perceived to be vulnerable to corruption.

A special mention must be made of Botswana – a country rich in mineral resources – which has taken measures to reduce corruption through the enactment in 1994 of the Corruption and Economic Crime Act which created new categories of offences associated with corruption, including being in control of disproportionate assets or maintaining an unexplained high standard of living. To deal with these offences a Directorate on Corruption and Economic Crime was instituted and given special powers of investigation, arrest, search and seizure[8]. To increase the chances of success the creation of the new directorate was accompanied with a public education campaign.

**Corruption and Anti-corruption Efforts in the Energy Extraction Sector**

Causes of Corruption

Mining and drilling operations typically lack choice in the location of mines or wells and are significantly dependent on government approval to extract mineral deposits[9]. They involve large lump sum capital investments; long time lags between prospecting and ultimate extraction; supplemental

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[6] Transparency International (2002) Transparency International Corruption Perceptions Index 2002, <http://www.transparency.org>

[7] Transparency International (2002) Transparency International Bribe Payers Index 2002, http://www.transparency.org.

[8] "*DCEC Botswana: Botswana's Approach to Fighting Corruption and Economic Crime*", International Anti-Corruption Newsletter, January 2000 <http://www.icac.org.hk/text/eng/newsl/issue1/dcec1.html >

[9] Schloss, M. (2000) "*Challenges of Investing in Countries Seen to be the most Corrupt in the World – The Case of Natural Resource Industries, Transparency International Annual General Meeting*", Workshop Series, Ottawa, September 20, 2000.

infrastructure development (roads, ports, pipelines, transmission lines); procurements for operation and maintenance of mines and wells; potential negative impacts on local communities, health, and environment; volatility of energy markets; uncertain returns on their investment over long periods of time; underpaid bureaucrats who control access to energy resources, have oversight over infrastructure development and procurement, or assess social, health and environmental impacts[10]; and perceptions that energy sources are part of a "national treasure chest" that rightfully belongs to the people and should be exploited for *their* benefit, thus making it easier for individuals to justify their corrupt behavior[11].

Forms and Extent of Corruption

Since extraction of minerals and fuels is a highly time-sensitive operation and typically require significant paperwork, bribes or other forms of "facilitating payments[12]" may be made to prompt timely delivery of goods and services, such as permits and licenses for exploration, development of wells and mines, and extraction of minerals and fuels. Though in many cases such bribes amount to "petty corruption" the sum total of such payments can be considerable. For instance, approximately one half of total system losses (amounting to an estimated 100 million dollars) of the Bangladesh Power Development Board (BPDB) and the Dhaka Electricity Supply Authority (DESA) are accounted for by mismanagement and falsified meter reading[13].

Since the extraction of minerals and fuels often involves large physical quantities that may be difficult to track with sufficient detail, opportunities exist

[10] Marshall, I.E. (2001) "*A Survey of Corruption Issues in the Mining and Mineral Sector, International Institute for Environment and Development*", Mining, Minerals and Sustainable Development Project, London, England.
[11] C.f. Marshall (2001) ibid.
[12] "Facilitating payments may include "signature bonuses" by oil companies to gain access to rights to oil resources. (*Black Gold: Sub-Saharan African Oil*" The Economist, October 26th 2002, p. 59)

to misreport quantities and use the difference for personal gain. For example, anecdotal evidence from the coal industry in Russia and Ukraine suggests that unrecorded coal production illegally sold for the benefit of individual mine managers is a widespread phenomenon, involving local industrial customers, the rail transport system, and port authorities[14].

Corrupt practices may also involve non-cash transactions. For example, because of its strategic importance and significant political influence, Russia's coal mining sector has received considerable subsidies, amounting in 1994 to almost US$ 2.8 billion, or more than 1 percent of its GDP. Until late 1997, control of these subsidies was the prerogative of RosUgol, the national coal monopoly. Allocation, distribution, and use of these budget funds were highly nontransparent, with no effective monitoring arrangements. Audits of 1996–97 coal subsidies ordered by the first deputy prime minister and the Duma found that significant sums of money had either been disbursed to the wrong recipients or used for the wrong purposes[15].

Opportunities and Constraints to Address Causes of Corruption

Increasing transparency of transactions and budgets, as well as increasing accountability of institutions and decision makers can help reduce corruption. For example, the Russian government tackled corruption in the coal sector[16] by dissolving RosUgol, transferring all subsidy management functions to the appropriate agencies, establishing earmarked federal treasury accounts for all subsidy categories and recipients, and putting in place mechanisms that ensure

[13] Lovei and Alastair (2000) ibid.
[14] Lovei and Alastair (2000) ibid.
[15] Lovei and Alastair (2000) ibid.
[16] Lovei and Alastair (2000) ibid.

that individual entitlements go directly to individuals, and not through coal companies.

In cases that involve international companies, introducing codes of conduct, monitoring foreign partners and their collaborators, training employees and establishing organizational structures to monitor and enforce codes of conduct, may reduce corruption[17]. These may include establishing internal audit departments or other codes of conduct that represent corporate values in a consistent manner.

Anti-corruption strategies may be stifled by the fact that those individuals who are most influential in bringing about change (e.g. political elites, bureaucrats, chief executives) are often also the ones who may lose most if corruption is curtailed. This is reinforced by the lack of transparency in economic and political decision making. Additionally, companies engaging in corruption may gain market access and power, and thus out-compete "*non-corrupt*" firms.

## Corruption and Anti-corruption Efforts in the Energy Transformation and Distribution Sector

Causes of Corruption

Transportation of primary energy sources (e.g. coal, oil, gas), their transformation into more useful forms (e.g. in refineries or power plants), and their distribution to end users (e.g. with pipelines or power lines) all typically involve large capital investments and movement of large physical quantities. Movement of coal, oil, gas and electricity may occur within districts and/or across countries and thus involve a range of firms, institutions and jurisdictions.

[17] Several energy companies have developed codes of conduct, training programs and mechanisms for sanctioning individuals who do not abide by these codes. See, for example, http://www2.shell.com/home/media-en/downloads/dealing_with_bribery_and_corruption_primer.pdf

If transportation and distribution of energy occurs across national boundaries – and especially if transactions occur on spot markets or are arranged trough short-term deals – opportunities exist for off-budget transactions that are difficult to trace. Such off-budget transactions may provide (potentially sizeable) opportunities for appropriations by, or payments to the decision makers involved. To the extent that distribution of energy from producers to consumers involves large numbers of people who individually account for small shares of final consumption and revenues, corruption in this part of the energy sector is typically small-scale, involving petty bribes and theft. For example, lack of adequate supply, cumbersome paperwork, non-computerized databases, and large backlog make petty corruption more prevalent in developing countries that are overwhelmed with demand and are relatively less regulated. The consumers' willingness to pay for convenience (getting new connections quickly, avoiding time-consuming paper work, etc.) has created a supply side pressure that serves to perpetuate this form of corruption.

Forms and Extent of Corruption

The main areas of corruption in the distribution of energy – and electricity in particular – include, among others, non-technical system loss (e.g. falsified meter readings, altered invoices and illegal purchases); interference in the flow of funds/barter/offsets within the system and to fuel suppliers; manipulation of the flows of electricity to favored customers; and opaque uneconomic import arrangements. For example, surveys sponsored by the World Bank as part of load management and agricultural electricity studies in India have shown that 20-30% of electricity attributed to unmetered agricultural consumption is in fact appropriated by high-income households, industry and large commercial

establishments, such as shopping malls[18]. Such "appropriations" constitute corrupt behavior if those entities who receive electricity for free or at reduced prices provide in return financial or political support to individuals who are in charge of collection of payments.

Preliminary estimates for the electricity sectors of Ukraine, Moldova, Georgia, Armenia, Kazakhstan, Bulgaria, Romania and Kyrgyzstan suggest that theft and other corruption amount to 15-30% of total electricity sales. The lack of revenue from electricity generation and distribution may jeopardize financial stability of the power sector – insufficient funds may be available to purchase input fuels or maintain generators or distribution networks – and as a result consumers may experience loss of service and/or individuals and institutions in the electricity sector may be enticed to engage in corrupt practices to ensure that electricity can be generated and distributed. In such cases, corrupt practices may ripple through the electricity sector and from it through the sectors that extract energy or help develop, operate and maintain energy infrastructures[19].

Other corrupt practices may involve accounts receivables collections and procurement, including corruption in the acquisition of capital goods, operating materials, and retaining consultants. [20] For instance, bidding on a project may be closed and re-opened repeatedly until a certain vendor wins the contract. The bribery mechanisms that are typically used in these cases include accessing inside information, influencing specifications, and purchasing recommendations, and may range from small fees paid to clerical staff to large scale bribes to senior

[18] Lovei, L. and A. McKechnie (2000) "*The Cost of Corruption for the Poor: The Energy Sector"*, The World Bank Group, Private Sector and Infrastructure Network, Washington, D.C.

[19] US AID's India Mission has recently decided to focus their reform efforts energy distribution, in part because the generation and transmission sub-sectors will not be able to pay their bills until the service that the distribution sector provides is moved from a political to an economic good, based on market-driven principles, and with availability/reliability/quality etc. issues resolved such that people will be willing to pay for the service.

officials. Political influence is usually applied at the highest levels and then allowed to work its way down the chain of command[21].

Corruption at the consumer level in the power sector is endemic to developing and transitional economies because lack of weak judicial and regulatory systems make it difficult for investors to take parties that have violated contracts to court. The existence of a political culture that overlooks corruption acts as an incentive for corruption. Some perceive such attitudes as part of a traditional culture predating, for instance, the Communist period wherein officialdom traditionally viewed public property as belonging to no one. The breakdown of order because of the dissolving former Soviet Union and a subsequent failure to create a new system may have furthered opportunities for corruption to take place.[22] Opportunities for corruption are further increased when civil servants are underpaid[23].

Opportunities and Constraints to Address Causes of Corruption

Anti-corruption measures in the transformation and distribution segment of an energy system may include establishment of a legal framework and an autonomous, transparent regulatory body with sufficient authority to oversee energy transformation and distribution. Clear guidelines must exist for accounting practices; budgets need to be transparent and accessible; and auditing systems must be developed to ensure that existing guidelines and rules are followed. Unbundling of the power system into separate energy transformation, transmission and distribution entities; establishment of decentralized,

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[20] Munshi, J. (2000) "*Corruption in State Owned Monopolies, The Bangladesh Power Sector*", Transparency International Bangladesh, February 2000
[21] Munshi, J. (2000) ibid.
[22] Anti-Corruption Research Concerning Eastern Europe and the Former Soviet Union: A Comparative Analysis, John M. Kramer Distinguished Professor, Mary Washington College, Virginia
[23] Anti-Corruption Research Concerning Eastern Europe and the Former Soviet Union: A Comparative Analysis, John M. Kramer Distinguished Professor, Mary Washington College, Virginia

competitive electricity markets; and decentralization of payments between distribution and generation companies are other strategies that could reduce corruption.

Privatization of a utility monopoly such as a power distribution company poses special regulatory challenges. In a bribery economy, deregulation may spawn new corruption opportunities. Whenever a portion of the enterprise is privatized, the privatized portion must carry on business transactions with the public portion that are subject to corruption. For example, if accounts receivable collections are out-sourced then a vendor may be able to under-report collections and if power generation is privatized, power vendors may be able to over-report sales. Again, accounting guidelines, budgetary transparency and auditing can help identify corrupt behaviors.

A potential industry architecture would minimize the role of the public sector without creating a private sector monopoly. It is anticipated that as micro-generation of power (e.g. with combine-heat and power systems or from alternative energy sources) becomes popular, many large industrial and commercial consumers will generate their own power. This new technology may encourage proliferation of small-scale utility cooperatives that could create a new kind of power distribution architecture with little scope for the government to become involved.

Other approaches may include formation of “integrity pacts” (IPs) to help governments, businesses and civil society establishes mutual contractual rights and obligations. IPs are typically developed for contracts between state-owned enterprises and private entities interested in obtaining such contracts. Integrity Pacts thus aim at enabling the bidders, or the contractor implementing the contract, to abstain from bribing. Whenever possible, IPs should cover all the activities related to the contract from the pre-selection of bidders, the bidding

and contracting proper, through the implementation, to the completion and operation of business[24].

**Summary and Conclusions**

The time-sensitive nature of energy resources, combined with the possibilities of generating considerable economic rents from energy extraction, transformation and use, as well as the need for large capital investments and procurements, as well as a central role of government agencies to oversee virtually all aspects of the energy sector – whether privatized or not – make the energy sector a prime target for, and source of corruption. Corruption occurs in many different forms, depending on features of the supply chain of each specific energy source, the significance of that specific energy source in the local and national economy, the sociopolitical and institutional context within which extraction, transformation and use occur, the number of individuals participating in decision making and the cultural environment within which decisions are made, and the transparency of those decisions and accounting methods, as well as a lack of effectiveness of legal systems to sanction abuse of power by decision makers. Efforts to reduce corruption need to simultaneously consider each of these issues in order to be effective. However, empirical and anecdotal evidence suggest a set of general recommendation that may be followed:

*Privatization and Development of Markets:* To the extent that privatization exposes producers to the incentives and disciplines of the market, it serves as a natural counterbalance to corruption among company managers, who may be for the first time answerable to private owners with an interest in protecting and increasing the value of their assets. [25] However, privatizing the power sector is

[24] Transparency International (2001) The Integrity Pact (TI-IP): The Concept, the Model and the present Applications: A Status Report (http://www.transparency.org/building_coalitions/integrity_pact/i_pact.pdf)
[25] Lovei, L. and A. McKechnie (2000) "*The Cost of Corruption for the Poor: The Energy Sector*", The World Bank group, Private Sector and Infrastructure Network, Washington, D.C.

not a panacea and benefits of markets may only be realized if they are supported by the appropriate institutions. Among such institutions may be independent energy regulatory bodies that help increase accountability and transparency. Similarly, international management contracts may help improve governance. It is thus a cooperative process between the government. the private sector and non-government organizations[26] that can help make privatization and market-orientation a successful anticorruption strategy.

The development of markets (such as sophisticated national and international markets for energy sources and energy-system infrastructure for transformation and distribution) need social peace and the enactment of enforceable laws. Corruption is more likely to retard than augment commerce and contribute to the very existence of poor laws and weak legal systems.

In cultures used to public sector corruption, corruption seems to continue to thrive when an organization moves to the private sector. While the private sector may not have a formal monopoly, given time and quality constraints on the purchaser, the seller's employees may still be in a position to extract monetary "inducements" from the situation. The lack of accountability in newly privatized firms without adequate financial controls allows employees to take personal advantage of their corporate position in much the same way that lack of accountability in the public sector enables civil servants to abuse their public sector positions for personal gain. This is often exacerbated by the fact that public officials are intricately involved in the process of privatization and often hold personal and financial stakes, e.g. in the form of shares, board memberships and voting rights.

[26] Asian Development Bank (2000) "*Developing Best Practices for Promoting Private Sector Investment in Infrastructure – Power*", Washington, D.C., p. 28

*Decentralization of Political Decision-making:* It has been argued that decentralization improves governance and public service delivery by increasing "allocative efficiency" by better matching public services to local preferences, and "productive efficiency" through increased accountability of local governments to citizens, fewer levels of bureaucracy, and better knowledge of local costs. The allocative efficiency argument presumes that citizens are able to "vote with their feet" (e.g. citizens are free to find alternatives to centralized power supply) while the productive efficiency argument assumes that decentralization occurs within an institutional environment that provides political, administrative and financial authority to local governments, along with effective channels of local accountability and central oversight[27].

Empirical evidence on the links between decentralization of power and corruption are mixed. Fisman and Gatti[28] find that countries where sub-national governments control a large share of expenditures are less corrupt, but acknowledge that this could be driven by reverse causality, as the central governments in highly corrupt countries are unlikely to devolve expenditure authority to local governments.

*Development of Alternative Energy Sources:* A key obstacle to many anti-corruption efforts lies in the highly centralized nature of the energy sector, which requires large capital investments, large (public and private sector) bureaucracies, and has high stakes associated with decisions. In contrast, a decentralized energy system may rely more heavily on local energy sources to meet local needs – solar collectors on rooftops, or combined heat and power

[27] See Kahkonen, S. and A. Lanyi (2001) "*Decentralization and Governance: Does Decentralization Improve Public Service Delivery?*" The Development Economics Vice Presidency and Poverty Reduction and Economic Management Network, PremNotes, June 2001, Number 55, The World Bank, Washington, D.C.

[28] Fisman, R. and R. Gatti (2000) "*Decentralization and Corruption: Evidence across Countries*", World Bank Policy Research Working Paper 2290, Washington, D.C.

plants for small residential neighborhoods or businesses, windmills for local energy generation, or local biomass-to-energy conversion facilities. Decentralization of the energy system may provide more control to locals over energy supply and thus help reduce opportunities for corruption by complementing privatization of the energy sector, development of energy markets, and decentralization of the political decision making process.

*Strengthening Legal Systems:* For legal systems to be effective in fighting corruption, laws prohibiting corrupt activities must be in place, police force and prosecutors must be effective in investigating corruption and bringing charges against offenders, and the judiciary system must act in a fair and impartial manner. A strengthened legal system may involve establishment of an Inspector-General or an Anti-Corruption Commission with powers to investigate corruption and bring charges.

*Transparency and Development of Civil Society:* Since granting authority without accountability can lead to corruption and lower productive efficiency, decentralization of the political decision making process and privatization of the energy sector need to be accompanied by reforms that increase the transparency and accountability of local government and business decision makers. Providing citizens with information about government and business activities and an opportunity to have their voices heard is key to transparency and development of a strong civil society. It requires the media to play a crucial role in information dissemination and education[29], and Freedom of Information (FOI) legislation to support the information collection and dissemination activities of the media and citizens.

[29] See Kahkonen, S. and A. Lanyi (2001) "*Decentralization and Governance: Does Decentralization Improve Public Service Delivery?*" The Development Economics Vice Presidency and Poverty Reduction and Economic Management Network, PremNotes, June 2001, Number 55, The World Bank, Washington, D.C.

*Development of Codes of Conducts:* Globally active energy companies may temporarily gain market share and raise profits by engaging in corrupt practices, but when such practices are exposed, their reputation may be affected and their ability to engage in contracts in the future may be severely hampered. To ensure consistent, ethical behavior of company employees will require establishment of codes of conduct, training of employees to abide by these codes, and monitoring and sanctioning of employee behavior. To administer codes of conduct in energy companies that often have employees from different countries which hold their citizens to different legal standards of corruption, will require high corporate standards. Companies have tried to incorporate anti-corruption measures in the company policy. For instance, in case a corrupt practice is observed, it is investigated and employees involved are dismissed and, if possible, prosecuted[30].

*Collective Action:* Energy sector businesses that implement and abide by high, internationally recognized standards may together with government representatives and NGOs advise countries on possible reform of their legislation to reduce corruption. Such collective efforts may directly contribute to legislative reform and indirectly strengthen industry-government-citizen relationships, overall improve the political and economic environment within which energy-sector related decisions are made, and thus improve economic efficiency and welfare. The formation of the Petroleum Advisory Group (PAG) in Georgia is an illustration of this sort of initiative. The PAG consists of industry representatives, international energy consultants, USAID representatives and government official to look into causes of corruption within industry and to offer solutions to address corruption. Not only is the PAG involved in developing

[30] See, e.g., http://www2.shell.com/home/

recommendations for the government, it is also involved in implementing them[31].

Many of the strategies to address corruption can make good economic and political sense in their own right. In order to avoid offending local decision makers, and thus undermining their effectiveness, anti-corruption strategies may pursue these strategies without explicit reference to corruption related issues. For these strategies to be fully effective, however, will likely require pursuing several (if not all) of them at once.

[31] Shenoy, B. 2002. Personal Communications, October 23, 2002, Bhamy.Shenoy@paconsulting.com