USAID
FROM THE AMERICAN PEOPLE

ENERGY UPDATE

ISSUE 3
JUN/JUL 2005

Powering Economic and Social Development through Expanded Access to Modern Energy Services

SPECIAL REPORT: GOVERNANCE, TRANSPARENCY, RESOURCE FLOWS

What are the special governance challenges thrown up by energy riches? Two case studies provide illumination.

FEATURES

EITI aims for proper accounting of revenues from extractive industries

The Extractive Industries Transparency Initiative is engaged in ensuring revenue reliability and proper allocation for sustainable development and poverty reduction in 20 nations.

Extractive Industry Review: World Bank

The Extractive Industry Review examines the World Bank's role in linking the extractive industry with sustainable development, namely pro-poor governance, effective social and environmental policies, and respect for human rights.

Bottom of the Barrel: Africa's Oil Boom and the Poor

The poor in Sub-Saharan Africa may not reap the benefits of the continent's oil boom. How can petrodollars be effectively utilized to fuel necessary reforms throughout the region?

How High Oil Prices Impact the Global Economy

Surging oil prices and fears of supply cuts have triggered a worldwide economic downturn. Policy measures must be established to reduce vulnerability and volatility in the medium to long-term.

NOTES FROM THE FIELD

USAID Partners with BP to Develop Indonesia's Energy Resources

The Bird's Head Global Development Alliance between USAID and BP will develop valuable natural resources while building the capacity of local government and civil society organizations in Papua.

Angola to Improve Transparency in Oil and Gas Sector

USAID is assisting the government of Angola in improving transparency in the oil and gas sector, introducing medium-term fiscal policy, and stimulating dialogue between the public and private sectors.

RECENT EVENTS

USAID's Belt Addresses US Energy Association Annual Meeting

New Program Manager for South Asia Regional Initiative/Energy

REQUEST FOR PROPOSALS: METHANE TO MARKETS

Energy Update is published bimonthly by the Energy Team, Office of Infrastructure and Engineering, Bureau for Economic Growth, Agriculture and Trade. The Energy Team focuses on increasing access to environmentally sound energy services by:

- Improving policy, legal, and regulatory frameworks to establish necessary market conditions for the private sector delivery of energy services and environmental management services;
- Increasing institutional (public, private, and NGO) ability to provide or deliver energy and environmental management services in the new and enhanced markets; and
- Increasing public understanding of, and participation in, decisions regarding delivery of energy and environmental management services.

Gordon W. Weynand, Director, Energy Programs, Office of Infrastructure and Engineering

To learn more about USAID's energy work, visit

http://www.usaid.gov/our_work/economic_growth_and_trade/energy/

COMING NEXT ISSUE

Please submit articles for the AUG/SEPT issue of Energy Update. This issue aims to answer the following questions:

Regulation: Is there a role for regulators in achieving access? How can competitive regional/national markets facilitate access? What are the regulatory options for improving access?

Policy: Are supporting policies necessary to improve access to energy services? Which policies have shown results?

All submissions must be 500 words or less in length and should include contact information. The deadline for submission of articles is **August 31, 2005**. Please e-mail your articles to the Editor Davida Wood. (dwood@usaid.gov).

Articles are accepted for publication from employees of USAID, associated organizations, and contractors.

FROM THE EDITOR

This issue of Energy Update highlights various aspects of hydrocarbon resource news, from the impact of rising oil prices to new initiatives in revenue transparency. Of particular importance is our focus on the governance issues underlying the successful conversion of resource riches to economic growth. Our Special Report provides an explanation of “Dutch Disease”, the resource curse that impoverishes states that should, on the face of things, be wealthy. Our Feature articles provide an overview of global initiatives in transparency (EITI, G-8, and Publish What You Pay) as well as profiles of creative approaches being implemented by USAID. These “Notes from the Field” situate USAID in the heart of post-conflict transformations, demonstrating the critical role of energy governance in holding nation-states together (Indonesia) and in creating credible institutions in the aftermath of a prolonged civil war (Angola).

Soaring oil prices present a new set of challenges for both oil importing and (a bit counter-intuitively) oil exporting countries. We share detailed forecasts of the impact of this trend for countries at various income levels, and current thinking on policy responses at the macro and micro levels.

Within the Energy Team, the Energy Sector Governance (ESG) program staff provide developing countries and USAID Missions with technical support and development tools with which to design and implement energy sector governance programs. This assistance is particularly important because of the transboundary nature of resource flows and the centrality of energy security from both geopolitical and national perspectives.

The ESG program staff welcomes your comments, ideas and suggestions in all areas of energy sector governance.

Your contacts are:

Mark Murray, Program Manager, email: mmurray@usaid.gov

Davida Wood, email: dwood@usaid.gov

Ellen Dragotto, email: edragotto@usaid.gov

Kevin Warr, email: kwarr@usaid.gov

Mark Schlagenhauf, email: mschlagenhauf@usaid.gov

Rajiv Rastogi, email: rrastogi@usaid.gov

Walter Hall, email: whall@usaid.gov

Davida Wood
Editor
Energy Update

Special Report: Governance, Transparency, Resource Flows

Resource Flows - Oil and Gas Revenues: Managing a Mixed Blessing

On the face of it, the exploration and exploitation of hydrocarbons would seem to be an obvious remedy for a country's economic difficulties. Energy sector development can have a positive impact on growth through increased investment, corporate profits and domestic spending. It can provide additional fiscal resources and room for governments to spend on poverty reduction and ease existing debt problems. To the extent that energy products are exported, energy sector development can provide additional export/foreign currency receipts, strengthen balance-of-payments and allow more scope for reserve accumulation. Strengthened external accounts can lead to increases in liquidity and thereby foster financial sector development.

However, historical experience in most countries provides numerous cautions with regard to hydrocarbon development. Studies have shown that over the long-term, natural resource-abundant countries (especially energy resources) have grown less rapidly than countries with scarce resources. In many countries, the discovery of oil and gas reserves has lead to the so-called Dutch Disease, an economic phenomenon in which the discovery and exploitation of natural resources deindustrializes a nation's economy (explained in greater detail in a separate article). Increased exports of energy can cause real currency appreciations and thereby crowd out non-oil exports and encourage consumption of imported consumer goods (as opposed to domestically produced goods). Increases in imports can be difficult to pare back when external revenues fall because of negative price shocks requiring sharp reductions in domestic demand to correct emerging external imbalances. When Central Banks resist nominal currency appreciations, rapid increases in money supply occur, which translates into inflation.

At a microeconomic level, energy sector development increases the allocation of resources to capital-intensive sectors. Coupled with Dutch Disease effects, this impairs employment creation and can lead to structural unemployment. Dutch Disease effects impair entrepreneurial activity, lower new business creation and reduce productivity increases in the non-oil economy.

Additionally, energy prices tend to be highly volatile and increased development of energy sectors make economies more vulnerable to these cyclical movements in energy prices. Run-ups in prices lead to fiscal decisions and institutional developments that are hard to reverse when prices fall, requiring painful adjustments. Instead of facing difficult decisions to pare these back when energy sector-based revenues fall, countries tend to borrow, leading to future debt problems.

Moreover, mismanaged windfalls from oil and gas revenues create economic distortions (over-consumption, inefficiency) and are a fiscal drain. Increased revenues can cause spending to rise, particularly for rigid spending items such as public wages and employment. Some countries have borrowed against future income (based on high prices), increasing their debt burdens and then facing debt service problems when prices fall (Algeria, Venezuela). When faced with negative price shocks and painful adjustment options, many countries opt to use administrative controls as their main response, further compounding economic distortions. Mismanaged oil and gas windfalls can also fuel corruption and political instability.

Properly managing a country's hydrocarbon resources is essential if those resources are to be used to increase the country's prosperity. Increased awareness of the socio-economic problems that arise from Dutch Disease has led to the utilization of preventative measures during natural resource windfalls. In principle, it is easy to avoid currency appreciation by keeping the foreign exchange earned from oil exports out of the country. But in most developing countries, such a policy is viewed as using oil money to develop someone else's economy. Stabilization funds are another means to help reduce the economic volatility associated with resource prices. Democratic, consensual, and transparent processes are more likely to ensure that the fruits of a country's wealth are equitably and well spent.

Dutch Disease, a "Curse" of Resource-Rich Nations

Dutch Disease is an economic phenomenon in which the discovery and exploitation of natural resources deindustrializes a nation's economy. The phenomenon is also known as the resource curse among economists because, on average, countries with large endowments of natural resources are outperformed by those nations that are less well endowed. In the given scenario, the value of the country's currency rises (making manufactured goods less competitive), imports increase, non-resource exports decrease. Dutch Disease becomes an actual disease if there is something special to the activities that resource extraction crowds out, such as learning by doing or economies of scale. The phenomenon was first observed in the Netherlands in the 1960s, when large reserves of natural gas in the North Sea were first exploited.

Some countries with abundant natural resources do perform better than others, and some have done well. Thirty years ago, Indonesia and Nigeria--both dependent on their oil--had comparable per capita incomes. Today, Indonesia's per capita income is four times Nigeria's. Indeed, Nigeria's has fallen. A similar pattern holds true in Sierra Leone and Botswana.

Reasons for the dismal performance of some richly endowed countries:

- The prospect of riches orients official efforts to seizing a larger share of the pie, rather than creating a larger pie. The result of this wealth grab is often civil strife and bribery.
- Natural resource prices are volatile, and managing this volatility is difficult. Lenders provide money when times are good, but want their money back when, say, energy prices plummet. Economic activity is even more volatile than commodity prices, and much of the gain made in a boom unravels in the bust that follows.
- Oil and other natural resources, while perhaps a source of wealth, do not create jobs by themselves, and often crowd out other economic sectors. When the exchange rate soars as a result of resource booms, countries cannot export manufactured or agricultural goods, and domestic producers cannot compete with an onslaught of imports.

Transparency

It is of the utmost importance that payments to governments from oil and gas companies, and key terms of project contracts such as Host Government Agreements and Concession Agreements are transparent and fully disclosed. Ideally, there should be an ex ante presumption of disclosure of these documents, which allows for redaction of or exceptions for commercially proprietary information.

The transparency and accountability of revenues, expenditures, and terms of government contracts are fundamental principles of wise management of a country's hydrocarbon resources. In the development of these resources, governments must consult with stakeholders to set transparent benchmarks for progress (*see Notes from the Field: Angola in this issue for insight into USAID's implementation strategy*). Governments should also have a clear and transparent plan for revenue management and an independent mechanism for monitoring the revenue management mechanism. Effective systems must be in place for tracking and auditing revenues and expenditures in all sectors. Commitment to budget transparency is necessary to credibly assess whether energy-related public revenues are allocated efficiently and equitably. Development assistance should be predicated upon the government of the country having in place, or committing to establish, a functioning system for accounting for revenues and expenditures in connection with the extraction and export of natural resources originating from public lands.

Energy extraction and use also have environmental consequences, which impinge on local and global populations. Financing of oil and gas projects in the developing world frequently involves multilateral development banks or development aid donors, all of which need to abide by their own environmental regulations. Wise management of the environment is thus an essential component of a country's ability to attract financing to a project, and to prosper domestically in the long run. Given this, governments should closely follow internationally recognized best practices for the use of toxic chemicals, mine closures, and emergency response for tailings pond failures. Additionally, current scientific understanding of the risks to biodiversity and ecosystem services associated with the oil and gas projects must be seriously considered.

Two case studies presented at the end of this report illustrate how to (Trinidad & Tobago) and how not to (Kazakhstan) plan energy-sector development to ensure a positive impact on the host nation's economy. Trinidad & Tobago has a detailed roadmap—called Vision 2020—to (1) maximize returns from the energy sector, (2) diversify the economy and reduce its dependence on the energy sector while achieving self-sustaining growth, and (3) ensure that the benefits of economic growth and development are shared by all citizens.

By contrast, Kazakhstan appears as if it could become another victim of Dutch Disease. The case study reveals rapidly increasing production, corruption, and little industrial diversification. However, warnings from the World Bank and other institutions may be gaining traction. President Nursultan Nazarbayev took a major step in mid June by pledging support of the Extractive Industries Transparency Initiative in requiring foreign firms to comply with its guidelines.

The initiative is designed to reduce corruption in the international oil and gas business by requiring companies to publish what they pay governments and for governments to publish payments that they receive in an effort to identify discrepancies. See first feature article, this issue, for details.

Case Study 1: Trinidad & Tobago

The government of Trinidad and Tobago maintains control of the oil and gas sector, while inviting private sector participation. In 2002, the country made an effort to wisely manage the country's oil and gas revenues, embarking on Vision 2020: "By the year 2020, we will be a united, resilient, productive, innovative and prosperous nation with a disciplined, caring, fun loving society comprising healthy, happy, and well-educated people and built on the enduring attributes of self-reliance, respect, tolerance, equity, and integrity in which:

- Every citizen has equal opportunities to achieve his or her fullest potential.
- All citizens enjoy a high quality of life, where quality healthcare is available to all, and where safe, peaceful, environmentally friendly communities are maintained.
- All citizens are assured of a sound, relevant education system tailored to meet the human resource needs of a modern, progressive, technologically advancing nation.
- Optimum use is made of all the resources of the nation.
- The family as the foundation of the society contributes to its growth, development, and stability.
- There is respect for the rule of law and human rights and the promotion of the principles of democracy.
- The diversity and creativity of its people are valued and nurtured."

Vision 2020 forms the basis for a new approach to planning for Trinidad and Tobago's future. It is an approach that is multisectoral and multidimensional in scope and involves the forging of deeper, more active development partnerships throughout the society. It aims to place Trinidad and Tobago as a developed nation in the fullest sense, in terms of the level of human development, the enterprise and creativity of its people, the success and dynamism of its economy, the standard of living enjoyed by all segments of its population, the social and institutional structures, the quality of governance, as well as, the state of the natural environment.

Moving toward Vision 2020, the government of Trinidad and Tobago has a three-tiered economic plan. First, the government aims to maximize returns from the energy sector, through increasing its participation in the value chain and raising the tax-take in a manner that is consistent with promoting a high level of investment in the sector. Second, the government aims to diversify the economy to reduce dependence on the energy sector and to achieve self-sustaining growth. The government's diversification strategy focuses on six main sectors: (1) the traditional manufacturing sector; (2) a new technologically based industrial sector; (3) tourism; (4) financial services; (5) agriculture, and (6) the small-business sector.

The third pillar of the government's economic strategy is to ensure that the benefits of economic growth and development are shared by all sections of the population. This implies that growth must be accompanied by the creation of full-employment involving permanent jobs and a high quality of health, education, and general welfare.

In addition, the Government of Trinidad and Tobago is also taking steps to improve transparency and governance in the public sector. It has publicly pledged to be accountable to the people and absolutely rigorous in the management of public funds. In this context, the current budget process will propose a transparent and effective mechanism to ensure that the rents from higher oil prices are not frittered away but are utilized for revenue stabilization, for inter-generational transfers and for strategic high quality investments that will benefit the people of Trinidad and Tobago.

Two other policy options can help countries avoid Dutch Disease. First, tax cuts on non-energy sectors can be used separately or with a Fiscal Stabilization Fund to improve the competitiveness of the non-energy economy. Offsetting the increase in fiscal revenues from the energy sector with tax cuts can also help prevent unsustainable expenditure increases. Second, targeting non-hydrocarbon fiscal balances helps countries achieve fiscal sustainability by gearing spending commitments to long-term oil rents, avoiding pro-cyclical fiscal policy.

Case Study 2: Kazakhstan Must Find Cure for Dutch Disease

Kazakhstan is flush with oil and gas revenues. It expects GDP to grow at annual rates of 6.3%-8.6% in 2004-2006. However, without targeted government policy, the long term economic consequences of the hydrocarbon boom may lead to crowding out investment in the non-petroleum sectors and appreciation of the Kazakh currency, the tenge.

Burgeoning demand for energy throughout the world has brought about the development of the country's diverse energy resources. Kazakhstan has boosted oil production by 16.6 %. Natural gas and gas condensate exports have increased by 13.2% and 30%, respectively. The country also announced plans to become the world's largest uranium producer by the year 2027.

This natural resources windfall is the strategic window of opportunity to address structural defects within its energy-driven economy:

- High-level corruption and capital flight may be the most difficult to resolve. Most often perpetrated, or aided and abetted, by top government officials, it is a net loss to the people of Kazakhstan.

- Internal energy prices must be brought to the world level. High oil prices can provide subsidies to retired or laid off workers, while closing down inefficient enterprises.

- Profits from the energy sector must be redistributed in order to stimulate social sector reform.

Partially in response to World Bank warnings, Kazakh President Nursultan Nazarbayev took a major step in mid June by pledging support of the Extractive Industries Transparency Initiative in requiring foreign firms to comply with its guidelines.

But further steps need to be taken to battle the Dutch Disease such as stimulating non-energy business development and job creation, simplifying registration for new business and reducing corporate taxes and employment payments for these newly created entities. As USAID and a number of NGOs repeatedly demonstrated around the world, micro-lending to boost entrepreneurship is yet another way to decrease unemployment and poverty.

Sources:

"Partnership for Energy and Prosperity in The Americas," Dr. Kevin Warr, USAID/Office of Infrastructure and Engineering/Energy Team.

Confronting Kazakhstan's 'Dutch Disease' March 26, 2003. This piece was originally published on the Central Asia-Caucasus Institute website. The author, Ariel Cohen, Ph.D., is Research Fellow in Russian and Eurasian Studies at the Heritage Foundation.

Kazakhstan Sees Need to Ease PSA Tax Laws, www.newsbase.com, June 29, 2005.

"We Can Now Cure Dutch Disease," Joseph Stiglitz, Guardian, August 18, 2004. Joseph Stiglitz, professor of economics at Columbia University, is a Nobel Prize winner and author of "Globalisation and Its Discontents."

Features

EITI Ensures Proper Accounting of Revenues from Extractive Industries

The goal of the Extractive Industries Transparency Initiative (EITI) is to ensure that revenues are properly accounted for and contribute to sustainable development and poverty reduction. This is accomplished by developing guidelines for host governments, companies and independent third parties in reporting, auditing, and disseminating to the public the payments and revenues related to extractive industries.

Revenues from oil, gas and mining companies, in the form of taxes, royalties, signature bonuses, and other payments should be an important engine for economic growth and social development in developing and transition countries. However, the lack of accountability and transparency in these revenues can exacerbate poor governance and lead to corruption, conflict and poverty. British Prime Minister Tony Blair announced the establishment of the initiative in Johannesburg in 2002. Since then, EITI has been engaged in programs in over 20 countries in Africa, Asia, and Latin America. For a list of countries that are either implementing the EITI or have endorsed the EITI, please visit http://www.eitransparency.org/countryupdates.htm

Developing nations are often stricken with low levels of life expectancy, infant mortality, and literacy, parlayed with high levels of instability and violence. These are also often nations of great wealth in natural resources. Thirty-five developing nations are considered petroleum-rich and 20 have vast mineral resources. Because of poor revenue management and social conditions, little improvement has been realized in terms of growth, progress, and social or political fortitude. The result of high resource dependency is Dutch Disease (see article on Dutch Disease later in issue). Only a country with a strong willingness to effectively and efficiently manage resources and revenues, make a commitment to good governance and gain the trust of its citizens can reverse this curse.

The backbone for the success of EITI is its democratic multi-stakeholder approach. It takes a determined government to implement the initiative, with the assistance of donor nations, in order to realize the potential for positive development. State-owned companies, small private companies, and multinationals need to be involved in implementing the initiative to ensure a level playing field. Business and industry associations play an important role in communicating standards and expectations to their members.

Case Update: Nigeria Improves Transparency

Nigeria has taken a leading regional role in making its petroleum revenues and contracts transparent. The most comprehensive audit attempted under EITI is Nigerian managed and funded, with the intention of restoring public confidence in the integrity of the system, accounting for oil revenues and proliferating an agenda for reform.

In January 2005, President Obisanjo submitted the NEITI Bill to the Nigerian National Assembly. The next month, the National Stakeholders Working Group, a multi-stakeholder group to implement the EITI agenda, announced the Hart Group consortium as the audit firm. The audit will consist of three streams:

- Revenue audit - payments/receipts of funds to Central Bank.
- Physical audit - measurement of oil volumes.
- Management audit- evaluation of industry processes.

The results will be reviewed and approved by the Working Group where discrepancies will be publicly reported and forward looking reviews of sector management will be published.

Case Update: Equatorial Guinea to Implement EITI

Like Nigeria, Equatorial Guinea is committed to strengthening transparency and governance in the public sector through the implementation of EITI to prepare a strategy of self-contained and focused reforms. Technical assistance was requested from the World Bank Group to help launch the initiative.

The appeal of EITI to the government of Equatorial Guinea lies in the multi-stakeholder engagement (which offers a model of transparent, consultative approach to reforms) and the potential impact on risk mitigation (which improves transparency under an internationally recognized framework).

The EITI commission, a sub-group of the Macroeconomic Committee, is responsible for fashioning agreements with industry and civil society, appointing an independent auditor, and defining reporting guidelines and timetables as a representative of the government of Equatorial Guinea. Based on the Action Plan, the first EITI compliant report is scheduled to be published in October 2005.

International groups, such as the World Bank Group and IMF, can give important political momentum to the initiative by using their experience of government reporting processes, and developing expertise, alongside bilateral donors. NGOs have a critical role to play in continuing to research the issues and to raise awareness of the importance of this initiative for sustainable development and poverty reduction. The role of civil society will be critically important in terms of using the disclosed data to hold governments accountable for its expenditure.

Implementation success hinges on EITI's ability to adapt to diverse political and technical challenges. Governments, while willing to embrace the need for transparency and governance, may have more pressing items on their agenda. Widely differing country contexts exist especially in political and social cultures, commitments to democracy, institutional capacity and the development of civil society. Outside the political realm, establishing credibility and gaining the trust of industries and civil society are essential for implementation to thrive.

Sources:

Extractive Industries Transparency Initiative, World Bank Energy Week, March 2005.

Developmental Relevance of EITI, Charles McPherson, World Bank Group, March 2005.

Increasing Transparency of Oil Revenues: The Nigerian Example, Presented to Energy Week 2005, David L. Goldwyn, Goldwyn International Strategies.

Implementing EITI in Equatorial Guinea, Silvana Tordo, Oil, Gas & Mining Policy Division, World Bank, March 2005.

Extractive Industry Review

The Extractive Industry (EI) Review was a multi-year multi-stakeholder approach headed by Dr. Emil Salim, the former environmental minister of Indonesia. It started in July 2001and was completed recently. The report concluded that Extractive Industry Projects were compatible with the World Bank Group's goals of sustainable development and poverty reduction – but only if the right conditions are in place.

The report found the three main enabling conditions needed to contribute to poverty reduction through sustainable development are:

- Pro-poor governance
- Effective social and environmental policies
- Respect for human rights

Specific energy recommendations were that the Bank increase lending to support renewable energy resource development, emissions-reducing projects, clean energy technology, energy efficiency and conservation. Natural gas lending was also endorsed including support for building new pipelines and renovating leaking ones. A specific target of increasing World Bank Group investments in renewable energies by 20% annually was suggested. The World Bank Group is currently in the process of implementing specific recommendations from this review.

The Bank endorsed two fundamental messages:

- Extractive industries can contribute to sustainable development, when projects are implemented well and preserve the rights of affected people, and if the benefits they generate are well-used, and

- There is a continuing role for the Bank Group in supporting EI provided its involvement supports poverty reduction and sustainable development.

Future World Bank investments in extractive industries will be selective, with greater focus on the needs of poor people, and a stronger emphasis on good governance and on promoting environmentally and socially sustainable development. Specific responses include prompt actions in the following areas:

- Strengthening governance and transparency;

- Ensuring that extractive industry benefits reach the poor;

- Mitigating environmental and social risks;

- Protecting the rights of people affected by extractive industry investments;

- Promoting renewable energy and efficiency to combat climate change;

- Improving organizational coordination;
- Establishing a working level advisory group on EI; and
- Making progress reports to the Board every year on the EI sector-these reports will be made public.

Civil Society Response to the Extractive Industry Review

The Extractive Industries Review's central finding--that the World Bank Group's past and present support for extractive industries has failed to demonstrate a contribution to poverty reduction--led it to conclude that the World Bank Group must adopt significant changes at the policy, portfolio and operational levels if its support for extractive industries is to have any chance of contributing to poverty reduction in the future.

Since the final report of the Extractive Industries Review was issued in December 2003, a variety of actors around the world have expressed support for its recommendations. One such group comprising of 300 civil society organizations (CSOs) sent a letter to the World Bank Group (WBG) with an appeal that the World Bank implement the reforms proposed in the Review's final report. Among the opinions expressed in the letter are that the WBG should require project sponsors to obtain free, prior and informed consent (FPIC) from indigenous peoples and affected local communities before undertaking extractive industry activities, and that the World Bank Group should phase out its support for oil and coal investments and increase its support for renewable energy.

An excerpt from the letter follows:

“We congratulate the EIR for recognizing climate change to be a profound threat to sustainable development and poverty alleviation and we strongly endorse the recommendation for the World Bank to immediately end its support for coal mining and to phase-out financing for oil projects by 2008.

By shifting financial support from fossil fuels to new renewable energy, the Bank could play an important catalytic role toward new renewable energy development in the South, in turn leveraging significant global benefits. We would like to also highlight the EIR's endorsement of the right of free, prior and informed consent for indigenous peoples and the importance of securing a “social license” from affected communities to operate before projects proceed. While this right is already recognized for indigenous people under international law, other communities often have very little influence over project decisions despite the significant impacts that extractive industry operations have on their livelihoods and on the environments on which they depend. Empowering communities is not only the right thing to do, it will also spare the Bank and project sponsors considerable reputational risk and added cost.

Recognition of and respect for human rights is one of the core elements of sustainable development. Despite your best efforts to date, which we recognize and applaud, the World Bank is far behind many other intergovernmental organizations in accepting its human rights responsibilities, including the rights of workers, and in integrating these and other human rights-related issues into its operations and programs. As the EIR correctly concludes, this is not a matter of discretion but rather it is a matter of compliance with international law that is binding on the Bank; it is also sound development practice.”

Sources:

http://www.bicusa.org/bicusa/issues/energy_and_extractive_industries/1361.php

http://www.eireview.info/doc/Global%20sign%20on%20letter.pdf

G8 Transparency and Anticorruption Initiative

The leaders of the Group of Eight (G8) nations have encouraged oil-producing countries to foster investment in their energy sectors by ensuring the openness of their markets with transparent business practices and regulation. The G8 comprises Canada, France, Germany, Italy, Japan, Russia, the United Kingdom and the United States.

The G-8 has taken a slightly different and more comprehensive approach than the UK-led Extractive Industry Transparency Initiative (EITI).

The EITI has focused on transparency of revenues as an initial step to promoting good governance in countries with significant extractive sectors, whereas the G-8 initiative looks at both revenues and expenditures.

The G-8 initiative was first brought up at the 2003 G8 Summit held in Evian, and was fully developed at the 2004 G8 Summit at Sea Island.

At the 2004 G8 Sea Island Summit, the G-8 governments announced their partnership with a number of developing countries to assist their efforts to increase transparency and thereby to use public resources wisely (especially in their extractive sectors). Four pilot countries, Peru, Nicaragua, Georgia, and Nigeria, entered into anti-corruption Compacts with the G-8. The Compacts will focus on transparency in public budgets, including revenues and expenditures, government procurement, the letting of public concessions and the granting of licenses.

The latest G8 meeting in 2005 at Gleneagles focused on Africa, and pledged increased support to EITI and countries implementing EITI, along with a number of other related anti-corruption and anti-bribery pledges, including extending transparency to other sectors.

Table: Anti-Corruption Initiatives in the Extractive Industry

Publish What you Pay (coalition of NGOs)	Companies report on extractive industry payments to governments
UK's EITI	Governments report on payments received from extractive industries
G-8 Initiative	Looks at both revenues and expenditures-includes non-extractive sectors

USAID's Oil and Conflict Management Toolkit

USAID's Office of Conflict Management and Mitigation (CMM) is currently working on an "Oil and Conflict Toolkit." The toolkit aims to inform USAID mission staff and external partners about the linkages between oil and violent conflict and identify how development assistance can be used to prevent, manage, or mitigate conflict. The toolkit incorporates a discussion of programming options and lessoned learned.

Sources:

Extractive Industry Review, World Bank, September 2004.

Oil and Gas and Conflict, Development Policies and Approaches, USAID, April 2005.

Bottom of the Barrel: Africa's Oil Boom and the Poor

Sub-Saharan Africa is in the midst of an oil boom. Foreign energy companies are investing billions of dollars in the region for exploration and production. And African governments, in turn, are receiving billions of dollars. The revenues available to reduce poverty are ballooning. Catholic Relief Services (CRS) conservatively estimates that Sub-Saharan African governments will receive over $200 billion in oil revenues over the next decade, enabling them to vastly improve lives through investment in health, education, and other vital necessities. The dramatic development failures that have characterized most other oil-dependent countries around the world, though, warn that petrodollars have not helped emerging nations.

Africa is fast becoming a key supplier of oil to the United States, which already imports 17% of its petroleum from Sub-Saharan Africa. In a decade, nearly a quarter will come from the region. More than $50 billion--the largest investment in African history-- will be spent on African oil fields in the next seven years. Many outsiders will benefit greatly from the oil boom; oil companies will make large profits and northern governments and consumers will secure new supplies. But these benefits cannot be at the expense of millions of Africans. However, unless democratic institutions and administrative capacity of Sub-Saharan nations are improved, it is unlikely that Africa's oil exporters will be able to use petrodollars to fuel poverty reduction.

The Need for Transparency. Oil is a natural resource owned by all Africans. Nevertheless, many aspects of the oil industry in Africa are concealed or shrouded in mystery. Key production facts are often treated as state secrets. Thus, it is virtually impossible to track how much money is being generated or how these revenues are spent. Transparency depends on multinational oil companies publishing what they pay and governments revealing what they spend.

The Responsibility for Change. The primary responsibility for managing Africa's oil wealth in a transparent, fair, and accountable way lies with Africa's governments. Other key actors determining the outcomes of this boom are foreign oil companies, international lending agencies, the governments of Northern Africa and the US.

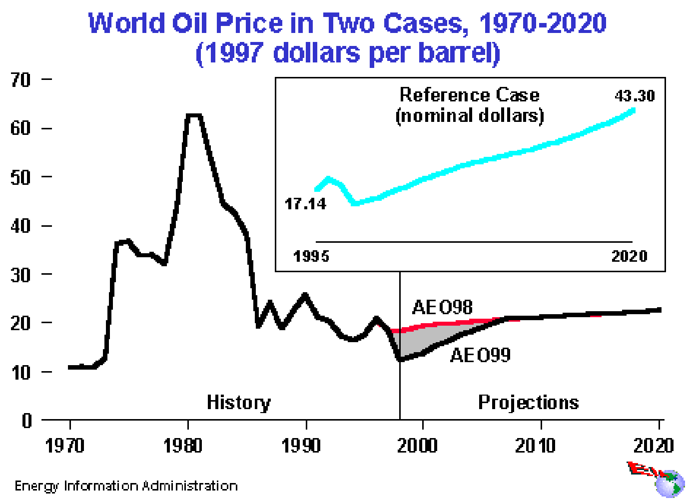
The Need for a "Big Push." To improve outcomes for the poor, all these actors need to make a "big push" to change some of their practices and work together in a more concerted manner. Unless this happens, Africa's oil boom is unlikely to foster any significant poverty reduction. Instead, oil riches most probably will continue to produce corruption and mismanagement, environmental destruction, human rights violations, and conflict.

Source: Bottom of the Barrel - Africa's Oil Boom and the Poor, Catholic Relief Services, June 2003.

How Higher Oil Prices Impact Low-Income Countries and the Poor

Recent oil-price increases have created widespread concern about their impact on low-income countries and on poor households. World Bank research shows that a sustained oil-price increase of $10/bbl (barrel) would reduce GDP by an average of 1.47% in countries with a per-capita GDP of less than $300. Even countries in the highest income group (per-capita GDP of more than $9000), would suffer an average loss in GDP of 0.44%. Countries with the lowest incomes would lose up to 4% GDP.

Impact on World GDP and Trade. Following a global oil-price rise, world GDP typically falls below where it would otherwise have been. For oil importers, there's an additional negative impact on oil importers because, on average, their income from exports of domestic goods decreases. The reduction in world GDP is estimated by the World Bank at about 0.5% the year following an oil-price increase of $10/bbl. This translates to a loss in buying power of more than $250 billion. For oil-importing countries, there's a further reduction in GDP of about 0.5%.



While oil prices are 40 percent higher than a year ago, they would need to surpass $90 a barrel to exceed the inflation-adjusted peak set in 1980.

A quantitative exercise conducted by the International Energy Agency (IEA), in collaboration with the OECD Economics Department and the International Monetary Fund Research Department, confirmed the World Bank's assessment stating that the GDP of Euro-zone countries dropped by 0.5% in 2004. Inflation rose by 0.5% during the same period. US GDP decreased by 0.3% in 2004, largely because its indigenous production meets a larger share of the country's oil needs than it does in the Euro-zone.

The IEA also found that the loss of GDP in Asian nations for the year following a $10/bbl increase would average 0.8% (1.6% in very poor, highly indebted countries). In "real" numbers, India spent $15 billion or 3% of its GDP on oil imports in 2003—16% more than it did two years earlier. Sub-Saharan African countries are impacted most severely—a 3% loss in GDP on average.

Impact on Households and Small Businesses. The direct effect of oil-price increases on households is higher costs for petroleum-based fuels used for cooking, heating, and transportation, as well as for other goods that require petroleum in their production. Small and medium-size enterprises also are likely to feel the impact of higher fuel costs. The sustainable development of these businesses may be adversely affected, depending on the magnitude of the price increase and price volatility.

Note that in countries where petroleum products are subsidized, higher oil prices have virtually no impact on households—at least initially. However, the deterioration of the fiscal position means less government spending. Since much of this spending might have benefited the poor, the attempt to protect them by across the board subsidies on petroleum products may be unsustainable. An understanding of the dynamics of fuel choice and energy efficiency by oil-importing countries is key to identifying the policies by which the vulnerability to oil shocks can be reduced.

Impact on Countries that are Net Oil Exporters. For these countries, higher oil prices mean a substantial improvement in their balance of payments. The lowest income group (per-capita income of less than $900) would enjoy an average 5.21% improvement in GDP. For the poorest countries, such as Angola, a $10/bbl oil-price increase would boost GDP by 30% in the first year.

Interestingly, the IEA study revealed that the economic stimulus provided by higher oil-export earnings of OPEC and other exporting countries would be outweighed by the depressive effect of higher prices on economic activity in the importing countries. The transfer of income from oil importers to oil exporters in the year following the $10/bbl price increase would amount to roughly $150 billion. A loss of business and consumer confidence, inappropriate policy responses, and higher gas prices would amplify these economic effects in the medium term.

Policy Recommendations. In the short term, policies to address the negative impacts of higher oil prices are severely limited. Governments have little alternative but to deflate the economy in order to adjust the balance of payments. Short-term borrowing or reserve reduction may be an option for some countries. But for many this is not possible, and it is not a sustainable response to a permanent shift in oil prices.

As to the level of protection for households, where oil price rises are felt most directly, governments have to balance short-term support—that is, subsidies—and the longer-term need to let the market work in order to force the discipline of higher prices on the choice of fuels and energy practices. Oil price elasticities of demand indicate the extent to which market forces produce reactions to higher oil prices, both in terms of fuel switching and improved energy efficiency. More exact quantification of these elasticities is needed to enable low-income countries to better understand the benefits of substitution away from oil.

After Oil: Powering the Future

The August issue of National Geographic magazine states that the world uses some 320 billion kilowatt-hours of energy a day -- equal to about 22 bulbs burning non-stop for every person on the planet. Below are excerpts from articles featured in issues of National Geographic magazine that examine the impact of energy prices, demand and supply, on society.

In "**Future Power: Where will the world get its next energy fix?**" the magazine poses the question "Where on Earth can our energy-hungry society turn to replace oil, coal, and natural gas?" Please click here to read the entire story: http://www7.nationalgeographic.com/ngm/0508/feature1/index.html

In "**The End of Cheap Oil**" the magazine reports that oil supply, no longer cheap, might soon decline. Further, instability from the Persian Gulf to Nigeria to Venezuela, where most oil is found, makes oil supply fragile. But just how soon will the vital fuel become so scarce and expensive? Please click here to read the entire story: http://magma.nationalgeographic.com/ngm/0406/feature5/fulltext.html

In "**Signs from Earth**," scientists see indisputable evidence that Earth has been getting warmer and believe that human activity, in particular the burning of fossil fuels and the resulting build up of greenhouse gases in the atmosphere, have influenced this warming trend. Please click here to read the entire story: http://magma.nationalgeographic.com/ngm/0409/feature1/index.html?fs=www7.nationalgeographic.com

Sources:

USDOE Energy Information Administration, Annual Energy Outlook 2005.

Analysis of the Impact of High Oil Prices on the Global Economy, International Energy Agency May 2004.

The Impact of Higher Oil Prices on Low Income Countries and on the Poor, United Nations Development Program/World Bank Energy Sector Management Assistance Programme, March 2005.

"Future Power: Where will the world get its next energy fix?" by Michael Parfit, National Geographic, August 2005.

"Signs from Earth," by Tim Appenzeller and Dennis R. Dimick, National Geographic, September 2004.

"The Big Thaw," by Daniel Glick, National Geographic, September 2004.

"End of Cheap Oil," by Tim Appenzeller, National Geographic, June 2004.

Notes From The Field

USAID Partners with BP to Develop Indonesia's Energy Resources

The Bird's Head Global Development Alliance (GDA) marshals the combined strengths of the public and private sectors to address the needs of one of Indonesia's most-neglected but resource-rich regions. The GDA is a partnership between USAID, the most active donor in the region, and BP (formerly British Petroleum) and partners, who are developing the Tangguh Liquefied Natural Gas Project. The alliance works in combination with civil society groups, other private firms, and local governments to promote regional development in the Bird's Head region of Papua. The goal of the program is to put new resources to work for the economic and social betterment of the region while protecting a unique environment.

The end of the Suharto regime in 1998 opened the door to an era of decentralization and devolution of significant authority to local governments. In the case of Papua, decentralization was buttressed with a Special Autonomy Act that provides great local control over resources and decisions. This law seeks to redress a legacy of human rights and resource grievances by granting great local authority in exchange for a commitment by Papuans to remain within Indonesia. The fiscal impact of decentralization on Papua is enormous. Already, the budget has increased four-fold; by next year, it should reach $190 million.

Bird's Head residents are watching new resource development, and their local governments, with mixed anxiety and enthusiasm. Largely undeveloped and rural, Bird's Head (the western-most part of Papua) is home to one of the highest concentrations of marine and terrestrial biodiversity in the world. It is also home to natural resources of enormous value, including timber, fishing, oil, gas, and minerals. Until now, these have been exploited with little regard for damage to the environment, and Papuans have gained few benefits. Education levels are low, access to public services is poor, and economic opportunities are limited. The government budget for the whole of Papua, which has 22% of Indonesia's land mass but only 1% of its population, has historically been small, generally under $20 million per year, far too little to enable appropriate development.

Over the past several years, the potential for proper development of the Bird's Head has increased dramatically. ARCO (now part of BP) made a major natural gas discovery in Bintuni-Berau Bay in 1997, now the Tangguh LNG Project. The $2 billion Project will produce substantial export revenues for Papua and, particularly, the Bird's Head local governments, starting in about 2011. This revenue stream is expected to add about $200 million a year to local resources over about a 40-year period. But because previous large-scale rapid development in Papua has led to severe social problems, residents still lack the technical and organizational capacity to manage increased revenue flows and development.

The development solution is the Bird's Head Alliance, with its unique capability to marry public and private resources and competencies in a diversified development strategy that builds capacity and accountability in local management and utilization of resources. USAID's principal role will be to build the capacities of local governments and civil society organizations to manage environmental resources, generate employment, and incomes in agriculture, and provide increased access to public services. BP's principal role will be to fund and implement community development, develop Tangguh in an environmentally and socially responsible manner, support local economic development through strengthening local businesses and human resources, collaborate with USAID to build local government fiscal management, and facilitate regional spatial planning.

Contact: Jessica Tulodo, USAID/Indonesia, at jtulodo@usaid.gov, and Roopa Karia, USAID's Global Development Alliance, at rkaria@usaid.gov

Angola to Improve Transparency in Oil and Gas Sector

USAID is assisting the government of Angola in improving transparency by helping the Ministry of Finance to define the roles and responsibilities for a new Fiscal Programming Unit (FPU). A vital part of recovery and reform efforts are focused on increasing transparency in the oil and gas sector. Angola remains in the recovery process after 30 years of civil war: enduring economic despair, a fragmented society, and a crippled political system. Last year, Angola was listed near the bottom of Transparency International's Corruption Perception Index and the country's difficulties have been highlighted in recent publications from Global Witness and Catholic Relief Service, among others. Progress is a delicate matter throughout Africa, and so the overall objective of USAID's work in Angola is conflict aversion and resolution, stabilization, recovery, and reform.

The FPU will support and strengthen the Office of International Economic Studies and Relations (OIESR) of the Angolan Ministry of Finance. The FPU will assist in the design of systems and procedures to consolidate and generate reliable public accounts, and it will provide training in basic and advanced macroeconomic/financial analysis. The FPU will represent a critical step in promoting greater transparency, institutional capacity, and the availability of information, according to the World Bank and other donors.

The project has two objectives: The first is to improve procedures to process, report, and analyze monthly public sector, financial performance data. The goal is to formulate trustworthy public accounts for government policy-making and for external donors. Angola's public-sector financial data have significant inadequacies and inconsistencies. As a consequence, financial accounts are considered insufficiently reliable or timely for policy management, and external credit operations or formulation of an IMF program.

The second objective is to facilitate the introduction of medium-term fiscal policy as envisaged under full implementation of the Integrated Financial Management Information (SIGFE) system. This would enable the government to more effectively plan development and poverty programs. Effective macroeconomic policy would help ensure that expenditure programs are carried out within financial constraints. However, since policy measures can only be credible and useful when based on accurate data and accounts, the first objective is the primary focus of the USAID assistance.

Additionally, USAID is working with Angolan civil society to promote national capacity in public policy research, as well as public-private dialogue and debate on economic growth concerns. Institutions such as the Center for Economic Studies and Scientific Research (CESSR), an independent think-tank affiliated with the Catholic University of Angola, serve as catalysts for key economic and private-sector reforms, particularly in the macroeconomic and agriculture arenas and create the foundation for public/private sector dialogue.

CESSR also provides sources of economic data and analysis in a monthly newsletter and quarterly bulletin on key economic and business issues related to economic development in Angola. The first-ever locally produced Annual Report on the Angolan Economy was published last year. In partnership with ExxonMobil, the quality of CESSR's research has been improved and has begun to reach out to a broader audience in order to improve the relevance of its research. USAID is considering expanding the role of CESSR to include a clearinghouse for information from all sources regarding transparency in Angola's oil and gas sectors. This will allow civil society to easily access information in order to make cogent analyses.

Contact: Eveline Viegas, USAID/Angola, at eviegas@usaid.gov

Recent Events

USAID's Juan Belt Addresses US Energy Association Annual Meeting

USEA's increasingly important role in improving the delivery of energy services worldwide was recognized in remarks made by Juan Belt, Director, USAID's Office of Infrastructure and Engineering (formerly the Office of Energy and Information Technology) at the 2005 US Energy Association Annual Meeting held in Washington DC.

Belt said, "Practitioner-to-practitioner contacts supported by your volunteers are building bridges and laying strong technical foundations for strengthening the energy sector. They also play an important role in the public diplomacy endeavors of the U.S. Government.

"Working with and through USEA, USAID is proud to have fostered partnerships between host-country utilities and regulatory bodies and their US counterparts. These partnerships have focused principally on improving economic governance of the energy sector by strengthening two of the most vital institutions in developing countries–-the utility that strives to provide services with an enhanced emphasis on commercially sound operations, and the regulator who creates and enforces the rules governing the energy market. Both of these institutions also find themselves dealing increasingly with the general public and their energy consumers, and USEA's members have assisted these institutions to improve their skills in this vital area."

Effective programs implemented by USEA:

- Power Grid Corp of Bangladesh (PGCB) has increased its technical capacity through a partnership with the Bonneville Power Administration (BPA). New transmission practices, system planning and tower designs based on those of BPA have been adopted. As a result, PGCB customers will benefit from a reduction of transmission-related service interruptions.

- Southern African Power Pool (SAPP) and PJM Interconnection have dramatically altered the governance structure of the Southern African Power Pool. Based on the PJM model, SAPP adapted a proportional representation structure that acts on behalf of the numerous stakeholders in the Southern African power transmission system.

- Baltimore Gas & Electric and Seattle City Light assisted North Delhi Power Company (NDPL) to increase power reliability through implementation of an effective outage management program. NDPL also conducted a consumer outreach program on social and safety issues related to energy theft using their experience with BG&E and Seattle City Light.

- Energy Regulatory Authority (ERA) has developed a life-line tariff to protect its low-income customers in Mongolia, based on information provided by their partners from the Minnesota Public Utilities Commission and the Delaware Public Service Commission. They have also adopted a public hearing rule to increase public involvement and maintain transparency of the regulatory process

- South Asia Regional Initiative for Energy (SARI/E) and the Energy Media Partnership have led the establishment of new associations of energy journalists in Nepal and Sri Lanka. Additionally, the SARI/E Utility Partnership has led to improvements in billing and collections and customer service programs.

- In Europe and Eurasia, USEA has been supporting partnership activities for almost 15 years and has touched over 22 countries in this region. Several of the first utility partnership countries are now full members of the European Union and others are in negotiations. The USEA program has focused over the past several years on developing regional markets and expanded opportunities for electricity trade and investment.

New Program Manager for South Asia Regional Initiative/Energy

Robyn Lyn McGuckin was recently named Regional Coordinator and Program Manager for the USAID South Asia Regional Initiative for Energy (SARI/Energy) Program. She will succeed Robert Beckman who managed the Program from its inception.

Ms. McGuckin's experience includes management of energy projects in the US and abroad for governmental agencies, multi-lateral development banks, the UN, and the private sector. Prior to this assignment, Ms. McGuckin, an engineer by education, worked for two years on the Iraq Infrastructure Reconstruction for USAID, including one year in Iraq managing the USAID electricity sector construction programs and a tour as USAID liaison to the Pentagon. While in Iraq, she was also the senior advisor of the Ministry of Electricity for the US Coalition Provisional Authority (CPA).

Request For Proposals

Methane To Markets

USAID's Bureau for Economic Growth, Agriculture and Trade (EGAT) would like to make a special call for the submission of concept papers related to President Bush's announcement on the International Methane to Markets Partnership.

The Methane to Markets Partnership is an international initiative that focuses on advancing cost-effective, near-term methane recovery and use as a clean energy source. The Partnership will reduce global methane emissions to enhance economic growth, promote energy security, improve the environment, and reduce greenhouse gas emissions. Other benefits include improving mine safety, reducing waste, and improving local air quality. The goals of the Partnership will be accomplished through collaboration between developed countries, developing countries, and countries with economies in transition - together with strong participation from the private sector, development banks, and other governmental and non-governmental organizations.

The Methane to Markets Partnership initially targets three major methane sources: landfills, underground coal mines, and natural gas and oil systems.

USAID seeks to develop alliances that bring innovative approaches, promising measurable impact to support the core activities of the Methane to Markets Partnership. These core activities include:

- Identifying and promoting areas of bilateral, multilateral, and private sector collaboration on methane recovery and use.
- Developing improved emissions estimates and identifying the largest relevant emission sources to facilitate project development.
- Identifying cost-effective opportunities to recover methane emissions for energy production and potential financing mechanisms to encourage investment.
- Improving the legal, regulatory, financial, institutional and other conditions necessary to attract investment in methane recovery and utilization projects.
- Identifying and implementing collaborative projects aimed at addressing specific challenges to methane recovery, such as raising awareness in key industries, removing barriers to project development and implementation, identifying project opportunities, and demonstrating technologies.
- Developing collaborative action plans that outline a series of concrete activities and actions that directly support the core goals and functions of the Partnership.
- Developing and implementing a process for evaluating progress and reporting results.

Project proposals that address these core activities in USAID supported Methane to Market Partner countries may be submitted under USAID's Annual Program Statement (APS) No. GDA-05-001. The list of Methane to Market Partnership countries for which USAID is soliciting proposals are the following: **Brazil, Colombia, Nigeria, India, Mexico, Russia, and the Ukraine**.

The USAID Missions and Washington operating units will be responsible for the proposal review process and management of the award process. Applicants are required to submit short concept papers to USAID missions or to the appropriate Washington operating unit for regional or global projects. Applicants may receive instructions on whether or not to proceed with a full proposal. Technical comments provided on the concept paper should guide the submission of the full proposal.

While the Methane to Markets Partnership is in effect for five years, proposals for funding during the current fiscal year must be submitted before the close of the fiscal year on September 30, 2005. Proposals submitted after September will require submission under the 2006 APS.

For information regarding guidelines and procedures to submit a concept paper, please refer to the APS posted by the USAID Global Development Alliance (GDA) Secretariat dated November 2, 2004. The APS can be found at the following website: www.usaid.gov/gda.

In addition to the USAID supported countries, the Methane to Markets Partnership includes the following member countries: Australia, China, Italy, Japan, South Korea, the United Kingdom, and the United States. Concept papers and proposals for these countries will be entertained by the other US government agencies involved in the partnership (EPA, DOE, TDA, and State Department). These proposals should be submitted first to USAID's Energy Team Leader, Gordon Weynand (GoWeynand@usaid.gov) for referral to the appropriate government agency.

Before submitting a concept paper we encourage applicants to speak with key technical staff involved in the Methane to Markets Partnership and/or the appropriate USAID point of contact. These staff can inform you whether or not your idea is appropriate to the country of interest and aligned with Methane to Markets Partnership goals in the country. Below is a list of Mission Staff and Washington DC staff working on Methane to Markets and/or public-private alliances:

USAID Mission Staff

Brazil
Dick Goughnour (Rgoughnour@usaid.gov)
Nena Lentini (nlentini@usaid.gov)

Colombia
Scott Taylor (SCTaylor@usaid.gov)

India
David Heesen (Dheesen@usaid.gov)

Mexico
Sara Walter (swalter@usaid.gov)

Nigeria
Anne Fleuret (Afleuret@usaid.gov)

Russia
Orion Yeandel (Oyeandel@usaid.gov)

Ukraine
Gary Linden (Glinden@usaid.gov)

Washington DC Staff

For Oil and Gas Sector

Mark Schlagenhauf P.E.
Energy and Infrastructure Advisor
Global Oil and Gas Division
Bureau for Europe and Eurasia
USAID
1300 Pennsylvania Ave., NW
Washington, DC 20523
Tel: 202-712-4425
Fax: 202-216-3389
e-mail: mschlagenhauf@usaid.gov

For Landfill Sector Projects

Edgar Thornton
Urban Programs
Bureau for Economic Growth, Agriculture, and Trade
USAID
1300 Pennsylvania Ave., NW
Washington, DC 20523
Tel: +1.202 712 5867
FAX: +1- 202-216-3389
e-mail: ethornton@usaid.gov

Additional background information on the Methane to Markets Partnership may be found at www.methanetomarkets.org