

United Republic of Tanzania

Tanzania Gas Sector Scoping Mission

Dar Es Salaam

October, 15-19 & December, 10-13, 2012

Final Report

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Final Report

1. At the request of the Government of Tanzania (GoT), a high-level scoping mission visited Dar es Salaam during the period of October 15-19 and December 10-13, 2012. The mission participants represented the African Development Bank (AfDB), the People's Republic of China, the United Kingdom's Department for International Development (DFID), the European Union (EU), Germany, the International Monetary Fund (IMF), and the World Bank (collectively, Partners), working together in the spirit of the Paris Declaration on Donor Coordination and Harmonization¹. The objectives of the mission included sharing lessons from international experiences of both successes and failures in managing natural resources as an input to the GoT's policy decisions going forward. This report captures the main points discussed between the mission and the GoT officials, private sector representatives and civil society representatives with whom the mission interacted. Following the mission, an aide memoire and an action plan (attached to this report) were delivered to the GoT in November and December, 2012 respectively.

2. From the outset, it is important to acknowledge that gas development is about more than gas alone. It is an opportunity for the current generation to leave a proud and prosperous Tanzania to the next generation. While a major gas export project can create large fiscal revenues, gas is also part of the solution to the nation's energy crisis and is essential for bringing private sector development, diversifying the economy, and creating inclusive growth. The country will get the best deal out of its gas if ALL Tanzanians act as stewards for the next generation and work together for a better future of the country. The current generation of Tanzanians owes this to its children and grandchildren. The country has a small window of time to take the right steps or it may soon be too late. Competition presses from other countries for gas markets; heightened domestic expectations may constrain policy choices if delayed. The time to act is now.

¹ The Mission was co-led by Albert Zeufack (World Bank), Paul Collier (Oxford University), Philip Daniel (IMF), Steve Karangizi (AfDB) and included: Zhou Ding (China) Alexander Huurdeman (World Bank), Franck Kaspereck (EU), and Markus Wagner (Germany). The mission was facilitated and coordinated by Philippe Dongier (World Bank Country Director for Tanzania) and Marshall Elliott (DFID Country Director for Tanzania). The team is grateful to Ambassador Ombeni Sefue for hosting the mission and for his effective leadership. The team is indebted to numerous staff in the institutions listed above including but not limited to: Katherine Bain, Thomas Baunsgaard, Andreas Blom, Andrea Dall'Olio, Tonia Kandiero, Richard Moberly, Jacques Morisset, Anand Rajaram, Robert Schlotterer, Nicola Woodroffe, Lydie Ahodehou and to Tanzanian counterparts for their assistance and collaboration.

3. Learning from international experience and using the information gathered during its two visits to Tanzania, the mission submits the following suggestions for the GoT's consideration. The first set of 5 suggestions addresses issues that need to be tackled urgently and have immediate effect and the second set of 5 suggestions targets issues that require action now but whose potentially beneficial impact comes only in the future.

A. Urgent actions with immediate impact

1. Communication

4. It would be advisable for the GoT to develop a communications strategy for the gas sector and define clear responsibilities for communications. The ultimate rationale for a sector specific National Communications Strategy (NCS) would be to empower a greater proportion of the Tanzanian public to effectively access, understand and participate in the ongoing dialogue on using the gas deposits as a source of national wealth. To reach this objective, it would be helpful to implement an NCS which progressively develops the public's ability to understand and analyze the complexity of the gas sector as it steadily develops and reaches the production stage. An NCS will also promote transparency and accountability, and will generate national and international support for the development of the sector through information dissemination, exchange, and sharing. An NCS is also key to preventing misconceptions about what gas development might mean for Tanzania's future. Tanzanians will not experience the benefits from gas development immediately and it is important for the public to appreciate that gas development will be a long-term endeavor.

5. Therefore, an NCS should cover, amongst others, (i) managing expectations, (ii) transparency, and (iii) preparing Tanzanian nationals to seize opportunities linked to the gas sector.

(i) Managing Expectations: As gas volumes still remain uncertain and none of the companies exploring for offshore gas has yet reached any decision to develop a field commercially and to secure a market, even if substantial, revenues may take a decade or more to flow. Gas will not turn Tanzania into a rich country overnight.

(ii) Transparency is a key to Tanzania "getting it right". The best way to provide citizens with the assurance that natural resource extraction will be used to benefit the entire population is to be transparent and explain to citizens how these resources will be exploited to improve the welfare of current and future generations. Already today, the considerable progress achieved by Tanzania in the implementation of the Extractive Industries Transparency Initiative (EITI), only recently recognized by the International

Secretariat of the EITI through declaring the country “EITI compliant”, sets an important and very positive signal on the country’s commitment to transparency in reporting on revenues from the extractives sector. However, this transparency should also include involving stakeholders in the design of the Natural Gas Policy and Natural Gas Utilization Master Plan through a national round of meaningful consultations and the provision of appropriate information to all participants ahead of discussions. In this regard, the GoT can build on its experience in developing the 2010 Minerals Policy, when stakeholders were able to provide valuable input, which significantly improved the policy. Similarly, stakeholders should be invited to participate in the preparation of new legislation, including the EITI bill, to ensure principles of transparency and accountability are enshrined in law. One important element of ensuring citizens understand how natural resources will be exploited is publishing and updating data on gas discoveries and reserves, using internationally recognized disclosure standards, committing to publishing all existing and new contracts, fiscal revenues from gas companies, an inventory of corporate social responsibility (CSR) investments and exemptions for oil companies (without creating a disincentive for investment), and continuing regular and timely audits of the Tanzania Petroleum Development Corporation (TPDC) and other companies. Proper disclosure of existing and future contracts and monitoring the social and environmental impacts of the new discoveries can be facilitated through open data, as has been done in Ghana (please see below). Additionally, GoT should include extractives as a sector under the Open Government Partnership.

Contract disclosure is becoming the norm

6. **A growing number of countries (including countries with significant capacity constraints), companies and international bodies are supporting and undertaking contract disclosure.** Liberia's 2009 EITI Law, for example, requires the public disclosure of all contracts, which appear on the LEITI website. In a recent letter to the Chair of the EITI, the LEITI Head of Secretariat stated: "To sustain and build on the gains EITI has made in helping Liberia and other countries to ably account for its extractive resources, EITI must move beyond the mere reconciliation of payments/receipts. Having published three reconciliation reports, Liberia has seen that payments/receipts reconciliation is not enough to ensure the citizens get the most from their extractive resources...Our LEITI website (www.leiti.org.lr) provides access to all contracts, concessions, and licenses assigned in respect of the oil, mining, agriculture, and forestry sectors...Our reasoning in Liberia is simple: There is an unambiguous correlation between the payments/receipts that are reconciled under the EITI principle and the contracts/concessions signed. To connect the dots we encourage the EITI Board to move towards contract transparency. The EITI should raise the bar so that it is seen as leading the process in enhancing transparency and accountability. Countries are yearning to do more because we have seen over

the years that the EITI threshold (payment/receipts reconciliation) is not enough to achieve the level of transparency and accountability needed to transform a country....” Niger's 2010 constitution mandates the publication of all oil contracts. Sierra Leone, Sao Tome & Principe, and Guinea all embedded contract transparency requirements in their oil/mining sector legislation and codes. Nigeria has included a mandatory contract disclosure provision in its pending Petroleum Industry Bill. In Colombia, and to some extent Mexico, governments allow for disclosure under freedom of information laws and policies.

7. The United States, Timor-Leste and Peru all share oil and gas contracts and licenses publicly. The Democratic Republic of Congo has published dozens of its mineral and petroleum contracts. Ghana's Ministry of Energy has made the country's most important petroleum agreements available. Congo-Brazzaville publishes all oil contracts on the Ministry of Finance website. In Bahrain, production sharing agreements that require legislative approval have been annexed to legislation and made publicly available. Afghanistan has publically released more than 200 mining contracts on the Ministry of Mines website and has pledged to release all contracts. A letter to the Chair of the EITI from Afghanistan's Minister of Finance and Minister of Mines indicated that: “Countries like Afghanistan have embraced a robust and broad approach to transparency, and EITI should match our ambitions. EITI will be effective if it codifies good practice rather than identifying the bare minimum performance levels...A webpage on the Ministry of Mines site <http://mom.gov.af/en/page/1384> now provides access to these contracts in a manner that allows citizens, journalists and other users to identify and compare specific provisions on priority issues like revenue generation as well as social and environmental impact. We believe this kind of transparency will, in the long term, improve the investment climate in Afghanistan and bolster mining sector accountability. Given that a number of countries have taken steps to embrace contract transparency, we support the proposal that EITI require contract disclosure in its new dispensation. It is an example of how EITI can export good practices, and support countries like Afghanistan which are actively working to improve mining governance.”

8. BP published its production sharing contracts in Azerbaijan. SOCAR, Amaco, Lukoil, Elf and Statoil are among the parties to these contracts. Executives at Rio Tinto and Newmont have spoken out in favor of contract disclosure. The Oyu Tolgoi investment agreement between Rio Tinto and the government of Mongolia was made public. A Newmont Mining official attested publicly that he "cannot see one reason why investment agreements are kept confidential," calling "the commercially-sensitive thing... an anachronism." Tullow and Kosmos published their Ghana production sharing contracts, with Kosmos using the contract to help reassure investors in advance of their IPO. With respect to production sharing agreements generally, Tullow has stated that they “take the position that should a government wish to make these agreements public, we would fully support them in doing so.” The ICMM, whose members are 17 of the largest global mining companies, requires that its members "engage constructively in

appropriate forums to improve the transparency of... contractual provisions on a level-playing field basis."

9. Many oil, gas and mining contracts are also publicly disclosed pursuant to U.S. Securities and Exchange Commission regulations requiring public disclosure of material contracts for public companies. The IMF's Revised Code of Good Practices on Fiscal Transparency notes that "contractual arrangements ... should be clear and publicly accessible." The International Finance Corporation (IFC) requires each IFC-backed oil, gas and mining project to disclose its "principal contract with government that sets out the key terms and conditions under which a resource will be exploited." The World Bank Group board, which includes many OECD country governments, voted in favor of this standard. The Natural Resource Charter supports licensing and contract transparency. The International Bar Association's Model Mining Agreement states: "This Agreement ... is a public document, and shall be open to free inspection by members of the public at the appropriate State office...." (Section 30.1(a)). The World Bank Institute (WBI) and GIZ are co-sponsoring the launch of Open Contracting, a multi-stakeholder initiative designed to facilitate disclosure and public understanding of large public contracts, including in oil and mining.

10. The table below provides a sample list of countries for which oil, gas or mining contracts are currently publicly available online pursuant to national legislation:

Country	On what legal basis?	Effective Date	How made available?
Afghanistan	Presidential Decree No. 45	2012	Ministry of Mines website
Democratic Republic of Congo	Governmental decree	2011	Ministry of Mines website
Ecuador	Organic Law on Transparency and Access to Public Information	2004	Petroecuador (national oil company) website
Liberia	EITI Law	2009	LEITI website
Peru	Law of Transparency and Access to Public Information	2003	Peru Petro (national oil company) website and Ministry of Energy and Mines website
Timor-Leste	Petroleum Act	2005	La'o Hamutuk NGO website

Lessons from country experience – Ghana’s Public Interest and Accountability Committee: In April 2011, The Ghanaian parliament passed the Petroleum Revenue Management Act. The law requires the government to publish information on receipts from petroleum companies online and in national newspapers on a quarterly basis. The Minister of Finance must reconcile receipts and expenditures and submit quarterly reports to parliament, and audited statements of Ghana’s oil accounts must be made public. The law benefitted from a meaningful consultation process including a Citizens Summit which brought together regional input in June 2010. The law established a Public Interest and Accountability Committee, which includes civil society activists, to monitor and evaluate compliance with the Act by the government and other relevant institutions. The committee also provides a platform for public debate on spending of revenues and gives independent assessment of their management and use through annual reports. The PIAC has just published its second report and is seen to be an exciting new innovation that increases the potential that revenues will be managed transparently in this West African nation.

Lessons from country experience – Ghana’s open data technology for monitoring the extractive industry: In 2011, the World Bank responded to a request from Ghana to use new technology to help citizens better visualize extractive industry data and use it to improve the monitoring of the new industry. With the support of the World Bank Africa Region and WBI, Ghana is piloting an interactive online mapping tool where citizens can view oil and gas wells, socioeconomic indicators, government revenues and donor-funded projects in the sector. The consolidation of this information helps policymakers and advocates better understand governance issues as they pertain to extractive industries, and could help in developing better-targeted government interventions in affected communities. It has received strong uptake with policy makers and demand side actors alike in Ghana and is now being technically managed by University of Ghana. It will be promoted through the public information centers for oil/gas as well as the civil society network. The World Bank version can be viewed at:

<http://maps.worldbank.org/extractives/afr/ghana/>

The University of Ghana, where the GIS is now housed, is now exploring the use of ICT tools to facilitate the tracking of oil spills, as well as the reporting of non-compliance. Mongolia has developed a similar map which can be viewed at: <http://mongoliamining.org/>

At the regional level, the World Bank Africa Region, together with WBI and Revenue Watch Institute, has also constructed an interactive contract database which not only provides access to all accessible contracts in Africa but provides a guide to specific terms and some analysis of how certain clauses measure up to international standards.

(iii) Opportunities for Tanzanians: It is important to prepare the population for the business opportunities that may arise from the gas industry and, equally important, from public investment out of gas revenues. Fostering linkages from the gas industry and supporting entrepreneurship is a key to harnessing the gas opportunity in Tanzania. The private sector and the GoT can cooperate to enable Tanzanian businesses and individuals to

supply goods and services to gas projects. Yet, all this requires capacity development to ensure that gas and supporting activities help to build a diversified economy. The GoT can play a crucial role in sharing information on the needs of oil companies and in supporting the development of standards for the gas sector and the upgrade of services of local providers.

11. Hence, an NCS on the gas sector should set forth a future vision, a conceptual framework, and analyses required to meet Tanzania's unique needs, as well as the plan for implementation and governance. An approach which helps the general public to understand and analyze information through progressive phases is recommended. The four phases of (i) raising awareness, (ii) education, (iii) insight and analysis, and (iv) reform and remediation can improve the quality of information disseminated and help to develop a level of public understanding and analytical capability for more meaningful participation and constructive discourse on this important national issue. The NCS would be invaluable in informing and educating the public about developments in the sector, opportunities for participation in the sector and the expected benefits from its development. Thus, the NCS should specifically:

- i. Strengthen GoT's communication leadership and foster a coordinated approach to communication by the multiple actors in the sector
- ii. Meet the information needs of the public through regular information dissemination, exchange and sharing
- iii. Promote accurate and balanced coverage of Tanzania's gas sector through proactive communication
- iv. Establish a coordination structure to synchronize internal communication across government institutions active in the sector
- v. Engage and promote communication synergies with key stakeholders such as industry actors and the media.

12. However, to effectively improve the quality of public participation, it is imperative that the GoT obtains sufficient professional resources to develop and implement the NCS. Designing the NCS could move along the following three steps:

- a) **Communications Appraisal:** In order to achieve the optimum strategic communication framework reflective of the needs, aspirations, challenges and concerns of the stakeholders, it will be necessary to conduct a comprehensive communications appraisal of the sector through consultations with various stakeholders, reviews of past and current communication efforts in addition to reviewing comparative communication strategies and relevant legal and policy frameworks both nationally and internationally. The strategy needs to be significantly informed by opinions of both individuals and

institutions that are key to the successful development of the gas sector of Tanzania. To this effect the communication strategy could also outline some lessons for Tanzania drawn from the comparative study of the other institutional and national strategies.

- b) Implementation Guide:** As an additional element, the NCS should then also define the strategy for implementation. Also, the key audiences that are expected to be reached through the communication interventions need to be spelt out in the strategy. These include government institutions, such as ministries, departments and agencies, parliament, industry actors, civil society, educational institutions, the mass media, communities in the gas areas, cultural institutions and the international community among others. Their specific interests in the sector and how they should be reached through communication needs to be outlined. The various communication channels through which communication can flow from the GoT to these audiences ought to be defined. Furthermore, a framework through which feedback from these audiences can be gathered and processed needs to be considered. The idea of having a feedback mechanism is based on the need to have a complete communication cycle.

To account for the diversity and complexities of Tanzania's society, the NCS might envisage a two-track approach. The first track should be premised upon direct communications to the general public through traditional media. The second track should focus upon an Opinion Leader Strategy, which is particularly useful for enabling the effective transformation of the public dialogue pertaining to the gas sector. Following such a strategy, a strong champion with the authority to act would be responsible for coherence of government communication regarding gas development and would be responsible for ongoing oversight and management responsibilities associated with the NCS.

- c) Implementation Frameworks:** Finally, the NCS should set forth an implementation framework, which focuses on strategic communication planning and a systemic approach to GoT communication on the sector. The levels of communication from the national to local levels, with emphasis on clearly defined communications functions, structures and reporting mechanisms need to be defined.

13. The strategy further should take into account the need for sustained communication and the reality of risk in communication. To this effect, a framework for risk management while ensuring sustained communication interventions should be provided for. Key aspects of this framework could include (i) guidelines for message development, (ii) an issues management framework as well as (iii) a crisis communication plan.

14. For purposes of tracking implementation and evaluating the impact of communication interventions, the NCS should outline both quantitative and qualitative methods. The monitoring and evaluation framework could be completed by an implementation matrix that describes, for example, the communication needs, related activities, tools and/or channels of communication, responsibility centers, implementation timeframes, output indicators and outcome indicators. The implementation matrix would be finally supported by a work plan that details implementation plans.

15. This strategy, if consistently implemented over the short and medium term should achieve its goal to build national, regional and international support for the gas sector in Tanzania and foster development and transformation through information dissemination, exchange, sharing, and participation.

Lessons from country experience – the early days of Nigerian oil: When oil was first discovered in Nigeria in 1956, there was jubilation not only in the vicinity of the finds but all over the country. That euphoria was based on the assumption that oil was wealth and that Nigeria would become quickly prosperous. The historical absence of information pertaining to Nigeria’s oil and gas sectors however is notorious. In the past, where scarce information has been forthcoming from Nigerian government agencies and commercial operators, the credibility of such information has been seriously challenged by the public. The product of these challenges ranges from a pervasive sense of economic disenfranchisement felt by a vast majority of Nigerians to violent conflict, for example, in the Delta region where the conflicts over wealth distribution associated with oil and gas production have been particularly significant. The discovery of oil and gas in the Niger Delta is even enumerated as one of the causes of the Nigerian civil war. The lack of a distinct communications strategy of the Nigerian government remained pertinent for a long period. It is only recently, that the N-EITI Communications Strategy aims to remedy this situation embarking on a tripartite dialogue amongst government, the private sector and civil society.

Lessons from country experience –the national communications strategy of Uganda: The first commercial discovery of oil in Uganda was made in 2006. Twenty discoveries have since been made, with five of these now at the development stage. These recent developments have heightened both anxiety and expectations in the country’s population. Most of the anxiety arises out of an absence of regular and up to date information regarding developments in this sector. The recently approved National Oil and Gas Policy of Uganda recommends putting in place and implementing a communication strategy specifically designed for the sector. Implementation of this strategy is expected to bridge the communication gap between the oil and gas industry and the general public and effectively address the anxiety and expectations referred to above. Other objectives cover local content development strategies for the oil and gas sector that will promote indigenous private sector service provision and competitiveness. This is being achieved through the establishment of training institutions and capacity building programs well before the gas sector has reached the stage of production and Uganda experiences a significant revenue inflow.

2. Ensuring inter-agency coordination

16. **Tanzania needs a strong champion with the authority to act to ensure policy coherence for gas development.** For gas to form the platform to diversify the economy and put Tanzania on a sustainable growth path, strong coordination across agencies and linkages across sectors need to be built. Broadening the debate to a wide range of stakeholders in the country, working across silos and ensuring policy coherence are essential. Effective development of gas requires consideration of fiscal issues, environmental issues, educational issues and more. For example, the environmental obligations placed upon oil companies must be harmonized with the GoT’s broader environmental management goals and priorities, and should be enshrined in environmental law. Environmental legislation and regulations should adequately account for the environmental concerns that development of the gas sector will raise and decisions on the development of the gas sector must take into consideration environmental protection and conservation concerns. Similarly, local content and local training obligations placed on oil companies should be coordinated with national policy aimed at increasing the capacity to supply such local content and training obligations should be considered in light of the GoT’s broader goals to increase skills and capacity that will be applicable beyond the gas sector and that can fuel the development of other sectors of the economy.

17. An effective way to facilitate the kind of inter-agency or inter-ministerial coordination that gas development will require is to establish an inter-ministerial committee charged with such coordination. Such a committee can facilitate input from across ministries in the design of policy or drafting of legislation thus leading to better ideas; can facilitate the sharing of information, technical and otherwise, across the government, which can enable ministries and agencies to better take advantage of one another’s strengths for accomplishing their respective goals and

missions; can facilitate harmonization of policies across ministries; and can provide a forum for clarification of roles and responsibilities among ministries, thereby reducing conflict and competition among ministries over subject and policy areas.

18. Inter-ministerial coordination can be served by establishing a cabinet-level committee or by civil-service level committees. The disadvantage of the latter, however, is without high-level representatives the committee may lack sufficient authority and high-level buy-in to make its work effective. The committee may devise recommendations, but these recommendations may be ignored or not properly implemented.

19. Cabinet-level or high-level committees are typically chaired by the head of government, with a minister delegated the responsibility for convening the committee. Leadership from the head of government's office is often necessary to give the committee sufficient weight. Its members are likewise appointed by the head of government. Committees should have an annual work program setting forth goals, priorities and targets to be met. The committee should periodically provide reports to the government detailing progress made on the accomplishment of specific goals and targets. Cabinet committees can be responsible for reviewing and providing input on proposed legislation relevant to the committee's mandate before such legislation is brought before the government (Metcalf and Lavin, 2012). The committee can also be responsible for soliciting and coordinating input from business and civil society stakeholders.

20. To assist the work of the committee, a secretariat should be established. The secretariat's role could include those of a typical cabinet secretariat but its responsibility would be specifically to assist the committee in the following ways:

- Scheduling committee meetings
- Preparing the agenda of committee meetings in consultation with the committee chair
- Preparing and circulating papers to brief committee members ahead of meetings
- Drafting and issuing committee correspondence
- Issuing committee minutes

21. Civil service-level committees are made up representatives from civil service level (or political appointee) level of ministry. They are generally created pursuant to a governmental act or decree and are headed by a particular ministry, as represented by a civil servant of such ministry, and include civil servant representatives of other relevant ministries. Such committees are a forum for information sharing, for involvement of all affected ministries in decision-making thereby facilitating later implementation, and for resolution of inter-ministerial or interagency conflicts. Such committees may serve to support the work of a cabinet-level committee created for the same purpose (Greer, 2012).

22. GoT should therefore establish a high-level Authority, which could include representatives of the Ministry of Energy and Minerals, Ministry of Finance and Economic Affairs, Bank of Tanzania, The President's Office Planning Commission, Ministry of Education and Vocational Training, Ministry of Labour, Employment and Youth Development, Ministry of Industry, Trade and Marketing, the Vice-President's Office for Environment, the Attorney General's office, Tanzania Revenue Authority and the Tanzania Petroleum Development Corporation. A secretariat for such Authority should also be established.

23. Tanzania's high-level Authority on gas issues could provide leadership for the design and implementation of the Natural Gas Policy and Natural Gas Utilization Master Plan and for coordinating stakeholder input on both before they are presented to the entire GoT. Such authority could also design and implement a communication strategy for the Government and be responsible for coordinating Partners and ensuring that capacity building efforts are coherent and take place across sectors rather than fragmented and piecemeal. The high-level group that discussed the proposed Draft Action Plan with Partners could form the bedrock for the proposed Authority. A highly credible member of the civil society known to champion transparency, including in the area of extractive industries, could be a welcome addition to the Authority.

24. Without collaboration, responsibilities may not be clearly defined, efforts may be duplicated across different ministries and ministries may even work at cross-purposes. This is often the case when the roles and responsibilities of each institution in the gas/petroleum sector are not clarified. Inherent conflicts of interest exist, notably when regulatory and commercial roles are played by a single entity. Some form of a separation-of-powers model, in which an independent body is charged with allocating licenses and monitoring the sector, while a national company focuses on commercial activity and the relevant ministry or ministries focus on policymaking, offers several advantages. The regulatory body can maintain neutrality and focus on the interests of the state without being entangled by commercial considerations and can develop technocratic capacity, while the national company can focus on developing its commercial capabilities. Even in the absence of separation of the policymaking and regulatory functions, there are clear advantages to at least the separation of commercial and regulatory roles, notably the facilitation of greater transparency and accountability of the petroleum/gas sector to the state and to the public, and therefore better performance overall. With all activities housed within one body, there is less opportunity for outside scrutiny of the sector and greater opportunity for corruption and mismanagement. The risk for conflicts of interest is also great when the body monitoring companies within the sector is also charged with monitoring itself as one such company.

Lessons from country experience – Gabon: Development of Gabon’s oil sector has largely consisted of technical decisions being made by foreign oil companies, with oversight formally tasked to the Ministry of Mines, Petroleum and Hydrocarbons. In practice, President Omar Bongo and his advisors and confidants exercised significant control over oversight. While oil provided a steady stream of income over several decades, the Gabonese government’s management of the sector has not been entirely successful. With foreign companies leading on technical decision-making, there has been little development of Gabonese capacity in oil-sector management. Further, the oil sector has not been effectively used to drive larger development goals by harnessing the revenues from the oil sector to develop a skilled workforce and a more vibrant private sector. Analysts are generally of the view that the concentration of decision-making regarding the oil-sector in the hands of a few has impeded innovation, limited transparency and accountability and has allowed corruption to flourish. According to a 2006 IMF report, coordination amongst the oil companies and various government institutions has been lacking and revenue flows among the ministry, treasury and tax collecting department and customs department have not been clear. All this has meant that the oil sector has generally benefited the few (Source: Heller & Marcel, 2012).

Lessons from country experience – Israel’s inter-ministerial committee on the natural gas industry: On October 2, 2011, Israel’s Prime Minister and the Minister of National Infrastructures (now the Minister of Energy and Water Resources) appointed an inter-ministerial committee to examine government policy on the natural gas industry in Israel. Its members consisted of the Director General of the Ministry of Energy and Water Resources as committee chair; the head of the National Economic Council in the Prime Minister's Office; the Supervisor of Budgets in the Ministry of Finance; the Antitrust Commissioner; the Director-General of the Ministry of Environmental Protection; the Deputy Head of the National Security Staff; the Deputy Director General for Multilateral and Strategic Affairs in the Ministry of Foreign Affairs; and the Deputy Legal Adviser to the government on economic and fiscal matters.

Pursuant to a letter of appointment, the committee conducted a comparative review of natural gas policies around the world to identify best practices and provide recommendations for an overall policy for Israel’s natural gas industry. The committee received input from international consultants.

On April 5, 2012, the committee published a draft of its recommendations for public comment and to this end held hearings. The Ministry of Energy and Water Resources also organized a conference to facilitate public comment. In August 2012 the committee submitted its recommendations to the government and on August 29, 2012, it published the main points of its recommendations (Source: Ministry of Energy and Water Resources).

3. Strengthening negotiation, legislative, contract management and monitoring capacity

25. One of the main problems confronting resource-rich developing countries in the development of their natural resources to the benefit of the country as a whole is getting a fair deal for the exploitation of their resources. Governments ideally would like to maximize revenues received from the exploitation of their resources and channel these revenues into other development programs, while limiting the social risks that accompany natural resource development, including pollution, environmental degradation and conflict surrounding the natural resource exploitation. Ideally, they would like the development of their natural resources to develop the skills of their workforce, which in turn can drive development of other sectors of the economy. Companies are also interested in getting the best deal and in maximizing their profits. Companies will naturally negotiate for contracts which are most advantageous to them and which include minimal social obligations in the absence of other factors (competition from other bidders, national or international legislation or reputational concerns with financial consequences, for example). Often there is an asymmetry of information when the governments of developing countries negotiate deals with multinational companies. Companies may have highly-skilled personnel with a breadth of experience while emerging producers lack information on what is a “good” or “bad” deal, may have limited professionals trained in the extractives industry and may have limited or no information about the experiences of other countries that can easily be applied to their situation (for example, developing countries may mostly have access to the experiences of more developed countries with highly-skilled workforces). The result is the risk of negotiating long-term contracts with terms that are so heavily one-sided that revenues earned from the resource end up being far less than they otherwise could have been, benefits to the population are limited, and local communities suffer as their environment is degraded and polluted and their traditional livelihoods are threatened by the activities of companies, without any real benefits to the communities to counterbalance the negative outcomes. Countries such as Guinea and Liberia, in more recent times have sought to revisit old contracts which were negotiated in the context of lack of capacity, secrecy and corruption and which resulted in severely disadvantageous terms for the country. Ideally, however, the goal would be to negotiate contracts with mutually beneficial terms at the outset, to avoid a later contract review and renegotiation process, which poses its own problems and challenges and can negatively affect the investment climate of a country.

26. Strengthening negotiating capacity requires a re-think of the approach to negotiation and the role of legislation.

- **Focus:** what needs to be done now and what later? For example, fiscal and regulatory treatment of a pipeline or LNG process plant needs early settlement.

- ***Narrow the scope of negotiations:*** consider using general tax legislation for mid-stream and downstream fiscal terms, not a negotiated contract; consider narrowing the range of negotiable variables in Production Sharing Agreements (PSAs).
- ***Portfolio of objectives:*** determine what range of objectives the GoT wishes to pursue (revenue, knowledge transfer, local content, etc.), identify which areas promote mutual benefit and enlarge the cake and realize there are trade-offs.
- ***Incorporating skilled advice:*** utilize expert advice, from beyond Tanzania where needed, and integrated with Tanzanian-led teams and organized to transfer skills.
- ***Create a “positive-sum game”*** in negotiations: is the size and scope of the pie fixed? Or can it be enlarged to the benefit of all parties?
- ***Workable contracts:*** no law and no contract can anticipate all possible future circumstances. Making a contract work requires trust among the parties, a willingness to review and revise (perhaps under built-in procedures). Parties to negotiations are seeking a cooperative solution; they are not irreconcilable adversaries.

27. The GoT has some 25 valid PSAs. These are generally regarded as being strong contracts, with favorable terms for GoT, but were designed with a focus on oil rather than gas. Therefore, some further modification of the contracts may be needed for these to properly work for gas.

28. The process of negotiating better terms should not be viewed as only the final event when the GoT sits with the gas companies to negotiate the contract. Instead there is need to look at it as a three phase process. The first phase is an advance preparation phase ahead of the actual negotiations, during which the GoT needs to review existing PSA gas terms within the context of changed circumstances and after consultation with all relevant government departments. The second phase is when the GoT actually carries out the negotiations with the relevant companies being offered the PSA. At this stage the leader of the GoT team should be accompanied by all the relevant government stakeholders and would negotiate on the basis of the guidelines adopted under Phase One. The third phase is the post-contract phase when the GoT needs to follow up with implementation of the agreement ensuring that contractual parties fulfill agreed obligations.

29. In order to implement the above, the GoT should ensure continuity of a multi-sectoral negotiation team and prepare a strategy for future negotiations. The team should utilize expert advice as necessary, and may even consider retaining international experts as members of the negotiation team, as necessary. The GoT should update all relevant legislation, utilizing the best possible advice. As mentioned above, while legislation and regulations should allow flexibility, they should also limit the scope of negotiations and the limit the option of negotiating

exemptions. Otherwise, the GoT runs the risk of implementing an inconsistent policy when it comes to gas contracts and not receiving the benefit of best practices that may be enshrined in legislation and regulations. The GoT may also consider appropriate training for not only the negotiation team, but other members of government and civil society actors to ensure clear understanding of the various terms and trade-offs, particularly the fiscal terms. Training may also be aimed at strengthening capacity for contract management and monitoring.

Lessons from country experience –Guinea: Like Liberia, Guinea made several contracts under previous administrations in a context of corruption that led to disadvantageous terms. In 2012 the Guinean government began a systematic review of contracts for the exploitation of its bauxite and iron deposits, which has been lauded by donors. In 2011 Guinea promulgated a new mining code that conforms to international best practice and promotes transparency and good governance. The contracts will be reviewed for their alignment and consistency with international norms, the laws in place at the time of their signing, and the principles of the mining code passed in 2011. A strategic committee and technical committee are responsible for the process, with the strategic committee responsible for political and strategic questions and reporting directly to the president and the technical committee responsible for the actual contract review process and reporting to the strategic committee. The strategic committee consists of the Minister of Mines and Geology, the Minister of Finance and the Economy, the Minister of Justice and the Minister of Public Works and Transport. The technical committee membership is based on specific criteria: legal knowledge, sector knowledge, contract negotiation knowledge, specific knowledge of the mineral in question, knowledge of global trends of the sector, industry knowledge, and ability to assess/appraise the companies/individuals whose contracts may be reviewed. The members are composed of high-level public officials representing various ministries and agencies of the government. The technical committee has the ability to draw on the support of Guinean and international experts. The technical committee was charged with recruiting such international consultants by open tender and organizing a seminar to allow for exchange of ideas among the committees, experienced international lawyers, international experts and Guinean experts. The technical committee was also charged with conducting a national public forum to clarify the goals and shape the process for the review. The Guinean government also committed to publishing existing and any renegotiated contracts.

Lessons from country experience –Liberia: As mentioned above, Liberia has been one of several African countries to make bad deals for exploitation of their natural resources under previous regimes. Notably, two agreements in particular were required to be revisited and renegotiated. Liberia's agreement with ArcelorMittal appeared to give the company ownership of the port and rail and contained other disadvantageous social and fiscal terms. Renegotiation increased Liberia's share of revenues under the contract. Liberia's contract with Firestone also needed to be revisited to increase the government's share of revenues. Transfer pricing was a particular problem under the agreement, resulting in losses to the government. The agreement was renegotiated to tie the price of the commodity sales directly to what the price was on the Singaporean and Malaysian markets.

4. Fiscal regime

30. **Fiscal terms need both to ensure efficient development (broaden the base) and to maximize retention of revenue in Tanzania (tax as much rent as possible).** An optimal fiscal regime maximizes a government's share of revenues while maintaining adequate incentives for investors. The GoT should aim to get the best value for its gas as it is depleted, thus staving off instability caused by public dissatisfaction with the benefits received by gas exploitation, while providing incentives for optimal production of its gas. The fiscal regime should limit companies' ability to exploit loopholes and should be enshrined in legislation, providing officials' limited discretion to negotiate key fiscal terms (for example, taxes, royalties and government share ownership, as applicable). Limiting discretion will provide for consistency across the gas sector and limit opportunity for corruption; that is, the opportunity to grant different terms to different investors in return for personal benefits. Consistency across contracts should also make contract enforcement and monitoring easier. An optimal fiscal regime should also allow the GoT to capture a fair share of wind-fall profits to companies if prices increase and provide minimum benefits to the GoT even when prices fall.

31. As yet, implementation experience with PSAs is limited to the near-shore gas projects and offshore exploration. The value to Tanzania of sharing terms for gas depends critically on the upstream (field delivery point) price achieved for gas, which in turn depends on how much of the ultimate gas price to consumers goes to owners of lower-taxed midstream and downstream facilities.

32. The GoT should consider the following in developing a fiscal regime applicable to the gas sector:

- **Transfer prices** into pipelines and processing plants require transparent formulas using international experience; any shift of revenue to these facilities, beyond the minimum necessary, requires clear justification.
- **The general tax system**, and not just production-sharing, makes a difference to revenue generation: rules on debt finance, gains on sales of petroleum rights, capital allowance rules, tax treaties, and models for transfer price rulings all need attention.
- **State participation** may have fiscal consequences, if it limits the scope for imposing taxes (because it already imposes a "tax cost" on companies) and if it requires government contributions of cash or assumption of risks (guarantees to gas buyers or to lenders). Forms of state participation therefore need evaluation as part of the fiscal terms.
- **Neutrality among uses of gas**: the fiscal regime should not distort decisions about whether to use gas onshore or for export where one or other is intrinsically more

efficient. Thus fiscal incentives for a LNG export project, for example, should not divert gas from domestic use.

33. The GoT should review the fiscal regime for gas, aiming at preserving the economic value in the higher-taxed upstream activities through transparent formulas for transfer prices and should also review the general tax system to ensure that rules on debt finance, gains on sales of petroleum rights, capital allowance rules, tax treaties and models for transfer pricing are all aligned with the GoT's objectives for gas.

Lessons from country experience –Uganda's changing capital gains regimes: In November 2009, Heritage announced its intention to sell its oil assets to Italian company ENI. Tullow Oil then exercised its pre-emption rights to acquire Heritage's interests for \$1.45 billion. Tullow in turn proposed to sell part of its interests to CNOOC and Total. The Ugandan government imposed a tax of more than \$400 million on the Heritage disposal and further taxes on the Tullow disposal, provoking a tax dispute between the Ugandan government and Heritage, which is currently being arbitrated. When the PSAs were first signed with the entities involved, capital gains were taxable under Ugandan law. In 2008 the Ugandan government passed legislation, which provided for disregarding gains on transfers for petroleum licenses for both buyers and sellers. In September 2009, the Ugandan government then amended the law to tax capital gains but provide no deduction for buyers. Subsequently the government then submitted a bill to parliament providing for a deduction for buyers. This dispute with Heritage highlights the need for a consistent tax policy reflecting objectives for the gas sector and also raises considerations concerning stabilization. (Source: Myers, 2010)

Lessons from country experience –Guinea: There is no one correct model for a fiscal regime, however Guinea's handling of its mining sector may serve as a guide. Guinea's 2011 mining code has provided for a largely standardized fiscal regime as applied to the mining sector and includes a mix of royalties linked to international prices, corporate income tax, free state equity and withholding tax on dividends. The regime also includes a special tax to be spent on development of communities in mining areas.

5. Unbundling short from medium to long term gas issues

34. **The prospect of large export projects from deep water gas should not divert attention from immediate opportunities to increase domestic gas use in the power sector.** Near-shore gas fields can contribute in the short term to a sustainable solution to the energy crisis. To make this a reality, further appraisal of gas discoveries, increased production capacity in the near-shore gas fields and a credible gas purchaser is required. With these elements in place, additional gas could reach the (power) market in approximately two years.

35. Due to the high cost of transportation, gas discoveries can only be developed with a so-called 'full value chain' approach that includes development of gas reserves, production capacity and transportation capacity to the market, as well as the development of a solid market with credible gas purchasers (aggregator) and final users with a sustained demand for gas.

36. Tanzania has been intermittently explored over the last 50 years. Two gas fields, Songo Songo and Mnazi Bay, are in production while several small discoveries are under appraisal. Natural gas reserves at Songo Songo are: Proved (1P) 689 bcf, Proved and Probable (2P) 879 bcf and Proved Probable and Possible (3P) 1,084 bcf. Natural gas reserves at Mnazi Bay are: Proved (1P) 332 bcf, Proved and Probable (2P) 962 bcf and Proved Probable and Possible (3P) 1,542 bcf. The Songo Songo development and related power generation infrastructure were supported by the International Development Associations's Songo Songo Gas Development and Power Generation Project. The project was developed in the form of a public private partnership between TPDC, TANESCO and a private company, Songas Ltd. (a subsidiary of Globeleq from the UK). The field is currently developed with six wells, a two-train processing facility with a rated capacity of 70million scf/d, a 35 km subsea pipeline and a 225 km onshore pipeline to customers in Dar es Salaam. A maximum transported volume of 105million scf/d is currently reached (89million for power generation and 16 million scf/d for Tanzanian industries). The field is operated by PanAfrican Energy (subsidiary of Orca Petroleum of Canada) and TPDC. The processing facilities and pipelines are owned and operated by Songas Ltd. The Mnazi Bay field is developed with four wells, of which only two are hooked up to the processing facility. With a current production capacity of 10 million scf/d, the actual production is only 1.8 million scf/d to feed an 11 MW power plant with a local grid. In the absence of more gas customers, the remainder of the gas is stranded. The field is operated by Maurelet Prom. Both Songo Songo and Mnazi Bay have so called upside gas volumes (3P) in place that need to be proven by further drilling before these can be developed. Small gas discoveries have been made in Mkuranga, Kiliwani and Songo Songo West that need to be further appraised to determine the reserves.

37. The government has recently secured a concessional loan from the China Exim Bank and a construction contract from China Petroleum Technology and Development Corporation to finance and build a 492 km 36-inch gas pipeline. The first phase involves a pipeline and processing facilities from Songo Songo to Dar es Salaam and the second phase a pipeline from Mnazi Bay to Somanga Fungu. Based on current information the pipeline could be operational between 18 and 24 months from now. The capacity of the additional pipeline would be approximately 250 million scf/d, but could be increased by installing compression capacity. When it is assumed that the production capacity in both the Songo Songo and the Mnazi bay field would be increased to match the additional transportation capacity, proven reserves in both fields would be sufficient to deliver gas for 7.5 and 3.5 years respectively. Proven and probable

reserves could sustain gas delivery for 9.5 and 10.5 years respectively. Sustained gas delivery during the technical lifetime of the pipeline, at least 25 years, requires as a minimum appraisal of discoveries to prove up available reserves and investment in additional production capacity. This production capacity would have to be installed by the time the pipeline becomes operational (in two years' time).

38. The gas produced from Songo Songo is utilized for power generation and as a fuel to cement manufacturing kilns and small captive power plants. Thirty-six industries in Dar es Salaam are also connected to the gas pipeline and use gas for boilers and furnaces. Recently the use of compressed natural gas (CNG) in vehicles and buildings has been introduced. Due to limited power demand in the Southern Regions of Lindi and Mtwara only 1 million scf/d from Mnazi Bay field is used to generate around 11 MW of electricity. Under the Songo Songo Agreements, the GoT, PanAfrican Energy and TPDC have agreed to set aside 'protected gas' to provide 80.5% of the needed gas supply of the 189 MW of Songas power plant (at predetermined price of US\$0.65 per GJ) and for the Twiga Cement Plant. "Additional gas" is sold to the TANESCO power stations (247 MW) at a price around US\$ 3.5 per GJ, while industrial users pay at a 25% discount to Heavy Fuel Oil (HFO) prices (US\$ 8-9 per GJ). Songas, and therefore TANESCO, is the primary off-taker, and in essence the 'market maker'. Songas' fuel price was originally conceived as part of the initial project concept to kick-start the domestic gas market and to offset the capacity charges so that the utility would not shoulder the full weight of developing the country's gas infrastructure. While this subsidizing scheme was justified in the context of the Songo Songo Project, future gas developments should be developed on a more cost reflective gas purchase price, which has to go hand in hand with cost reflective electricity retail prices. Those new pricing mechanisms coupled with an enhanced competition in the medium to longer term will allow for a financially sustainable expansion of the local gas market. The country's main installed generation capacities currently amount to 1,438MW and are based on hydropower (39 percent) and natural gas (34 percent).

39. According to TANESCO's short to medium term generation expansion plan (up to 2017) the majority of the planned generation capacity additions are expected to be based on natural gas, wind, coal and hydropower. The current generation expansion projects pursued by TANESCO (see table below) will require substantial additional gas supplies to the utility in the next five years.

Table 1. Currently proposed Generation expansion plan for gas to power projects

Year	Plant	Additional capacity		Average required Gas
		MW		mscf/d
2011	Current Capacity	436		89
	Kinyerezi Emergency Thermal Generation (Jacobsen)	150		30
2014	Kinyerezi II (Sumitomo)	240		48
	Somanga Fungu (Kilwa Energy)	300		58
2015	Power Plant Project fired by Mnazi Bay Gas (China)	300		58
	Total Addition	990		194
	Total	1,426		283

Source: WB TZ Energy Team/TANESCO

40. The table shows the importance of a short-term update of TANESCO's Power System Master Plan to ensure current planning efforts with regard to gas usage are aligned with the technically and economically feasible developments in the Natural Gas Utilization Master Plan. Other domestic gas markets could include industries that use gas either as a fuel or a feedstock. The feasibility of a fertilizer plant has recently been studied. Yet, under current conditions of reserves this individual project did not prove to be competitive with international fertilizer producers at realistic gas prices. The industrial gas market in Dar es Salaam is currently saturated, but it is anticipated that the market will grow with further economic development. The market for CNG still has some potential for expansion.

41. The financial situation of the sector is challenging: the majority of the Emergency Power Program (prepared in late 2011) has been contracted by now. Financing of O&M of this program remains a challenge as the regulator's recent approval of a 40% increase in tariffs is less than what is required. Consequently, TANESCO continues to grapple with financing constraints and is seeking financing (US\$ 240m) from the commercial market (a banking consortium led by Citibank) to pay for thermal generation. Since this corporate loan is not yet concluded a number of emergency generators did not get paid for several months and have started to shut down their operations. Estimated arrears by TANESCO to IPPs currently exceed US\$ 200million. The operators of the gas fields have also suspended investments in field appraisal and in additional production capacity due to outstanding payments. It is anticipated that field operators will be prepared to continue investing in appraisal and production capacity in their respective fields when TANESCO can demonstrate its ability to pay for past and future gas purchases. Gas sales agreements for those gas fields that are not covered under the Songo Songo Agreements will need to be negotiated.

42. **Priority actions** for the GoT include:

- Developing a financial solution for the arrears TANESCO has built up and the deficit it will continue to create over the next two years, without excessive price increases that deter energy use;
- Putting in place a policy and managerial framework to ensure that TANESCO will be a credible gas purchaser on a sustainable basis; this should include a gas and power pricing policy that supports economic growth;
- Focusing on project management of the gas pipeline under construction to ensure the pipeline is operational at the earliest opportunity;
- Aligning TANESCO's Power System Master Plan with the Natural Gas Utilization Master Plan;
- Agreeing to terms with the partners in the gas field that give incentives for further appraisal and increased production capacity;
- Stimulating early appraisal activities to determine available reserves;
- Negotiating gas sales agreements for those gas fields that are not covered under the Songo Songo Agreements.

43. **Gas discoveries in offshore deep water provide an opportunity for inclusive growth of the Tanzanian economy.** To make this a reality requires the initial development of a full gas value chain that is able to finance the costly deep water development. This will generate significant revenue streams that can be used to invest in Tanzanian society. Once this 'anchor' development is in place, a trade-off can be made between strategic options for the use of additional volumes of discovered gas that has the greatest benefit to the Tanzanian people. Sequencing these actions requires gas policy, gas planning, and the necessary new legislation.

44. The deep offshore of Tanzania is considered to be one of the few remaining attractive frontier exploration areas. Exploration in the Tanzanian offshore is still at an early stage. Between 2010 and 2012 Ophir and partner British Gas as well as Statoil announced the discovery under their respective licenses of natural gas resources in the order of 16 Tcf. These volumes still require further testing and appraisal to determine recoverable reserves. Further exploration potential may lead to additional discoveries. Significant exploration activity by a number of international companies is already planned. There are ongoing consultations between Zanzibar and the central government to resolve matters regarding exploration in Zanzibar. Nevertheless, at this stage it is difficult to predict what recoverable volumes of gas may be present in the geological basins of Tanzania.

45. Over the past decade technological developments have enabled the drilling and production of hydrocarbons in increasingly great water depths. Research and development still

focus on improving safety and reliability and on reducing costs. The water depth in the Tanzanian license blocks is between 1000 and 2000 meters. Development of a gas value chain based on a two-train LNG plant and export may require an investment between \$ US20 and 30 billion dollars. It is anticipated that with increased (shareable) gas infrastructure, with further growth of the local service industry and with further technological development these costs may come down.

46. The current high cost of developing deep water gas discoveries can only be justified by a large, stable and long-term market with high netback values. The domestic market in Tanzania does not yet meet these qualifications. Given global commodity market conditions, the most likely market to serve as an anchor for deep water gas development is LNG export to, for instance, East Asia. A two-train LNG plant, which is often considered a minimum configuration for LNG export, requires approximately 15 Tcf of gas over the lifetime of the plant. Such an export project would be the foundation for development of additional gas reserves, more of which could then find a market in Tanzania.

47. First revenues from the development of deep water gas may be expected ten years from now at the earliest and could last for a period of approximately twenty-five years. A large number of commercial agreements, many of which involve the GoT, are required for investors to take a final investment decision.

48. When additional discoveries are made that can share available infrastructure for their development, these volumes may be considered for other strategic options in the domestic market (industries that use gas either as a feedstock or a fuel). The government will need to identify feasible strategic options and make trade-offs between fiscal revenues, employment opportunities, geographically distributed opportunities for economic stimulus, social and environmental impact and so forth that are generated by these strategic options. The Natural Gas Utilization Master Plan that is currently being prepared, and which will need to be updated when new reserves and market information become available, is an important tool for providing a decision framework to the GoT that can be used to make policy and investment decisions required to meet the vision for the gas development in Tanzania.

49. **Priority actions** for the GoT include:

- Determine the right balance, and rebalance when needed, between domestic and regional markets and exports. Consider earmarking gas from onshore and near shore developments for the domestic and regional markets and putting a domestic supply obligation on deep offshore developments that target LNG export markets, subject to commitments made under export contracts

- Further clarify in the Natural Gas Policy the need for and the distinct roles of an independent upstream regulator and a National Oil and Gas Corporation assuming the commercial functions
- Develop and include in the Natural Gas Utilization Master Plan a framework to establish trade-offs between different domestic uses of gas including fertilizers, cooking, etc.
- Fast-track an LNG value chain development that allows for expansion

Lessons from country experience –Nigeria: Nigeria is one of the largest natural gas holders in the world and the largest in Africa. Most of the reserves are located in the Niger Delta. Yet up to recently Nigeria's oil and gas extraction has not addressed high unemployment in the Delta and lack of basic resources such as clean water and electricity. Further, it has meant environmental degradation. The unfulfilled promises of oil and gas extraction and its negative social and societal impact have provoked violence in the Niger Delta region. However, in 2008 the Nigerian government approved a Gas Master Plan, which sets the framework for the commercial exploitation and management of Nigeria's gas sector.

Lessons from country experience – Trinidad and Tobago: The experience of Trinidad and Tobago in developing its natural gas sector can be instructive for Tanzania. In the mid-1970s The Trinidadian government, developed and implemented a strategy for the development of its natural gas reserves. The National Gas Company of Trinidad and Tobago (NGC) was established, as the sole seller of natural gas to the domestic market. Initially, the gas that was then being flared on oil platforms was brought to shore to generate electricity. An industrial estate was also established, which became the site of gas-based petrochemical plants, wholly- or majority-owned by the Trinidadian government. Such plants included iron and steel, ammonia, urea and methanol plants. In the 1990s Trinidad and Tobago began production of LNG for export. NGC, along with several foreign oil and gas companies, invested in an LNG plant called the Atlantic LNG Company, which currently consists of four trains. Today Trinidad and Tobago is one of the largest exporters of LNG. With the expansion of gas exports the Trinidadian government brought forward the date by which bpTT, Trinidad's biggest gas producers, would start to pay a 10% royalty on exported gas under its exploration and production licenses for its offshore fields. Trinidad opted to receive this royalty in kind and not cash, providing a gas supply which could be used to develop strategic industries (Source: Renwick, 2008).

B. Actions to start now with long term benefits to the country

1. Steering clear of “Dutch Disease”

50. **It will be important to take actions aimed at alleviating the “Dutch Disease” – rapid appreciation of the real exchange rate (through inflation or nominal appreciation) that drives out other exporting and import-competing industries.** Rapid real appreciation will take hold if spending rises faster than the economy can absorb and, especially, if the balance of that spending is at first heavily tilted towards consumption (driven especially by wage rises, rapid increases in the government or parastatal payroll, and subsidies). “Mortgaging the future” by borrowing in advance of both revenues and the development of public investment capacity poses a special danger. Avoiding the “Dutch Disease” will require:

- Closely monitoring debt, fiscal and monetary indicators, inflation and the real and nominal exchange rates
- Conducting appropriate monetary and fiscal policy to counteract any overheating from foreign direct investment (FDI) inflows
- Managing debt actively to avoid fiscal and debt distress

51. The priorities that follow are important in themselves, and for avoidance of Dutch Disease.

Lessons from country experience –Azerbaijan’s oil boom:From 2006 to 2008,Azerbaijan experienced double digit GDP growth rates, attributable to an oil boom. During this period the government massively increased budgetary spending, resulting in soaring inflation. Some non-oil sectors such as construction, banking and real estate also expanded, however these increases could generally be linked to the oil sector. At the same time, other sectors, notably agriculture, suffered domestically due to imports.

Lessons from country experience – Chile: Chile’s fiscal rules can provide a good example of sound fiscal policy.In Chile, the structural fiscal balance rule makes it possible for the government to implement counter-cyclical policies, with the ability to run deficits during recessions and build surpluses during expansions. The rule, which includes stock and flow elements, is organized to target a ‘structural’ fiscal surplus rate (SFSR) of 1% of trend GDP. The SFSR has an automatic counter-cyclical effect in the traditional way (automatic stabilizer), leaving little space for additional ad-hoc counter-cyclical efforts from the government, with the concomitant pressure on the central bank. In addition, public discussion on medium-run trend GDP growth prevents the population’s unfounded exuberance while increasing transparency. In Chile, implementation of fiscal rules led to a consolidated net debt decline from 40% of GDP in 1989 to 8% by 2002, accumulated fiscal surplus up to 1997, strong growth of GDP and reduction in market interest rates.

2. “Investing in investing”

52. **Successful investment of gas revenues, and successful investment in spin-off businesses, requires preparedness – “investing in investing”.** Investing in investing involves building the capacity to invest efficiently and profitably through public financial management, public investment management, and a demand-driven human capital accumulation. Also, the capacity in various government organizations needs to be strengthened to deal with the growing work load (increased number of licenses) and complexity (deep water, LNG, massive investment and revenues) in a timely fashion.

53. **Strengthening public financial management.** Both macro-economic policies and institutional quality are likely to be a crucial transmission channel between natural resource and long-run growth. Fiscal institutions, including sound Public Financial Management systems, and strong legislative frameworks should be in place to support sound fiscal policies. In the absence of strong institutions, governance challenges are greater, undermining the feasibility of the policy frameworks, and increasing the likelihood of failure. Setting-up a robust system in anticipation of gas revenues and potential increase in public investments would be salutary.

54. **Increasing efficiency and quality of public investments.** Resource-rich developing countries (RRDCs) that fail to harness their resources share two characteristics. First, they tend to consume most of the revenues from natural resources, exhibiting low savings/investment rates and a large infrastructure gap. Second, when they do scale-up investment, they pay little attention to efficiency and quality of investments. Across the Africa region, Public Investment Management (PIM) systems continue to suffer from deficiencies including, among others: (1) Insufficient evaluation and screening of public investment projects prior to selection; (2) Absence of multi-year allocation of the investment budget; (3) Deficiency in monitoring of project implementation; (4) Lack of focus on maintenance and replacement expenditures; (5) Low rate of public investment project completion; and (6) Lack of effective institutional coordination and project oversight. RRDCs are particularly vulnerable to those challenges given the increased revenue flows. A robust PIM system would ensure sound planning, formulation, allocation and supervision of investment projects. PIM therefore represents a critical area where a mix of diagnostic work, technical assistance can help countries to strengthen their capacity to invest efficiently.

Investing in human capital formation, and improving human development indicators.

55. **During oil and gas booms, the demand for a wide array of low-skilled, skilled, and highly-skilled jobs across many sectors increases.** Specific measures are needed to maximize jobs for nationals through training, and (eventually) to use the revenue from the oil and gas

sector to undertake long-term investments in human capital. Central to both propositions is the need for management of natural resources to go beyond the traditional thinking of “a right to extract in return for an obligation to pay royalties and taxes.” A strategy for maximizing jobs for nationals includes preparing qualified nationals for jobs in the gas industry (labor supply of skilled nationals) and focusing on binding or incentivizing companies to employ and train nationals through contractual obligations and incentives (enhancing labor demand for nationals).

56. Except for the labor-intensive construction phase, extractive industries generally do not generate a high share of employment. However, employment and value added are multiplied by upstream and downstream value chains. Domestic firms can find business in a range of supporting sectors such as transportation, equipment maintenance, specialized equipment manufacturing, semi-fabrication, fabrication and construction, and in environmental services. It is therefore important to take a broader view of the employment impact and skill needs of the extractive industry sector.

57. **However, without specific measures most employees in the oil and gas sector could be “fly-in-fly-out” foreigners, leaving nationals with opportunities only for lower-paid jobs, such as day-laborers, security personnel, chauffeurs, and so forth.** A lack of good opportunities for local employees’ increases perceptions of income-inequality, reduces support from local communities and increases the risk of civil strife. Sizeable skills gaps have been identified in the professions demanded by the natural resource sector, including auxiliary services such as hospitality. The gaps include engineers (civil, mining, chemical and production) as well as project managers and graduates of earth sciences (geologists, physicists, and chemists). Skills gaps are also pervasive in skilled trades, such as electricians, machine operators, bricklayers, carpenters, and various forms of technicians. Making the Most of Commodities Programme (MMCP) investigated local content in 8 Sub-Saharan African countries. They found: *“Skills and the ensemble of institutions which affect the development of firm-level and sector-level capabilities “shouts out” in all of the country-studies as being the single most important determinant of linkage development. This of course reflects a global challenge in an increasingly knowledge-driven world, but its affects are particularly acutely felt in Africa’s commodity sectors. They are an important factor explaining why outcomes differ in the same sector in different economies, for example in the provision of knowledge-based services into the offshore oil industries in Angola and Nigeria.”* Other contextual drivers of local content were the nationality of the lead commodity firm, quality of national infrastructure, and national policy. It is paramount to understand that the lack of highly-skilled labor not only affects the share of locals in the high-paying jobs in the lead commodity companies, but, perhaps even more importantly, the lack of skills curtails the ability of companies to source key input locally, whether it is manufacturing of inputs, servicing and maintenance, or product refinements downstream after extraction. (Morris, Kaplinsky & Kaplan, 2011).

58. **Building human capital requires quality education, vocational training and on the job training.** These should address closely analytical, practical, project and program implementation skills development, covering the entire value chain. Engineering skills in the upstream activities are needed and further skills could be developed through synergy with existing mining sector education, drawing from well-established international education and training programs and relying on existing programs implemented by operators active in Tanzania. Environmental training and softer skills should be addressed as these aspects are not well represented in current curricula.

Lessons from country experience – Angola’s Low Local Employment in the Oil and Gas Sector: Angola has a relatively long history with oil and gas (more than 30 years) compared to other African countries, however local employment and local content remain surprising low. For example, in the oil and gas operations (excluding installation and maintenance), the employment situation was as described in table 2 below.

Table 2. Employment situation in the oil and gas operation

	Share of Angola (Local) employment			Share of International employment		
	Basic and mid skills	Managers	Engineers	Basic and mid skills	Managers	Engineers
2004	80%	30%	0%	20%	70%	100%
2009	90%	45%	17%	10%	55%	83%

The volume of local human capital is high at basic and mid-technical levels, but this is very low at higher technical levels (engineers). It should also be mentioned that the government of Angola in 1982 aimed for 100% local employment for un- and mid-skilled jobs and 80% for highly-skilled by 1990, but those targets were not met. The reasons for lower local employment are: (i) the training programs focus on mid-level technical, and not the higher technical level personnel; (ii) lack of joint-working arrangements in policy design and implementation across the relevant ministries of oil, industry and education; (iii) universities are providing training mostly in social sciences, but to a small extent in engineering and to a much lesser extent in petroleum engineering, with only 20 petroleum engineers produced annually; (iv) lack of evaluation and update of strategies and targets. (Source: Teka, 2011)

59. **International experience shows that, to provide optimal benefits in terms of employment, technology transfer and private sector development, the oil, gas and mining sectors need to be grounded in domestic research, education and policy institutions.** This is the case in the most progressive resource-rich countries, such as Australia, Chile, Canada and

Norway, where such capacity was built up in the decades after discoveries were made. These countries early on went beyond the purpose of addressing extractive industries' staffing needs, to also generating their own domestic policy and technical research. These centers have played a pivotal role in keeping domestic sector policies and domestically developed technology, as well as sector relevant education, updated and relevant. Financing for policy and research institutions can come from the private or the public sector, but some level of private sector involvement is likely to ensure relevance of the research for the sector.

Lessons from country experience – Norway—Diversification within the Oil and Gas Value Chain:

Norway is well known for its oil savings and stabilization fund, but might also provide the most successful example of diversification within the oil-sector value chain. From the start of oil extraction in the late 1960s, Norway went from initially very low levels of local content, with virtually all upstream and downstream activities undertaken by international oil companies and their existing supply chains, to local content that three decades later exceeded seventy percent, now closer to 50 percent.

To promote the development of local capabilities, international petroleum companies were in the early phase of oil extraction encouraged to enter cooperative agreements with research units at national universities. This resulted in the upgrading of oil sector-specific skills among academic staff, and degree programs tailored to the oil sector and related industry. The policy was characterized by a well-articulated system of evaluating operator contributions to domestic capacity building. Financial support for research and development was taken into account in the award of contracts, as was transfer of skills and technology. A corporate income tax rate of 78%, with all research and development expenses immediately deductible, provided a strong incentive for investment in domestic research and development.

Similar policies were active at the firm level, encouraging the integration of domestic firms and enterprises into large development projects undertaken by the multinational oil companies, as well as joint ventures and cooperation agreements between domestic and foreign companies. International oil companies were also required to set up fully operating subsidiaries in Norway. Such arrangements allowed domestic firms to convert their existing capabilities into capabilities for offshore oil production.

When selecting sectors for diversification, Norway chose sectors for which related capabilities already existed, essentially in ship building, capabilities that could be developed to building offshore oil platforms. Norway did not diversify significantly downstream, except for oil refineries and gas processing plants, since petrochemical industry was not perceived as a sector in which Norway would have a competitive advantage by its existing capabilities.

60. **There is a strong need for public-private partnerships and industry sector dialogue in training for the extractive industries.** Capital equipment and technologies are large scale, extremely expensive, sophisticated, and highly site-specific. The specific knowledge and competencies are therefore often acquired through on-the-job training building upon specific and frequently updated training done in the classrooms. Often education and training institutions face difficulties acquiring appropriate technologies for training purposes. There is therefore, need for:

(i) frequent and large industry input into curricula, and (ii) industry attachments to facilitate on-the-job-training.

61. **Working with lead commodity companies to prepare and implement a local employment strategy.** Although firms have a large financial incentives for local employment given the wage difference between local and international employees, many fall short of adequately training local employees, partly because of the high risk that other companies poach the skilled employee. It should be noted that the market failure from poaching can be remedied through public-private partnerships. For example, the government in association with education providers can work with firms to formalize a local employment (and local content) strategy, and facilitate and monitor the implementation of the strategy.

CASE STUDY

Total: Developing Yemen's LNG workforce

Total's US\$4.5 billion Yemen LNG project, launched in August 2005, is by far the largest in the nation's history. The company aims for 90% Yemenization of staff by 2015. To achieve this, Total set up an integrated strategy to recruit, train, retain and motivate a world-class Yemeni workforce—all on employment terms and conditions that are highly competitive within the region.

To compensate for the scarcity of local personnel competent in LNG operations, Yemen LNG set up training centres that offer an intensive, high-calibre training programme for technical specialists, engineers and supervisors.

To populate that scheme, Total launched an advertising campaign to attract candidates through radio, TV and the national press. Out of 16,000 application forms submitted for technical specialist level, the company chose 200 candidates.

Training began with an intensive three-month English programme, followed by eight months of training in oil and gas techniques. Then came 13 months of hands-on training.

Out of 7,058 applicants for the supervisory training levels, 82 engineers and supervisors ultimately joined the ranks of Yemen LNG. Many of the supervisor trainees for this specific level had acquired skills and knowledge working abroad. Total offered competitive packages to these expatriates to attract them back home and to participate in the development and the operation of the LNG project.

The training programme for the Yemeni LNG plant was a first for the country. Based on this success, Yemen LNG intends to run further programmes to train technicians to fill vacant positions as the first batch of trainees move on to assume senior and supervisory roles.

62. **Potential policy actions** for the GoT include:

- Assessing the capacity needs along the decision chain. The GoT should explore with NEPAD the possibility of using their flagship program on the natural resource charter to investigate further the capacity needs along the gas decision and value chain. The GoT should engage with Partners to fill identified capacity needs
- Conducting a skills needs assessment to document the supply and the demand for skilled labor

- Engaging gas companies in designing specific local content and employment programs
- Setting up an industry-government-education provider consultative framework to ensure a match between the supply and demand for skills, including through curriculum development and certification
- Helping local SMEs to meet the needs of gas companies through sharing information on needs of gas companies, developing standards for the gas industry and supporting quality upgrading of services of local providers
- Working in collaboration with gas companies and local communities to develop joint government-firms infrastructures
- Creating a conducive environment for local employment by gas companies
- Enforcing safeguards and enforcing application of CSRs to respond to local communities' development needs.

3. Investing efficiently and effectively, especially in strategic infrastructure and growth poles to attract private investment and catalyze economic diversification

63. Once capacity is in place, gas revenues should be used primarily to promote *sustained, inclusive economic development* through enabling and maintaining *high levels of investment* in the country. The priority in scaling-up investment should be in areas that offer the opportunity to “break the trap of low private investment”. This includes expansion of a reliable energy supply network and lifting of transport constraints for goods and people. Tanzania can avoid the trap of investing in large infrastructure projects, which may provide immediate political benefits, but which long-term fail to advance larger development objectives or stimulate other sectors of the economy and end up becoming white elephants. The city and port of Dar es Salaam would be a place to start. Public investment should not be limited to physical capital investment.

64. In order to invest efficiently the GoT should:

- Implement a robust public investment management program in government
- Implement specific public investment management programs in the area of infrastructure and urban development
- Develop a framework to facilitate private investment in infrastructure, including public private partnerships
- Align investment with the national priorities and long-term planning for the country.

Lessons from country experience – Russia: From 2000 to 2009 the Russian government earned nearly \$700 billion in oil and gas revenues due to rising prices. Revenues were used to reduce debt and for savings, however, the government has not reduced heavy dependence on oil and gas revenues and needs to implement a strategy for diversifying the economy. During the 2000 to 2009 period, public investment stagnated while public spending on roads, declined. (Source: Heuty, 2012).

Lessons from country experience – Malaysia: Malaysia was able to use savings from the commodity boom of the late 1970s for strategic infrastructural development to diversify the economy. (Source: Collier and Venables (2011), Yusof (2011), Gauthier and Zeufack (2012).

4. Updating the institutional and governance frameworks

65. **Building on the short-term establishment of a coordination mechanism to drive “whole of government” work on gas development, design a longer program to make agencies “fit for purpose” in the new era.** Gas will change Tanzania and its governance structure needs to respond. Some of the change will be fiscal or economic. Gas revenues need to be deployed in a medium-term fiscal framework and integrated with the budget. GoT should build on the coordination strategy achieved through the establishment of an inter-ministerial Authority to analyze institutional needs for the development of the gas sector, develop new institutions and agencies, as necessary, identify governance capacity gaps and develop a strategy and agenda to address capacity building needs within government agencies.

66. Specifically, **policy actions** for the GoT should include:

- Separating regulatory and commercial functions of state entities in the sector
- Ensuring gas revenues are deployed in a medium-term fiscal framework and integrated with the budget
- Considering all options for underpinning the fiscal policy framework with a natural resource revenue fund integrated with the budget, including a stabilization fund and a Sovereign Development Fund.

Lessons from country experience –Nigeria’s lack of savings: In late 2012 Nigeria launched a sovereign wealth fund. Before then, however, decades of high oil production produced little savings and Nigeria’s economy was exposed to commodity price shocks.

Lessons from country experience –The Government Pension Fund of Norway: Norway’s Government Pension Fund is the second largest in the world, valued at approximately \$US 664.3 billion as of 2011. The fund is administered by Norges Bank Investment Management, a division of the Norwegian Central Bank. The fund aims to facilitate government savings to meet the rise in public pension expenditure in future years and to support long-term management of petroleum revenues. It is rated as one of the most transparent sovereign wealth funds and investments are made in keeping with ethical guidelines, forbidding investment in companies, for example, that produce weapons that violate humanitarian principles. (Source: SWF Institute, www.swfinstitute.org and Guidelines for the observation and exclusion of companies from the Government Pension Fund Global’s investment universe, http://www.regjeringen.no/en/sub/Styrer-rad-utvalg/ethics_council/Ethical-Guidelines.html?id=425277)

5. Managing the environmental downside risks

67. Hydrocarbon projects can have significant negative environmental and social effects throughout their project life cycles. **From early assessments to communication and oversight, effective environmental management is critical throughout the development and production chain to ensure good social and environmental performance.** The Western Indian Ocean is renowned for its biological diversity. From coastal forests to coral reefs it covers almost 20,000 known plant and animal species many of which are endemic to the region. Off-shore it hosts an estimated 10,000 marine species. Economically, it also supports the world’s largest wild prawn fishery and a major tuna industry as well as a significant tourism sector. Throughout the region, about 60 million people live along the coast of the Indian Ocean. Many are directly dependent upon the aquatic resources in the region for their survival and livelihoods. The ecosystems, the services they provide and the resources within them are already under significant pressure and being destroyed or degraded. A failure to adequately manage gas developments in Tanzanian waters will further increase the pressure.

68. Tanzania’s policy-makers face many challenges presented by the recent gas finds offshore. Amongst these is how to balance the potential high economic and development returns from successful exploitation of natural gas against the high environmental risk. Although Tanzania is aiming to put in place national instruments such as the Natural Gas Policy, Natural Gas Utilization Master Plan, gas revenue management legislation and other regulation, the country lacks experience in effectively implementing these instruments.

69. At present, the only regional governance framework dealing specifically with issues related to gas is the Nairobi Convention for Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region (signed in 1985, effective 1996 and amended 2010). It provides a mechanism for regional cooperation in the eastern and southern African region and sets a framework for information sharing, consultation and assessment of the environment between countries relating to potential trans-boundary impacts.

70. However, multinational gas companies operating in Tanzania all claim to adhere to international environmental standards that go beyond local compliance requirements. The adoption of the highest standards of environmental performance by the companies in the gas sector can help improve the overall standard of environmental planning and management of Tanzania's coastal zones by introducing new benchmarks for smaller industries to aspire to. Through corporate responsibility programs they can also significantly contribute to sustainable development.

71. On the other hand, gas companies are increasingly seeking efficiencies by contracting out project activities to specialized service companies. Therefore production and service chains become more complex. This is especially the case when governments impose targets for local procurement. Responsibility hence needs to be shared throughout the contracting chain, across company departments, and between government and industry, with space for independent third-party oversight.

72. The following elements of an environmental and social management framework based on **internationally accepted environmental principles** following best practices for oil and gas exploitation (including decommissioning activities) that affect the marine environment should also be applied in Tanzania. Such best practices include:

- Environmental and social impact (ESI) analysis of extraction, processing and infrastructure activities
- Compensation schemes such as biodiversity offsets
- ESI management plans (biodiversity as well as community engagement)
- Requirement for corporate environmental reporting according to international standards
- Ensuring that technology development and transfer form an integral part of gas development to help build local capacity.

73. Specifically, **policy actions** for the GoT should include:

- Ensuring GoT and gas companies develop and maintain “Emergency Response Plans” applicable to all operations
- Carrying out strategic environmental and social assessments before any development and strengthening implementation
- Improving land and marine use planning, including identifying, demarcating and protecting critical zones (habitats, conservation areas, ecosystems), and investing in marine and coastal zone environmental protection
- Strengthening GoT capacity to monitor compliance and enforce environmental regulations.

Lessons from country experience – Texaco exploration in north east Bangkok: Practices voluntarily adopted by one company may become a model for national oil and gas legislation, thereby raising the standard expected of other companies seeking to operate in that country. For example, Texaco’s procedures for the exploratory drilling of the onshore site Dao Ruang 1 in Thailand in 1993, conducted according to the company’s “Worldwide Exploration and Production Environmental Practices”, were used by the Thai government as a model for drafting the Ministerial Regulations concerning Petroleum Environmental Management. The Thai government has used Texaco’s procedures for closure of the site as the case study for future reference for other operations in Thailand.

Lessons from country experience – blow-out at the Macondo platform (USA): The explosion and subsequent fire on the semi-submersible Mobile Offshore Drilling Unit (MODU), which operated about 60 km southeast of the Louisiana coast killed 11 workers and injured 16 others. It caused the MODU to burn and sink, and started a massive offshore oil spill in the Gulf of Mexico; this environmental disaster is now considered the second largest in US history. The accident in Gulf of Mexico in April 2010 offered a dramatic lesson: The causes of the blow-out involved a diffuse network of responsibilities and poor coordination among the actors of the contracting chain such as failure to communicate and lack of common standards is thought to have played a significant part in this disaster. Also, the US government has received blame in its role as regulator.

All companies in the contracting chain need to ensure that responsibility for good performance and effective emergency response is shared. The incident is also a reminder that poor contracting chain management is not limited to the developing world.

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Appendix

Proposed Tanzania Gas Action Plan Matrix

This Matrix, drafted at the request of the Government of Tanzania (GoT), was discussed with, and reflects feedback from, key GoT counterparts received on December 13, 2012. The Matrix will be attached to the final report of the Gas Sector Scoping Mission held on October 15-19, 2012. The mission participants represented the African Development Bank (AfDB), the People's Republic of China, the United Kingdom's Department for International Development (DFID), the European Union (EU), Germany, the International Monetary Fund (IMF), and the World Bank (collectively, the Partners), working together in the spirit of the Paris Declaration on Donor Coordination and Harmonization. The Action Plan suggests the creation of a high-level Authority that will designate and work with the entity responsible for the implementation of the specific actions proposed (see column 4 of the table below).

Objective	Specific Actions	Timing/ Status	Entity Responsible
PART A. Measures with Immediate impact			
1. Ensure Inter-Agency coordination needed for Gas to serve as the platform to diversify the economy and put Tanzania on a sustainable growth path.	<ul style="list-style-type: none"> Set-up a high-level Authority under the leadership of an empowered Champion. The Authority could include representatives of the Ministry of Energy and Minerals, Ministry of Finance and Economic Affairs, Bank of Tanzania, The President's Office Planning Commission, Ministry of Education and Vocational Training, Ministry of Labour, Employment and Youth Development, Ministry of Industry, Trade and Marketing, the Vice-President's Office for Environment, the Attorney General's office, Tanzania Revenue Authority, Tanzania Petroleum Development Corporation. Establish and operationalize a Secretariat to the Authority 	In the next 3 months	Presidency
2. Communicate effectively to manage expectations and highlight business opportunities from gas	<ul style="list-style-type: none"> Develop a National Communication Strategy (NCS) for implementation 	In the next 6 months and ongoing	

<p>3. Ensure transparency and strengthen accountability at all levels of the natural gas value chain</p>	<ul style="list-style-type: none"> • Involve stakeholders in the design of the Natural Gas Policy and the Natural Gas Utilization Master Plan • Publish and update on a frequent basis data on gas discoveries and reserves using internationally recognized disclosure standards • Commit to publishing all existing and new contracts, fiscal revenues from gas companies, an inventory of corporate social responsibility investments and all exemptions for companies, subject to applicable confidentiality clauses and without creating a disincentive for investment • Continue regular and timely audits of TPDC and oil companies, and additional third party oversight of different elements of the value chain • include extractives as a sector under the Open Government Partnership 	<p>In the next year</p>
<p>4. Strengthen negotiation, legislative, contract management and monitoring capacity</p>	<ul style="list-style-type: none"> • Ensure continuity of a multi-agency negotiation team and prepare a strategy for future negotiations. The team should utilize expert advice to build up capacity as needed. Update all relevant legislation, utilizing the best possible advice • Strengthen capacity for contract management and monitoring 	<p>Immediate and continuous</p> <p>In the next year</p>
<p>5. Review fiscal regimes to ensure alignment with GoT's objectives</p>	<ul style="list-style-type: none"> • Review the fiscal regime for gas, aiming at preserving the economic value in the higher-taxed upstream activities through transparent formulas for transfer prices • Review the general tax system to ensure that rules on debt finance, gains on sales of petroleum rights, capital allowance rules, tax treaties, and models for transfer price rulings are all aligned with the GoT's broad objectives for gas 	<p>In the next year</p>

6. Ensure Consistency with fiscal and macro framework	<ul style="list-style-type: none"> • Closely monitor debt, fiscal and monetary indicators, inflation and the real and nominal exchange rates • Conduct appropriate monetary and fiscal policy to counteract any over-heating from FDI inflows • Manage debt actively to avoid fiscal and debt distress 	In the next six months
7. Clarify key strategic objectives	<ul style="list-style-type: none"> • Determine the right balance, and rebalance when needed, between domestic and regional markets and exports. Consider earmarking gas from onshore and nearshore developments for the domestic and regional markets and putting a domestic supply obligation on deep offshore developments that target LNG export markets <p>Further clarify in the Natural Gas Policy the need for and the distinct roles of an independent upstream regulator and a National Oil and Gas Corporation assuming the commercial functions</p> <ul style="list-style-type: none"> • Develop and include in the Natural Gas Utilization master plan a framework to establish trade-offs between different domestic uses of gas including fertilizers, cooking, etc. • Fast-track an LNG value chain development that allows for expansion 	In the next six months
PART B. Measures with Medium term impact		
8. “Investing in Investing”: Build capacity along the entire natural resource value chain	<ul style="list-style-type: none"> • Assess the capacity needs along the decision chain, especially concentrating on the “investing-in-investing”: explore with NEPAD the opportunity of using their flagship program on the natural resource charter to investigate further the capacity needs along the gas decision and value chain • Engage with Partners to fill identified capacity needs 	In the next year In the next year
9. Invest efficiently and effectively, especially in strategic infrastructure and	<ul style="list-style-type: none"> • Implement a robust Public Investment Management program in government • Implement specific Public Investment Management programs 	In the next two years

<p>growth poles to attract private investment and catalyze economic diversification</p>	<p>in the area of infrastructure and urban development</p> <ul style="list-style-type: none"> • Develop a framework to facilitate private investment in infrastructure, including public private partnerships • Align investment with the national priorities and long-term planning for the country 	
<p>10. Develop strong industry-education linkages to avoid skills mismatch at the national level</p>	<ul style="list-style-type: none"> • Conduct a skills needs assessment to document the supply and the demand for skilled labor • Engage gas companies in designing specific local content and employment programs • Set up an industry-government-education provider consultative framework to ensure a match between the supply and demand for skills, including through curriculum development and certification 	<p>In the ne year</p>
<p>11. Promote local development, including through growth poles</p>	<ul style="list-style-type: none"> • Support local SMEs to meet the needs of gas companies through sharing information on needs of gas companies, development of standards for the gas industry and support to quality upgrading of services of local providers • Work in collaboration with gas companies and in consultation with local communities to develop joint government-firms infrastructures • Create framework conducive environment for local employment by gas companies • Enforce safeguards and enforce application of CSRs to respond to local communities' development needs 	
<p>12. Update Institutional and Governance frameworks to adapt to the new opportunity</p>	<ul style="list-style-type: none"> • Separate regulatory and commercial functions of state entities in the sector • Ensure gas revenues are deployed in a medium-term fiscal framework and integrated with the budget • Consider all options for underpinning the fiscal policy framework with a natural resource revenue fund integrated with the budget, including a stabilization fund and a Sovereign Development Fund 	<p>In the ne year</p>

<p>13. Prevent and manage environmental and social risks, by both GoT and gas companies</p>	<ul style="list-style-type: none"> • Ensure GoT and gas companies develop and maintain respective “Emergency Response Plans” applicable to all operations • Carry out strategic environmental and social assessments before any development and strengthen implementation • Improve land and marine use planning. Identify, demarcate and protect critical zones (habitats, conservation areas, ecosystems). Invest in marine and coastal zone environmental protection • Strengthen GoT capacity to monitor compliance and enforce environmental regulations 	<p>In the ne year</p>
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