

Gender and Equity Compact for the Energy and Mineral Development Sector 2016/2017 – 2019/2020



*"Enhancing Gender and Equity
Planning and Budgeting
in the Energy and Mineral
Development Sector"*

2017



Gender and Equity Compact for the Energy and Mineral Development Sector (GEC EMDS) 2016/2017 – 2019/2020

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Development Sector”*

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FOREWORD

As Uganda strives to become a middle-income country by 2020, the Energy and Mineral Development sector plays a crucial role as a key driver of economic growth and industrialization. A significant proportion of the national budget and public financing is allocated to the sector throughout the National Development Plan (NDP) II period, as Uganda is exploiting its oil and gas resources. To contribute to industrialization and economic growth, the Energy sub-sector is obliged to increase electricity generation and transmission, to expand development and access to sustainable energy services and to promote efficient utilization of energy. For socio-economic development, the Minerals sub-sector promotes and ensures development and utilization of mineral resources in a safe and sustainable environment, and the petroleum (oil and gas) sub-sector explores, develops and utilizes oil and gas resources.

In line with the United Nations Sustainable Development Goal (SDG) 7 which is to ensure access to affordable, reliable, sustainable, and modern energy for all, the Uganda Vision 2040 aims to reach 80% access to modern energy by 2040, a considerable increase from the 14% coverage in 2013. Uganda's current energy balance comprises of 92% biomass, 7% fossil fuels and 1% electricity. Most of the biomass energy consists of wood consumed in the form of charcoal and firewood, while a large burden of biomass collection and use is on women who are the primary domestic caretakers and employees in the informal food industry.¹

In February 2015, the Government of Uganda strengthened its commitment towards gender and equity planning and budgeting by introducing the Public Finance Management Act (PFMA) 2015 with three provisions² on gender and equity. In supporting the fulfillment of the gender and equity provisions of the PFMA 2015, UN Women and the Equal Opportunities Commission (EOC) are delighted to present the first Gender and Equity Compact for the Energy and Mineral Development Sector (GEC EMDS) for the period 2016/2017-2019/2020.

Gender and Equity responsive planning and budgeting can be a useful way to facilitate equitable access to the energy infrastructure and services for all, which is fundamental for sustainable and inclusive economic growth. On the supply-side of this expanding sector of Uganda, equal participation of disadvantaged groups of the population in the energy and mineral development, production, trade and management is also critical.

To support and facilitate Gender and Equity-responsive planning and budgeting, the Compact gives guidance on sector-specific gender and equity issues, possible interventions and indicators at output and outcome levels in line with the NDP II 2015/2016 – 2019/2020. It is hoped that effective use of the

¹ UoG (2015). Second National Development Plan (NDP II) 2015/16 – 2019/20

² Section 9 (6) (a) and (b) on Budget Framework Papers; Section 13 (11) e (i) and (ii) on the National Budget and Section 13 (15) g (i) and (ii) on the Ministerial Policy Statements

compact will facilitate the achievement of sustainable inclusive growth and development, as provided by the 17 SDGs and the NDP II, by strengthening the country's competitiveness for sustainable wealth creation, employment and inclusive growth.



Sylvia Muwebwa Ntambi
Chairperson
Equal Opportunities Commission



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Country Representative
UN Women

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This compact was developed by UN Women with technical leadership from Ms. Nite Tanzarn, a national consultant who worked in close collaboration with the National Taskforce on Gender and Equity including the Equal Opportunities Commission (EOC), the Ministry of Finance, Planning and Economic Development (MoFPED) and the Ministry of Gender, Labour and Social Development (MoGLSD). The Equal Opportunities Commission in particular directly contributed to the publication by providing leadership, technical inputs, reviewing and co-publishing this Compact.

UN Women and the Equal Opportunities Commission acknowledge with gratitude, the cooperation and participation in the formulation of this Compact by officials from the Ministry of Energy and Mineral Development (MEMD), Energy and Gender Working Group, Rural Electrification Agency (REA) and the Energy for Rural Transformation (ERT) Project throughout the consultative, training and writing processes.

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ACRONYMS

ASM	Artisanal Small-scale Mining
BFPs	Budget Framework Papers
EDF	European Development Fund
EOC	Equal Opportunities Commission
EU	European Union
GoU	Government of Uganda
LGs	Local Governments
LPG	Liquefied Petroleum Gas
FY	Financial Year
ICT	Information and Communications Technology
MDAs	Ministries, Departments and Agencies
M&E	Monitoring and Evaluation
MEMD	Ministry of Energy and Mineral Development
MoGLSD	Ministry of Gender, Labour and Social Development
MoFPED	Ministry of Finance, Planning and Economic Development
MPS	Ministerial Policy Statement
NDP II	The Second National Development Plan
NPGEIs	National Priority Gender Equality Indicators
OSH	Occupational Safety and Health
OVC	Orphans and Vulnerable Children
PFMA	Public Finance Management Act
PWDs	Persons with Disabilities
RAP	Resettlement Action Plan
SDGs	Sustainable Development Goals
UBOS	Uganda Bureau of Statistics
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
WETSU	Women Engineers, Technicians and Scientists in Uganda

INTRODUCTION

1.1 Background

Budgeting is the tool through which policies, programmes and development strategies of government are translated into public service delivery. The budget needs to be allocated and utilized to equitably deliver public services to all segments of the population, in particular disadvantaged groups such as women, persons with disabilities (PWDs), the chronically poor, the older persons, youth, orphans and other vulnerable children (OVCs), as well as people living in rural areas and disadvantaged regions.

According to the 2015/16 Final Report on the State of Equal Opportunities in Uganda, published by the Equal Opportunities Commission (EOC), marginalized groups in Uganda include: the disadvantaged youth; older persons; persons with disabilities; different categories of poor women including those living in post-conflict areas; ethnic minorities; orphans and other vulnerable children; and persons living with or affected by HIV/AIDS. (Refer to Annex A for the list of marginalized individuals and population groups). There are also geographical dimensions to marginalization in Uganda as the greater north region and eastern region are still lagging behind the rest of the country in terms of development due to various historical reasons. Cumulatively, marginalized groups comprise almost 80 percent of Uganda's population, and dominate those that fall below the poverty line.

The Government of Uganda initiated Gender and Equity budgeting during Financial Year (FY) 2004/5. However, the uptake was limited due to weak institutional gender and equity capacities as well as the lack of policy tools for enforcement. In February 2015, the Government of Uganda strengthened its commitment to realize equal opportunities in planning and budgeting by introducing a law known as the

Public Finance Management (PFM) Act, 2015 with three provisions of compliance with gender and equity planning and budgeting. The enactment of the Public Finance Management Act (PFMA) 2015 bearing the gender and equity provisions addressed the issue of enforcement.

Section 9 (1) requires each Accounting Officer in consultation with the relevant stakeholders, to prepare a Budget Framework Paper (BFP) for the vote (which means MDAs), taking into consideration balanced development, gender and equity responsiveness and shall submit the BFP to the Minister.

Section 9 (6) requires the Minister responsible for Finance in consultation with the Equal Opportunities Commission (EOC) to issue a Certificate, certifying that the Budget Framework Paper (BFP) is gender and equity responsive and specifying measures taken to equalize opportunities.

Section 13 (11) (e) mandates the Minister responsible for Finance to present the Gender and Equity certificates with the annual budget. Section 13 (15) specifies that a policy statement (of all MDAs as well as Local Governments (LGs)) shall contain the Gender and Equity Certificates issued by the Minister responsible for Finance in consultation with the EOC certifying that the policy statement is gender and equity responsive with specific measures taken to redress imbalances. The issuance of the Certificate to the respective budget of MDAs depends on the gender and equity compliance scores of the BFPs and MPSs assessed by the EOC.

1.2 Justification

As per the 2015 PFMA, it is mandatory for MDAs and LGs to be issued a Gender and Equity Certificate by the Minister responsible for Finance before submission of Budget Framework Papers and Ministerial Policy Statements to Parliament. MDAs and LGs, therefore, have

to identify gender and equity issues, specify measures to equalize the opportunities and allocate budgets to address the different needs of men and women, PWDs, older persons, youth and other marginalized groups and regions.

1.3 Purpose of the Compact

This Compact is a tool intended to facilitate identification of sector gender and equity issues, appropriate interventions and related performance indicators.

The Compact generates the gender and equity issues from both the gender and equity disaggregated data analysis and existing reports for ease of reference. The gender and equity issues selected for this compact are in line with the NDP II sector objectives and interventions¹. To that effect, the Compact reiterates, re-proposes and reinforces implementation of the national agreed sector priorities.

The Compact identifies programme/intervention areas to address identified gender and equity issues, and provides performance indicators at

the outcome and output level. The Compact is intended to stimulate critical thinking when dealing with the sector's gender and equity dimensions during planning, budgeting and during the decision-making processes.

1.4 Target group

The Compact has been designed for a cross section of sector officials namely:

- a. Decision makers constituted of the Top Management teams whose buy-in is critical. This includes Ministers; Permanent Secretaries; Directors; and Commissioners.
- b. Sector officials engaged in the budgeting process in particular officers in the policy and planning units and respective Heads of Departments/Divisions/Sections/Units.
- c. Managers of Government Programmes and Projects.
- d. Gender and Equity budgeting trainers.
- e. Gender and Equity Assessors

¹ These interventions have been agreed on in the second National Development Plan (NDP) II

1.5 How to use the Compact

1.5.1 Application During Budgeting

The budgeting officials will use the Compact in drafting the sector Budget Framework Paper (BFP) and Ministerial Policy Statement (MPS).

The “How to use Table” below is a brief manual depicting how to pick up issues/interventions/indicators from the Compact for the BFP and MPS. The Table also provides guidance for prioritizing gender and equity issues to be addressed as well as appropriate interventions.

Table 1: How to use the Compact during the Budgeting Process

Section of the BFP	Application of the Compact
V1: Sector Overview	
Sector Policy Objectives	Indicate desired gender and equity outcomes under the sector objectives.
Key performance issues to be addressed in the medium term	<ul style="list-style-type: none">- These should be drawn from the outcome performance indicators – the change desired when gender and equity issues are addressed.- Indicate the gender and equity issues among the key performance issues to be addressed by the sector. Select these from the list of gender and equity issues. <i>The prioritization of issues for selection should depend on the extent to which they (the issues) limit the achievement of sector objectives.</i>
V2: Past Performance and Medium Term Plans	
Past Performance	
<ul style="list-style-type: none">- Outcomes- Outputs	Indicate whether any gender and equity issues were addressed in the previous FY. List the outputs derived from the interventions that you carried out. These can be picked from the gender and equity issues and proposed strategies/interventions.
<ul style="list-style-type: none">- Given FY Planned Outputs- Given FY Planned Outcomes	Indicate the proposed interventions to address the gender and equity issues, and the expected results/outputs and outcomes for the financial year. The outputs should be selected from the proposed interventions to address gender and equity issues. The outcomes are the desired results achieved upon addressing the gender and equity issues. These should be adduced from the issues themselves.
Medium Term Plans	Indicate Medium term plans by listing which interventions shall be carried out in accordance with the planning framework i.e. NDP II. <i>Prioritization of selected interventions depend on the extent to which the interventions tackle the problems and contribute to achievement of medium term objectives, within the available resources.</i>
Key sector output and outcome indicators	Indicate key sector output and outcome performance indicators to show that gender and equity issues have been addressed. <i>These indicators have been provided.</i>
Proposed budget allocations by Class of Output	<i>Present specific budget allocation to outputs that explicitly promote Gender and Equity in the given template of BFP and MPS.</i>
Sector Challenges	Indicate Gender and Equity gaps under sector challenges. These are the key gender and equity issues that would not be addressed in a given financial year.

1.5.2 Application as a Training Tool

Gender and Equity budgeting experts will use the Compact during the training of sector officials. The sector gender and equity issues will be used as some of the illustrative examples.

This Compact has been supported by the European Union (EU) and developed by the UN Women in close collaboration with the Equal Opportunities Commission (EOC), Ministry of Finance, Planning and Economic Development (MoFPED) and Ministry of Gender, Labour and Social Development (MoGLSD). Officials from the Ministry of Energy and Mineral Development and the Public Agencies in the Sector participated in and contributed to formulation of this Compact and National Taskforce on Gender and Equity² experts and officials provided peer reviews.

² The Task Force, chaired by the Director Budget, MoFPED, draws its membership from The Equal Opportunities Commission; Ministry of Finance, Planning and Economic Development; Ministry of Gender, Labour and Social Development; Ministry of Education and Sports; Ministry of Health; National Planning Authority; Ministry of Local Government; Office of the Prime Minister; and the Civil Society Budget Advocacy Group (CSBAG)

1.6 Time frame

The Compact has been designed for the period covered by the NPDII: 2015/16–2019/20. It is expected that thereafter the EOC in collaboration with the Energy and Mineral Development Sector will analyze the status of gender and equity within the sector so as to agree on which issues to focus on until such a time when the sector has the capacity to identify pertinent sector gender and equity issues through rigorous analysis.

SITUATION ANALYSIS

2.1 Energy

- 2.1.1 Energy technologies, and in particular those using renewable energy resources, have the potential to reduce drudgery and increase free time and productivity, but the benefits are not necessarily evenly distributed. Gender and equity issues, including women's relative to men's time and physical energy, are not necessarily taken into consideration in policy, planning and budgeting. Further to that, innovations, technologies and applications are not gender and equity responsive with the available ones being very costly for the poor to afford.
- 2.1.2 Biomass is the major [92%] source of energy in the country most of which is from wood consumed in the form of charcoal and firewood used by nearly 95 percent of the households as the main source of fuel. The main burden of biomass collection and use is placed upon women who are the major domestic caretakers as well as employees in the informal food industry.³ Accordingly, they disproportionately bear the burden of energy poverty and face significant health risks from household air pollution as well as safety risks by the lack of light. Safety of children is also a concern arising out of using open fires for cooking.
- 2.1.3 Women expend more labour and spend more time on [energy intensive] care and domestic economy activities such as caring for children, the sick and the old. They carry head- and back-loading heavy loads of water, firewood and food.

Additionally, women are predominantly involved in labour-intensive agricultural processing for domestic consumption. Lack of efficient biomass, mechanical and electrical energy are direct contributors to women's work burden. Anecdotal evidence suggests that heavy back- and head-loading increases women's susceptibility to health risks, including chronic back and neck pains and produces complications after delivery.

- 2.1.4 A number of quantitative and qualitative studies have shown that clean energy access is linked with better chances for girls and boys to complete primary education and for women and the poor to earn better wages, while it also contributes to a reduction in gender-based violence. Ability to power mobile phones means better connectivity and better business opportunities⁴.
- 2.1.5 Most energy technologies used at the household level, in institutions, industries, and the commercial sector are energy inefficient. For instance, there is a low penetration of improved stoves with only about 65,000 distributed annually throughout the country. And these have an average life span of only four years. As a result, 90 percent of the rural, and 80 percent of the urban households continue using the three-stone fuelwood stove and the traditional metallic charcoal stoves, respectively.⁵
- 2.1.6 Climatic stresses on forest resources are increasing the burden on many vulnerable persons such as women, children, the rural poor, older persons and PWDs forcing them to travel even longer distances to

⁴ N. Misra from Solar Sister. 2015. Sustainable Energy for All: Empowering Women. UN Chronicle. Vol. LII No. 3: 2015. Available at: <https://unchronicle.un.org/article/sustainable-energy-all-empowering-women>

⁵ Ministry of Energy and Mineral Development [MEMD]. Biomass Energy Strategy [BEST] Uganda, (2013)

collect fuel wood.⁶ But there are cases that adaptation measures such as some fuel-efficient cooking technologies heighten women's time poverty. For instance, it takes 2.7 hours to cook using the traditional three-stone stove but 4.6 hours using a sawdust one.⁷

- 2.1.7 Women and girls are vulnerable to sexual and gender-based violence during firewood collection. This is exacerbated in conflict and post-conflict situations. For instance, in 2014 in Nakivale refugee camp, 41 percent of households reported incidences of violence during firewood collection. These included confiscation of firewood [23%], beating [20%], bodily injury [12%], assault [10%], attempted rape [5%] and rape [4%]. The exposure to the risk of sexual- and gender-based violence heightens with the number of times and the distances travelled to collect firewood. Women refugees collect firewood 8.3 times per month, while girls age 17 and under collect wood 7.2 times per month. Time spent per trip is 3 hours and the average distance travelled by is 5.7 km. And yet, rural electrification programmes do not address household cooking energy needs.
- 2.1.8 Considering their reproductive role, women are disproportionately affected by inadequate powering of health facilities, and in particular those offering delivery services including emergency obstetric care.
- 2.1.9 Most of traditional income generating activities that the poor, PWDs and women engage in such as food preparation and processing, beer brewing, and pottery, use process heat for which electricity is not the cheapest option. And yet due

to income poverty, the poor, PWDs and women may not easily adapt to renewable energy solutions, with the potential to improve the productivity of their labour. Further to that, their restricted ownership of resources limits their ability to benefit equally from energy facilities that require physical assets such as land. Rural households are disproportionately affected by the lack of affordability and supply of energy technologies. Additionally, lower income level and relative lack of access to credit limit the ability of women, PWDs, older persons and the poor to pay the up-front costs of energy services such as connection fees to the electricity grid. Furthermore, time and income poverty restrict women's relative to men's ability to become energy entrepreneurs.

2.1.10 Men dominate the high value enterprises and activities, and women in the low paying downstream artisanal sector. At the same time, men predominate in the high risk energy and mineral development sector activities.

2.1.11 The benefits of energy to PWDs include powering equipment and devices that provide mobility, communication and independence. These include reading, writing, speaking and hearing aids, mobile and cordless telephones, and motorised wheelchairs. However, PWDs are often income poor and cannot afford the mostly costly assistive technology.

2.1.12 The influx of migrant workers in large infrastructural projects increases the risk of sexual violence against women, girls, boys and PWDs in the communities. This

6 NDPII [2015]. Op. Cit.

7 UBOS [2015]. Op. Cit.

is besides the increased exposure to health risks such as sexually transmitted infections including HIV and AIDS.

2.2 Mineral Development

- 2.2.1 The extractives industry has the potential to increase local employment opportunities and development of local expertise and skills of women, men youth, PWDs and men. This is besides improving access to socioeconomic services through improved roads, transportation, communications and information.
- 2.2.2 However, women, people who have low incomes, low literacy and PWDs experience restricted access to these opportunities due to inequitable policy practices and capacity challenges.
- 2.2.3 Men predominate in the large-scale mining that is typically mechanised and women, youth, the poor among other vulnerable groups, in the artisanal and small-scale mining (ASM) that employs rudimentary techniques and often operates under hazardous, labour-intensive and unregulated conditions.
- 2.2.4 Men, the rich and the educated predominate as concession owners, mine operators, dealers and buying agents, and equipment owners. Women constitute less than 5 percent of persons employed in the formal mineral sector, 10-25 percent of the miners in ASM gold areas in the West and Southwest and between 50-90 percent in the Northeast⁸.
- 2.2.5 The roles of women in artisanal mining communities differ significantly from those of men and these result in distinct opportunities and risks. Women are often involved in processing, which is a less lucrative activity than the actual

digging. Women's responsibilities in mineral processing activities range from crushing, grinding, sieving, washing and panning, to amalgamation and amalgam decomposition in the case of gold mining.

- 2.2.6 Men are involved in underground work and are thus vulnerable to ground failure, shaft collapses and machinery accidents. Women in ASM are highly susceptible to chemical dangers, particularly in association with mercury misuse in gold mining. As processing activities are often conducted in the home, women and their families can be at great risk of mercury poisoning and silicosis.
- 2.2.7 A notable concern is the high prevalence of child labour in ASM, and in particular gold and stone mining, which affects children's school enrolment. Further to that, is the safety of children who may accompany their mothers or take part in artisanal mining activities.

2.3 Oil And Gas

- 2.3.1 The oil and gas sub sector offers great potential to create new employment opportunities for women, men, the poor, youth, and PWDs. This is besides the potential for Liquefied Petroleum Gas (LPG) replacing firewood for cooking and thus addressing the dependency on biomass.
- 2.3.2 However, women are typically employed as cooks and domestic workers, at lower pay rates than construction work, which is mostly given to young men.
- 2.3.3 Further to that, global evidence suggests that whereas oil pipeline construction results in new employment for men, it disproportionately harms women, who lose farm income from appropriated farmland and suffer from violence,

⁸ United Nations Environment Programme (2012)

prostitution, HIV/AIDS and stillbirths⁹. A 2011 study conducted in Cameroon, Nigeria, Ghana and Togo showed that pipelines badly affected women's livelihoods in farming, fishing, handicrafts and other industries.¹⁰

2.3.4 However, the primary concern with petroleum development in Uganda is environmental sensitivity. Local communities and residents who will be directly affected by petroleum activities are treated as part of the "environment".

There has been no explicit consideration of gender differences in land ownership and use, employment equity; displacement and resettlement. And there have been no differential impacts on women and men from the influx of male foreign workers and likely increase in "social vices".¹¹

⁹ Gender Action, Boom Time Blues: Big Oil's Gender Impacts in Azerbaijan, Georgia and Sakhalin, (September 2006). <http://www.genderaction.org/images/boomtimeblues.pdf>

¹⁰ Gender Action, Broken Promises: Gender Impacts of the WB-financed West African and Chad-Cameroon Pipelines, September 2011. www.genderaction.org/publications/11/chad-cam-wagp-pipelines.html

¹¹ ENERGIA. Upstream Petroleum Sector. Building capacity for gender mainstreaming of energy sector co-operation in Uganda: baseline study. Draft, (February 2012)

NDPII GENDER AND EQUITY COMMITMENTS

1. Mainstream gender, equity and rights in policies, plans and programmes in sectors and local governments.
2. Promote formulation of gender and equity sensitive regulatory frameworks.
3. Promote formulation of legal frameworks for vulnerable persons and groups at all levels.
4. Design, implement and follow up the integration of gender, equity and human rights in policies.
5. Strengthen the capacity of stakeholders in promotion, protection and reporting on gender, equity and human rights.
6. Strengthen the land rights for the poor and vulnerable groups.
7. Strengthen access to land for women and youth.
8. Prevent and respond to Gender Based Violence.
9. Promote and protect the rights of vulnerable groups, namely, orphans and vulnerable children, PWDs and older persons against abuse, exploitation, violence and neglect.
10. Formulate a National Sexual Harassment Policy.
11. Expand labour intensive public works to poor and vulnerable households.

4

THE COMPACT

4.1 Energy Sub-Sector

Mandate: The Energy sub-sector is responsible for increasing electricity generation and transmission, development and access to sustainable energy services and promotion of efficient utilization of energy.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
<i>NDP II Objective 1: Increase power generation capacity to drive economic development</i>				
<ul style="list-style-type: none"> - Develop hydropower energy: Large and small hydropower plants. - Develop geothermal power sources. - Build thermal power plants. 	<ul style="list-style-type: none"> - High mobility of labour/influx of migrant workers in large infrastructural projects result in: Risk of sexual violence against women, girls, boys and PWDS. - Increased exposure to health risks such as sexually transmitted infections including HIV and AIDS. 	<ul style="list-style-type: none"> - Develop a Code of Conduct clearly outlining unacceptable behaviour and legal and contractual consequences for sexual harassment and other gender based violence. - Appoint a focal committee in the Local District Government and establish clear official reporting system of the case and referral mechanisms to the justice and forensic health institutions - Conduct public information and communication sessions for contractors, employees and local community representatives of no tolerance of sexual violence, the Code of Conduct, a focal point committee/staff, and official reporting and referral systems to justice and forensic authorities 	<ul style="list-style-type: none"> - Code of Conduct incorporated in contractual documents; - A focal point/ committee appointed; - Institutional reporting systems established; - Referral institutions identified and networked; - No. of information sessions conducted for contractors, employees and local community representatives 	<ul style="list-style-type: none"> - % change in number of reported cases of sexual violence against women, children and PWDS in construction; - No. of cases reviewed by the committee and referred to the justice and health institutions.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
Women and PWDs under-represented in the construction of infrastructure.	<ul style="list-style-type: none"> - Affirmative action for women and PWDs in recruitment, as appropriate. - Database developed or updated of employees involved in construction works disaggregated by sex, age, disability and category of work. 	<ul style="list-style-type: none"> - When engaging and consulting with the community/households affected by the land acquisition, compensation and resettlement, ensure to listen to concerns and needs of women members and female heads of households and reflect in the resettlement action plans - Make sure resettlement action plans are implemented and the compensation delivered to family members in the right way - Maintain a database of persons/households affected and compensated disaggregated by sex, disability and age. - The needs of the voiceless including women, PWDs, and the older persons are not given adequate consideration in land acquisition, compensation and resettlement. 	<ul style="list-style-type: none"> - Number, percentage and type of employment generated to women and PWDs annually. 	<ul style="list-style-type: none"> - Proportion of women relative to men employed by category of work by the end of the project. - Number of PWDs employed by category of work.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
	<ul style="list-style-type: none"> - Women and children may not fully benefit from resettlement schemes arising from land acquisition for large energy infrastructure investments due to poor application of Resettlement Action Plans. - Occurrence of social ills as one of the side effects of resettlement schemes e.g., Families may break up as male beneficiaries of resettlement schemes may abandon their wives and children. 		Annual reduction in the number of reported cases of people, disaggregated by sex, disability and age, negatively affected by land acquisition, compensation and resettlement.	

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
NDPII Objective 2: Expand the electricity transmission grid network	<ul style="list-style-type: none"> - Although the grid infrastructure extended, accessibility to power use at the household level is determined by the affordability of the connection price to the electricity grid and service fees. Therefore, even in under-grid communities, electrification rates of rural households usually remain very low.¹⁴ - Build new transmission lines to evacuate power from generation plants. - Extend the transmission grid to service previously unreachd peri-urban and rural areas. 	<ul style="list-style-type: none"> - To complement the grid extension with actual connections of rural households along the way, design electrification schemes for rural households including female-headed households with supporting options such as: <ol style="list-style-type: none"> 1. subsidizing <i>last-mile electricity connections to households;</i> 2. providing access to credit or innovative financing options to help rural households meet the up-front cost associated with electrification; 3. group-based subsidies tied to the number of applicants for lower transportation and utility costs and economies of scale¹⁵ 	<ul style="list-style-type: none"> - No. of rural households disaggregated by sex of household head benefitted from the electrification support scheme - Number of rural households connected to the grid annually. 	<ul style="list-style-type: none"> % increase in electrification rates of rural households

¹⁴ K. Lee et al., 2016. Electrification for “Under Grid” households in Rural Kenya. Development Engineering 1 (2016) 26–35

¹⁵ Ibid.

Prioritised NDPII sector intervention	Gender and equity issues strategy	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
NDPII Objective 3: Improve Energy Efficiency				
Develop and enforce standards for promoting energy efficiency.	<ul style="list-style-type: none"> - Women, men, PWDs and the older persons have distinct energy needs. - Rural women and girls are disproportionately affected by the low levels of efficiency of the energy technologies in use, including wood fuel stoves, lights and other appliances. - High rates of electrocution in upcoming town areas for example Elgon sub region. 	<ul style="list-style-type: none"> - Conduct a gender and equity analysis to inform the development of the standards. - Research and development of energy efficient and innovative cooking equipment and devices - Enforce legal connection to power in the Elgon Sub Region 	<ul style="list-style-type: none"> - Standards for promoting energy efficiency responsive to the distinct needs of women, men, PWDs and the older persons. - Proportion of the Population accessing power legally 	<ul style="list-style-type: none"> - Number of gender and equity responsive energy efficient innovations and technologies developed annually. - Reduced illegal power connections

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
NDPII Objective 4: Promote use of alternative sources of energy	<ul style="list-style-type: none"> - Despite more than three decades of promoting the use of energy efficient stoves, adoption is about 10 percent or less in both urban and rural areas.¹⁶ - The failure of consumers to adopt improved cook-stoves with benefits far greater than its costs has consistently challenged improved cook-stove programmes. Some consumers decline to adopt health-benefiting and fuel-saving new stoves even when the cost of an efficient cook-stove can be recovered from just a few months of fuel savings¹⁷. - The barriers of local households to adopt the new stoves include present bias, liquidity constraints, and imperfect information on fuel savings and stove durability¹⁸. 	<ul style="list-style-type: none"> - It was proven that the collective barriers to adoption identified can be countered with an optimal sales contract combining: a free trial, time payments, and the right to return the stove.²⁰ - This sales offer is designed to address liquidity constraints, present bias, concerns about savings and concerns about durability. - Employ public-private partnerships taking innovative approach e.g., women-driven last mile distribution to promote adoption of the renewable energy technologies as below (Model of “Solar Sister”)²¹ <ul style="list-style-type: none"> o Build a women-driven last mile distribution network to bring clean energy access to underserved communities o Recruit, train and mentor women to build sustainable businesses selling clean cook-stoves 	<ul style="list-style-type: none"> - A costed action plan to promote use of energy efficient stoves or other technologies, as appropriate. - No. of households offered with the optimal sales offer combining a free trial, time payments and the right to return the stove. - No. of households contracted with this sales offer - % increase in the number of female clean energy entrepreneurs/ employees 	<p>% increase in the number of households adopting energy efficient technologies disaggregated by sex, location and age of head and type of renewable energy technology.</p>

¹⁶ MEMD BEST, 2013

¹⁷ D. Levine et al., 2013. What Impedes Efficient Adoption of Products? Evidence from Randomized Variation in Sales Offers for Improved Cook-stoves in Uganda

¹⁸ Ibid.

²⁰ This optimal contract offer in Uganda, both randomized trials, dramatically increased uptake of the efficient stove—in urban Kampala from 4% to 46% and in rural Mbarama from 5% to 57%. D. Levine et al., 2013. What Impedes Efficient Adoption of Products? Evidence from Randomized Variation in Sales Offers for Improved Cook-stoves in Uganda

²¹ N. Misra from Solar Sister. 2015. Sustainable Energy for All: Empowering Women. UN Chronicle. Vol. LI No. 3: 2015. Available at: <https://unchronicle.un.org/article/sustainable-energy-all-empowering-women>

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
- People may hardly give energy sources and devices the kind of attention stove promoters or energy product innovators suppose they do. At a basic level, what is important to a household is that the food is prepared on time irrespective of the stove used. ¹⁹ - Limited affordable energy alternatives for household cooking as a strategy to address effects of climate change as a result of deforestation	<ul style="list-style-type: none"> o Equip women entrepreneurs with business in a bag kit, business skills, technology and confidence. o Women use their social networks to provide the most effective distribution channel to rural and hard-to-reach customers. Since women are firmly rooted in their communities, they become a trusted source of post-point of customer care service and this is vital for building customer's confidence in clean energy technologies. o Women entrepreneurs benefit first-hand as users of clean energy and use the power of personal testimony to educate their communities on the benefits of the clean cooking solutions they sell e.g., transformational, positive impact that clean energy access initiatives have had on health, education, local livelihoods and a better environment. 	Lack of awareness/restricted access to information affects women, PWDs, the poor and older persons from adoption of energy saving/efficient technologies.	Involve women's groups, PWDs, the poor and older persons in the awareness creation and dissemination of information.	No. of women, PWDs, the poor and older persons involved in the promotion of renewable energy technologies per district per year.

¹⁶ MEMD BEST, 2013

¹⁷ D. Levine et al., 2013. What Impedes Efficient Adoption of Products? Evidence from Randomized Variation in Sales Offers for Improved Cook-stoves in Uganda

¹⁸ Ibid.

²⁰ This optimal contract offer in Uganda, both randomized trials, dramatically increased uptake of the efficient stove—in urban Kampala from 4% to 46% and in rural Mbarara from 5% to 57%. D. Levine et al., 2013. What Impedes Efficient Adoption of Products? Evidence from Randomized Variation in Sales Offers for Improved Cook-stoves in Uganda

²¹ N. Misra from Solar Sister. 2015. Sustainable Energy for All: Empowering Women. UN Chronicle. Vol. LI No. 3: 2015. Available at: <https://unchronicle.un.org/article/sustainable-energy-all-empowering-women>

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
Women, PWDs and rural and urban households at lower income level may not easily adapt to the expensive renewable energy solutions such as LPG.	- Option 1: group-based subsidies tied to the number of applicants for lower transportation and utility costs and economies of scale ²² - Option 2: Offer optimal sales contract combining a free trial, time payments, and the right to return the equipment addressing liquidity constraints, present bias, concerns about savings and concerns about durability of the equipment	Incorporate gender and equity awareness creation in the promotion of renewable energy technologies.	- No. of households offered with group-based subsidies - No. of households contracted with the optimal sales offer	Number of promotion campaigns conducted annually, incorporating gender and equity awareness raising.
Women experience restricted voice as regards choice of and decisions to purchase energy technologies.		Sustained awareness creation campaigns about the risk management of using traditional cooking technologies and about alternative cooking technologies.		Number of awareness creation campaigns conducted annually.
Children's safety is an issue on account of using open fires for cooking.				

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
- In Africa, renewable energy-related employment is presently low except in a few countries where growth of renewable energy deployment is creating domestic value and jobs. ²³ In this context, on the workforce side , women are under-represented in the clean technology sector and renewable energy industries.	<ul style="list-style-type: none"> - Empower women through local green jobs and workforce development in building the pipeline of skills needed to successfully leverage the technological advances of the future of work in Africa²⁴. - (Model of “Solar Sister”)²⁵ - Build a women-driven last mile distribution network to bring clean energy access to underserved communities - Recruit, train and mentor women to build sustainable businesses selling e.g., portable solar lamps, mobile phone chargers and clean cook-stoves - Equip women entrepreneurs with business in a bag kit, business skills, technology and confidence. 	<ul style="list-style-type: none"> - On the entrepreneur side for development and innovation of energy technologies, products and process, women are structurally constrained from participating as clean energy entrepreneurs due to lack of credit, assets, knowledge and technology. 	% increase in the number of female employees and entrepreneurs involved in the clean energy sector	% increase in the number of households adopting clean energy technologies disaggregated by sex of head and type of energy technology.

²³ The International Renewable Energy Agency (IRENA). 2015. Renewable Energy and Jobs. Annual Review 2015. Available from: http://www.irena.org/DocumentDownloads/Publications/IRENA_RE_Jobs_Annual_Review_2015.pdf

²⁴ Annunziata & Kramer. 2015. “Building strong workforces to power Africa’s growth. The future of work in Africa”, White Papers series (General Electric: July 2015). Available from: http://files.publicaffairs.geblogs.com/ideas-lab/files/pdfs/building-strong-workforces-to-power-africas-growth.pdf?utm_content=buffercded2&utm_medium=social&utm_source=twittercom&utm_campaign=buffer

²⁵ N. Misra from Solar Sister. 2015. Sustainable Energy for All: Empowering Women. UN Chronicle. Vol. LII No. 3: 2015. Available at: <https://unchronicle.un.org/article/sustainable-energy-all-empowering-women>. Key approaches of the model are as below:

- o Build a women-driven last mile distribution network to bring clean energy access to underserved communities
- o Recruit, train and mentor women to build sustainable businesses selling e.g., portable solar lamps, mobile phone chargers and clean cook-stoves
- o Equip women entrepreneurs with business in a bag kit, business skills, technology and confidence.
- o Women use their social networks to provide the most effective distribution channel to rural and hard-to-reach customers. Since women are firmly rooted in their communities, they become a trusted source of post-point of customer care service and this is vital for building customer’s confidence in clean energy technologies.
- o Women entrepreneurs benefit first-hand as users of clean energy and use the power of personal testimony to educate their communities on the benefits of the solar and clean cooking solutions they sell e.g., transformational, positive impact that clean energy access initiatives have had on health, education, local livelihoods and a better environment.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
		<ul style="list-style-type: none"> - Women use their social networks to provide the most effective distribution channel to rural and hard-to-reach customers. Since women are firmly rooted in their communities, they become a trusted source of post-point of customer care service and this is vital for building customer's confidence in clean energy technologies. - Women entrepreneurs benefit first-hand as users of clean energy and use the power of personal testimony to educate their communities on the benefits of the solar and clean cooking solutions they sell e.g., transformational, positive impact that clean energy access initiatives have had on health, education, local livelihoods and a better environment. 	<ul style="list-style-type: none"> - Promote cost effective and energy efficient technologies (<i>intervention options addressed above</i>). 	<p>Number of households adopting cost effective and energy efficient technologies.</p> <ul style="list-style-type: none"> - % reduction in average time taken to and from the firewood supply point by sex of house-hold head (mins) - % reduction in average cooking time. <p>Number of energy efficient pumping technologies installed annually.</p> <p>% reduction in average time taken to & from the water (safe) supply point by sex of household head (mins)</p>

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
	Women's work in the care economy involves head and back loading heavy loads on foot and this has harmful effects on women's health	<ul style="list-style-type: none"> - Design and promote energy efficient technologies to minimise head and back loading. - Employ public-private partnerships to promote using labor-efficient carrying instrument of water/fuel-wood (e.g. rolling water carrier) 	Number of technologies promoted and adopted.	% reduction in head and back loading disaggregated by sex.
	Considering their reproductive role, women are disproportionately affected by inadequate powering of health facilities, and in particular those offering delivery services including emergency obstetric care.	<ul style="list-style-type: none"> - In collaboration with the Ministry of Health, promote the use of appropriate and cost effective renewal energy technologies in public health facilities. - Promote and use the power of personal testimony by women using the clean energy to educate their communities on the benefits of the quality solar lights they sell e.g., transformational, positive impact that clean energy access initiatives have had on health, education, local livelihoods and a better environment. 	Number of collaborative interventions conducted annually.	% of health facilities using renewable energy technologies.
	The performance of school going children in rural areas affected by household sustained lighting.	<ul style="list-style-type: none"> - Promote affordable energy efficient technologies. - Promote and use the power of personal testimony by women using the clean energy to educate their communities on the benefits of the quality solar lights they sell e.g., transformational, positive impact that clean energy access initiatives have had on health, education, local livelihoods and a better environment. 	Number of promotion campaigns conducted annually by location.	% of rural households adopting energy efficient technologies for lighting.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
The risk of sexual violence restricts women's and girls' participation in economic, political and social activities outside the home after dark.	Engage urban and local authorities to use renewable energy for [street lighting].	Number of engagements annually.	Number of innovations addressing women's energy burden beyond cooking.	% of communities lit.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
NDPII Objective 5: Improve the policy, legal and institutional framework				
Develop policies to address gaps [atomic energy, thermal power from locally produced petroleum products, biomass, and energy efficiency].	Policies have gender and equity differentiated impacts. Limited disaggregated data that renders equity issues unviable.	<p>Conduct a gender and equity analysis to inform the development of the policies.</p> <p>Enhance the capacity of the policy and planning unit in gender and equity sensitive data collection, analysis, interpretation, monitoring and evaluation, dissemination/ communication</p>	<p>Gender and equity mainstreamed in policies</p> <p>Number trained in gender and equity research methodologies</p>	<ul style="list-style-type: none"> - Number of gender and equity responsive innovations and technologies developed annually. - BFP and MPS provide gender and equity disaggregated data.
Review the existing policies and Acts [Energy Policy, Renewable Energy Policy, and Electricity Act].	Energy Policy for Uganda (2002) recognises women's role in biomass supply and utilisation and the attendant labour burden and health risks. However, the Policy reduces gender and energy issues only to cooking and a biomass-oriented concern The Renewable Energy Policy for Uganda (2007) is largely gender responsive.	<p>Conduct a gender and equity energy audit to inform the review of Policies and Acts.</p> <p>Electricity Act gender and equity blind.</p>	Gender and equity mainstreamed in revised policies and legislation.	Gender and equity mainstreamed in revised policies and legislation.
Formulate a PPP framework to allow more private investment in the energy sector.	Women and other disadvantaged groups under-represented amongst energy entrepreneurs.	PPP framework provides for affirmative action, capacity building and flexible credit facilities to promote female/PWDs energy entrepreneurs and their energy firms.	Proportion of female/PWDs-owned or predominated energy firms benefitting from capacity building and flexible credit.	% increase in the number female/PWDs-owned or predominated firms involved in the energy sector.
The overall aim of the private sector is to maximise profit not necessarily considering gender and equity promotion.	PPP framework provides for incentives to the private sector to address gender and equity issues in their investments.	Proportion of private investors incorporating gender and equity issues in their company profiles.	Number of gender and equity responsive innovations and technologies developed.	

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
Strengthen the institutional and human capacity.	NDPII Objective 6: Build capacity in the energy sector Functional Sector Gender Committee is in place	<ul style="list-style-type: none"> - Gender and equity capacity building [training of trainers -ToTs] for committee to improve its effectiveness. - Build and lead institutional Gender Action Plan at the sector level in association with Ministerial Policy Statements of Votes under the Energy Sector - The Gender Committee synthesizes existing studies regarding gender/equity – energy of Uganda as well as lessons learned from the gender-energy interventions of the Government, NGOs and Development Partners. 	<ul style="list-style-type: none"> - ToTs conducted by end of financial year - Number of gender and equity staff training workshops conducted annually by the committee. - Time- and resource-bound Sector Gender Action Plan with assigned roles to respective agencies which feed into MPSs of respective Energy MDAs - Synthesis of gender and energy knowledge drawn from the randomized sample tests, studies or interventions in Uganda 	<ul style="list-style-type: none"> - Critical mass of energy sector officials [at least 30%] equipped with gender and equity training conducted by the committee - Specific budgets allocated to outputs explicitly promoting gender and equity in respective Energy MDAs in their MPSs - Actual expenditures tracking allocated budget to gender Any recommendation/ innovative idea adopted from the knowledge synthesis by MDAs' energy interventions

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
Women and PWDs under-represented in energy sector.	Affirmative action for women and PWDs in institutional capacity building.	Number of officials trained annually, disaggregated by type of training, sex, age, and disability.	% increase in number of females relative to men in the sector.	
Train staff in specialized fields like nuclear science, geophysics, geology, hydropower and geothermal technology.	Collaborate with the WETSU [Association of Women Engineers, Technicians and Scientists in Uganda] to encourage school girls to choose science and female graduate engineers to join the energy sub-sector.	Number of collaborative undertakings annually.		
	Affirmative action for women and PWDs in the selection of beneficiaries for the training	- Women constitute at least 30% of the trained staff, as appropriate. - Number of PWDs trained.	- Progress towards critical mass of women in specialized fields such as nuclear science, geophysics, geology, hydropower and geothermal technology. - Number of PWDs in specialized fields such as nuclear science, geophysics, geology, hydropower and geothermal technology.	

4.2 Minerals Sub-Sector

Mandate: The Minerals sub-sector is responsible for promoting and ensuring rational development and utilisation of mineral resources in a safe and sustainable environment for socioeconomic development.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
NDPII Objective 2: Increase monitoring and regulation in the mining sector				
Develop a mineral development plan “master” plan.	Exploration and mining activities have gender and equity differentiated impacts.	Identify and analyze the key gender and equity issues in the minerals sub sector to inform the development of the “master” plan with explicit mitigation plan of the negative gender impacts and promotion of women’s and PWDs participation and benefit	“Master” plan provides key gender and equity sensitive baseline data and measures to promote women’s and PWDs participation in and benefit from the sub-sector.	Sub sector performance reports provide data on impacts by sex, age, and disability status.
Sub-sector has a National Guidance Strategy for Promotion of Gender Equity in Mining.		Develop a resource and time-bound action plan for implementation of the Strategy.	Resource and time-bound action plan	<ul style="list-style-type: none"> - % increase in the number of females relative to men benefitting from the sub-sector. - % increase in the number of PWDs (sex-disaggregated) benefitting in the sub-sector. - % reduction in number of children involved in mining. - % reduction in number of mining-related accidents reported.
Complete the review of mining policy and legislation.	<p>Gender and equity issues are typically treated marginally in policies and legislation</p> <p>Mining sector-specific legislation does not provide specific provisions concerning the use of mercury and cyanide.</p>	<p>Conduct a gender and equity analysis to inform the review of mining policy and legislation</p> <p>Sector-specific guidelines and regulations on safe use and handling of mercury and cyanide.</p>	<p>A gender and equity dimension explicit in mining policy and legislation.</p>	<ul style="list-style-type: none"> - % reduction in number of mining-related accidents reported.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
	<ul style="list-style-type: none"> - One of the objectives of the Mineral Policy of Uganda (2000) is to remove restrictive practices on women's participation in the mineral sector. - The 2003 Mining Act provides for women's employment in all mining work and associated activities. 	<p>Implement the gender and equity strategies identified in the Mineral Policy of Uganda (2000) namely:</p> <ul style="list-style-type: none"> - encourage employment and involvement of women in mining; - encourage the formation of women mining associations or groups; and - put in place and enforce regulations against child exposure to mining activities. - formulate preventive measures against accidents and other human health and safety hazards 	<ul style="list-style-type: none"> - Affirmative action in favour of women and PWDs in employment. - Legislation prohibiting child labour in mining. - Legislation promoting occupational health and safety in mining. 	

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
Inspect and monitor exploration and mining activities and ensure existence of health and safety standards including eliminating child involvement.	Exploration and mining activities have gender and equity differentiated impacts.	Incorporate gender and equity criteria in the inspection and monitoring tools.	<ul style="list-style-type: none"> Proportion of exploration and mining projects: <ul style="list-style-type: none"> - With Gender and Equity experts. - With Code of Conduct on sexual violence - Offering flexible working hours - Providing separate toilet and accommodation facilities for women, including sanitary facilities and sheds for children of working mothers. - Providing toilet facilities sensitive to the needs of PWDs, as appropriate. - Submitting monthly reports of labour attendance disaggregated by category of work, sex, age and disability. 	<ul style="list-style-type: none"> - % increase in the number of females relative to men involved in exploration and mining activities. - % increase in the number of PWDs involved in exploration and mining activities. - % reduction in the number of children involved in exploration and mining activities. - % reduction in reported sexual violence against women, children and PWDs in exploration and mining activities.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
Conduct due diligence on potential investors in the sector.	Investors are interested in maximising profit rather than promoting equitable benefits for all.	Collaborate with the Chamber of Mines and Petroleum to ensure that due diligence should incorporate a requirement of sensitivity to gender and equity issues.	Sensitivity to gender and equity incorporated in selection criteria of potential investors.	<ul style="list-style-type: none"> - % of investors incorporating a gender and equity management plan in their respective company profiles. - % of investors adopted Women's Empowerment Principles²⁶ for private enterprises. - % of female-owned or predominated firms amongst investors. - % of PWD-owned or predominated firms amongst investors.
	Women and PWDs have limited access to credit and are thus under-represented among potential investors.	Affirmative action in the credit scheme for female/PWDs-owned or predominated firms.	At least 30% of the potential investors are female/PWDs-owned or predominated firms.	<ul style="list-style-type: none"> - % of PWD-owned or predominated firms amongst investors.
Mainstream and monitor operations of Artisanal and Small-Scale Miners (ASM)	Women and other vulnerable groups predominate among the low-paying and largely unregulated ASM that is characterized by low levels of technology and poor capitalization and skills.	Develop and implement gender and equity responsive regulations for ASM.	Gender and equity responsive regulations in place and enforced.	Number of ASM registered and monitored disaggregated by sex age, disability status and ethnicity.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
	High prevalence of child labour in ASM [gold and stones mining]	Build the capacity of Local Government Labour, Community Development and Probation Officers	Budgetary allocation to enforcement of child labour laws. Budgetary allocation to enforcement of OSH.	% reduction in number of children engaged in ASM disaggregated by sex, disability status, and mining region.
				<ul style="list-style-type: none"> - % reduction in negative impacts of mining activities on women, PWDs, children and the older persons. - Number of ASM registered and monitored disaggregated by sex age, disability status and ethnicity.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
NDPII Objective 3: Increase regulations for trade in mineral commodities				
Implement a regional certification mechanism as a tool for rational management of natural resources to avoid illegal exploitation.	Illegal exploitation of natural resources and corresponding environmental implications affect vulnerable groups such as women and children disproportionately.	Conduct a gender and equity-sensitive environmental impact assessment of illegal exploitation of natural resources to inform the implementation of the regional certification mechanism.	Gender and equity-sensitive criteria explicit in the regional certification and screening mechanism.	- % reduction in people affected by illegal exploitation of natural resources disaggregated by sex, age, and disability.
Establish a public institution to handle the certification process.	Women and PWDs under-represented in the sector.	Affirmative action for women and PWDs in recruitment.	- Women constitute at least 30% of the people recruited. - Number of PWDs recruited.	- % of female relative to men involved in the certification process. - Number of PWDs involved in the certification process.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
NDPII Objective 6: Increase response to mitigate seismic risk	<p>Establish earthquake administration policy, disaster management plan and legal framework to enforce seismic safety standards.</p> <p>PWDs and women are less reached by the disaster warning and mitigation information due to their limited access to the information and communication technology (ICT). Besides, they hardly benefit from it. Consequently, their vulnerability to disasters is higher; this is further reinforced by limited physical strengths and capacities.</p>	<ul style="list-style-type: none"> - Conduct gender and disability-sensitive risk assessment of earthquakes and disasters to inform the earthquake administration policy, disaster management plan and safety standards. - Disaster management plan and safety standards necessarily ensure universal and comprehensive methods of delivery of public information and services including audio, video, sign languages and others - Data collection system of earthquake affected population specified and strengthened with disaggregation by sex, age, disability and locations 	<p>Earthquake administration policy, Disaster Management Plan and Legal framework to enforce seismic safety standards enforced by universal and comprehensive methods of information and service delivery</p>	No. of earthquake affected population disaggregated by sex, age, disability and locations

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
NDPII Objective 7: Increase the stock of skilled human capital along the mineral development value chain				
Develop and maintain national skills and expertise in the minerals sector.	Women and PWDs are under-represented in the sector.	<ul style="list-style-type: none"> - Collaborate with the Ministry of Education and WETSU [Association of Women Engineers, Technicians and Scientists in Uganda] to encourage school girls to choose science and female graduate engineers to join the mineral development sub-sector. - The sector workforce development strategy and plan needs to present the roadmap and progressive approach for female Human Resource development and promotion in the sector as experts, technicians and engineers. 	<ul style="list-style-type: none"> - Number of collaborative actions undertaken annually. - Workforce development strategy and plan presents forward- looking gender equitable HR development and promotion - Proportion of women relative to men benefiting from capacity building and workforce development. - Number of PWDs disaggregated by sex, benefitting from capacity building and workforce development. 	<ul style="list-style-type: none"> - % increase in number of female students in Science, Technology, Engineering and Mathematics majors - % increase in number of females relative to men in the sector. - % of females relative to men with skills and expertise in the sector. - % of PWDs with skills and expertise in the sector.
Implement the sector workforce development strategy and plan.	Women and PWDs under-represented in the sector.			

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators-Outcomes
Develop appropriate training programmes for ASM.	Women and other resource poor groups may not participate in the training.	<ul style="list-style-type: none"> - Define quotas for women's and PWDs' participation in the training. - Subsidise costs of training, as appropriate. 	<ul style="list-style-type: none"> - Female ASM constitute 50% of the training participants. - Number of PWDs trained. 	<ul style="list-style-type: none"> - % increase in earnings of female relative to men ASM. - % increase in earning of PWDs ASM.
	Women may not participate in the training on account of domestic responsibilities and the related time poverty.	<ul style="list-style-type: none"> - Consult women ASM on appropriate timing and location of training workshops. - Provide child care facilities for female participants, as required. 		
	PWDs may not participate in the training due to sensory barriers.	<ul style="list-style-type: none"> - Provide assistive facilities and resources for PWDs, as required. 		
Develop the capacity of institutions under the Directorate of Geological Surveys and Mines.	Inadequate institutional gender and equity capacities.	Gender and equity dimension in the capacity building.	Number of institutional capacity building activities incorporating gender and equity.	Gender and equity responsive sub-sector policies, plans, BFPs, MPS.
Promote research and development in the mineral sector.	Lack of gender and equity disaggregated data.	Incorporate gender and equity dimensions with data collection and analysis in promoting of research and development in the sub-sector.	Research reports provide baseline gender and equity disaggregated data.	Sub-sector developments informed by a gender and equity analysis.

4.3 Petroleum (Oil and Gas) Sub Sector

Mandate: The Oil and Gas sub-sector is responsible for rational and sustainable exploration, development and utilisation of oil and gas resources for socio-economic development.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E indicators – Outputs	Proposed G&E impact Indicators- Outcomes
	NDPII Objective 1: Increase the exploitation of oil and gas production			
Establish mechanisms to regulate licensed areas.	Oil and gas activities have potential negative gender and equity impacts.	Conduct a gender and equity impact assessment to inform the establishment of mechanisms to regulate licensed areas.	Mechanisms to regulate licensed areas responsive to gender and equity-differentiated impact identified and analyzed.	% reduction of negative impact of exploitation of oil and gas production on communities disaggregated by sex, age and disability.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
NDPII Objective 2: Increase efficiency and effectiveness in the management of Uganda's oil and gas resource potential				
Finalize the regulations on field development and production.	High mobility of labour in construction projects heighten the risk of sexual violence towards women, girls and boys as well as HIV infection in the communities	Conduct a gender and equity impact assessment of field development and production to inform the finalisation of the regulations.	Regulations include provisions of Code of Conduct clearly outlining unacceptable behaviour and consequences for sexual harassment and other gender based violence.	% reduction in reported sexual violence against women, children and PWDs in construction.
Commence the implementation of Monitoring and Evaluation strategy for the National Oil and Gas Policy (NOGP).	- Lack of generation of gender and equity disaggregated data. - Lack of gender- and equity-responsive indicators and targets	Develop, collect, analyse and utilise gender and equity disaggregated data in the sector.	Gender and equity sensitive implementation of Monitoring and Evaluation strategy for the NOGP.	Sub-sector BFPs and MPS provide gender and equity disaggregated data.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
Develop and strengthen the capacity of the old and new institutions in the sector.	Gender and equity dimension inadequately mainstreamed in sub-sector institutions.	<p>Incorporate gender and equity in the capacity of the sub-sector institutions.</p> <p>Incorporate gender and equity indicators and data collection in the monitoring framework and capacity of the sub-sector institutions.</p> <p>Establish Social Safeguards Unit with mandates including gender and equity issues in the petroleum sector institutions.</p>	<p>Proportion of staff trained in gender and equity annually disaggregated by institution, function, sex, disability and age.</p>	<ul style="list-style-type: none"> - Sub-sector BFPS and MPS include a gender and equity dimension. - Monitoring reports provide gender and equity sensitive data. <p>Number of institutions with Social Safeguards Unit.</p>

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
NDPII Objective 3: Increase efficiency in extraction of oil and gas resources				
Engage the oil companies during the preparation of development plans to ensure that the assumptions and/or approaches made by the companies promote efficiency.	Overall aim of oil companies is profit maximisation.	<ul style="list-style-type: none"> - Approaches should include the principle of doing “No Harm” Balance efficiency with equity. - Social and environmental safeguards including concrete mitigation measures for negative impacts on gender and equity should be duly complied with. 	<ul style="list-style-type: none"> - Proportion of oil companies with development plans complied with social safeguards including mitigation measures on gender and equity. - % of investors adopted the <i>Women's Empowerment Principles</i> for private enterprises. 	Reduction in the proportion of people disaggregated by sex, age, disability status and ethnicity reporting negative impacts of oil and gas extraction.
Closely monitor and regulate activities of the licensed oil companies – including costs and environmental issues.	Lack of gender and equity sensitive baseline data.	<ul style="list-style-type: none"> - Conduct a gender and equity sensitive baseline study to inform the monitoring and regulation of activities. - Monitoring and regulating practices track the changes in gender and equity sensitive data against the baseline data 	Monitoring and regulation reports provide gender and equity sensitive data.	

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
NDPII Objective 4: Produce refined oil and oil by-products for the local and export markets				
Complete the acquisition of land for development of the refinery.	<ul style="list-style-type: none"> - The needs of the voiceless including women, PWDs, and the older persons are not given adequate consideration in land acquisition, compensation and in the design of resettlement programmes. - Women, girls, PWDs and the older persons suffer the negative impacts of land acquisition and resettlement disproportionately. 	<p>Strengthen the gender and equity dimension in implementing the resettlement action plans and maintain a database of persons affected disaggregated by sex, disability and age.</p>	<p>Annual reduction in the number of reported cases of people, disaggregated by sex, disability and age, negatively affected by land acquisition, compensation and resettlement.</p>	% increase in the number of people reporting satisfaction with the land acquisition, compensation and resettlement process.
Construct the refinery and attendant infrastructure.		<p>Women, PWDs and ethnic minorities are under-represented in construction works of the refinery and attendant infrastructure.</p>	<ul style="list-style-type: none"> - Affirmative action for women and PWDs in construction recruitment, as appropriate. - Data base of employees involved in construction works disaggregated by sex, age, disability status, ethnicity and category of work. 	<p>Number and type of employment opportunities generated annually disaggregated by sex, age, disability status and minority group.</p>
Develop and implement the National Strategy and Plan for Transportation and Storage facilities.		<p>High mobility of labour in construction projects heighten the risk of sexual violence towards women, girls and boys and HIV infection in the communities</p>	<p>Develop a code of conduct clearly outlining unacceptable behaviour and consequences for sexual harassment and other gender based violence.</p>	% reduction in reported sexual violence against women, children and PWDs in construction.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
Conduct a Resettlement Action Plan (RAP) study and its implementation for the Multi-products' pipeline from the refinery to Kampala Terminal in preparation for acquiring the right of way.	Women, girls, PWDs and the older persons suffer the negative impacts of land acquisition and resettlement disproportionately.	Integrate gender and equity analysis in the RAP study.	Annual reduction in the number of reported cases of people negatively affected by land acquisition, compensation and resettlement disaggregated by sex, disability status and age	By the end of acquisition: % increase in the number of people reporting satisfaction with the land acquisition, compensation and resettlement process.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
NDPII Objective 5: Increase efficiency in transportation, storage, handling and security of stock of petroleum products				
Develop petroleum products pipelines transport infrastructure.	High mobility of labour in construction projects and transport corridors heighten the risk of sexual violence towards women, girls and boys and HIV infection in the communities.	Develop a Code of Conduct clearly outlining unacceptable behaviour and consequences for sexual harassment and other gender based violence.	Code of Conduct incorporated in service contractors' contractual documents.	% reduction in reported sexual violence against women, children and PWDs in construction.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
NDPII Objective 6: Improve protection of the environment against oil and gas activities and mitigate the likely effects of Green House Gases (GHG) emissions				
Review and update the relevant environmental regulations and laws in collaboration with other key stakeholders.	The environmental degradation has different effects on women and men due to their different gender roles and responsibilities.	Conduct a gender and equity analysis to inform the review and update of environmental regulations and laws	<ul style="list-style-type: none"> - No. of environmental laws with gender and equity perspectives. - No. of environmental regulations with a gender and equity dimension. 	% reduction in the number of people negatively affected by oil and gas activities disaggregated by sex, age and disability status.

Prioritised NDPII sector intervention	Gender and equity issues	Proposed gender and equity strategy	Proposed G&E performance indicators – Outputs	Proposed G&E impact Indicators- Outcomes
NDPII Objective 7: Improve stakeholder relationships in the development of a desirable oil and gas sector				
Establish and implement a communication strategy for the sector.	<ul style="list-style-type: none"> - Women are under-represented in the sector as technicians, engineers, laborers and entrepreneurs - Social perception of gender roles inherently discourages women and girls to choose the technology and science driven sector for career and disciplines. 	<ul style="list-style-type: none"> - The Sector Communication Strategy needs to present the roadmap and progressive approach for female Human Resource development and promotion in the sector as experts, technicians and engineers. - Collaborate with the WETSU [Association of Women Engineers, Technicians and Scientists in Uganda] to encourage school girls to choose science and female graduate engineers to join the sector. 	<p>Communications strategy present forward- looking gender equitable HR development and promotion</p> <p>Harmonisation framework addresses measures meeting the gaps in gender and equity informed by the analysis.</p>	<ul style="list-style-type: none"> - Proportion of employees hired by the oil and gas sector disaggregated by sex, disability status, age and ethnicity. - % reduction in the number of people negatively affected by oil and gas activities disaggregated by sex, age and disability status.
Harmonize policies, legal and fiscal framework for the oil sector in the EAC.	<p>Oil and gas activities have a gender and equity dimension.</p>	<ul style="list-style-type: none"> - Conduct a gender and equity analysis of the overall oil and gas sector and labor markets of the sector to inform the harmonisation of policies, legal and fiscal framework. - Consult civil society organisations to oversight gender and equity dimension of the sector. 		

ANNEX A: LIST OF RECOGNIZED MARGINALIZED GROUPS IN UGANDA

Conflict related	Demographic Categories	Poverty related
<ul style="list-style-type: none"> • Refugees • Internally displaced persons (IDPs) • War orphans • Abductees • Traumatised civilians • Households living in or near conflict zones 	<ul style="list-style-type: none"> • Asset-less widows and widowers • Orphans and abandoned children • Female-headed households • Child-headed households • People with disabilities (PWD) • Chronically sick • HIV/Aids sufferers and carers • Victims of domestic abuse • Ethnic minority groups • Street children 	<p>Urban</p> <ul style="list-style-type: none"> • Urban unemployed • Low-paid workers • Informal sector workers • Beggars • Squatters <p>Rural</p> <ul style="list-style-type: none"> • Rural landless • Cash-crop farmers • Pastoralists • Plantation workers

REFERENCES

- ENERGIA. 2012. Upstream Petroleum Sector. "Building capacity for gender mainstreaming of energy sector co-operation in Uganda: baseline study".
- Gender Action. 2011. "Broken promises: Gender impacts of the WB-financed West African and Chad-Cameroon pipelines". Retrieved from: www.genderaction.org/publications/11/chad-cam-wagp-pipelines.html
- Gender Action. 2006. "Boom Time Blues: Big Oil's Gender Impacts in Azerbaijan, Georgia and Sakhalin". Retrieved from: <http://www.genderaction.org/images/boomtimeblues.pdf>
- General Electric. 2015. "Building strong workforces to power Africa's growth: The future of work in Africa". White Papers Series. Retrieved from: http://files.publicaffairs.geblogs.com/ideas-lab/files/pdfs/building-strong-workforces-to-power-africas-growth.pdf?utm_content=buffercd6d2&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer
- Government of Uganda. 2015. "Second National Development Plan 2015/16 – 2019/20". National Planning Authority.
- _____. 2013. "Biomass Energy Strategy (BEST)". Ministry of Energy and Mineral Development (MEMD).
- _____. 2012. "Rural Electrification Strategy and Plan 2013 – 2022". Ministry of Energy and Mineral Development (MEMD).
- _____. 2007. "The Renewable Energy Policy for Uganda". Ministry of Energy and Mineral Development (MEMD).
- _____. 2002. "Energy Policy for Uganda". Ministry of Energy and Mineral Development (MEMD).
- _____. 2000. "The Mineral Policy of Uganda". Ministry of Energy and Mineral Development (MEMD).
- International Renewable Energy Agency (IRENA). 2015. "Renewable Energy and Jobs". Annual Review. Retrieved from: http://www.irena.org/DocumentDownloads/Publications/IRENA_RE_Jobs_Annual_Review_2015.pdf
- Lee, K et al. 2016. "Electrification for Under Grid households in Rural Kenya". *Development Engineering* 1 (2016): 26–35. Retrieved from: <http://www.sciencedirect.com/science/article/pii/S235272851530035X>
- Levine, B et al. 2013. "What Impedes Efficient Adoption of Products?: Evidence from Randomized Variation in Sales Offers for Improved Cook-stoves in Uganda".
- Misra, N. from Solar Sister. 2015. "Sustainable Energy for All: Empowering Women". *UN Chronicle*. Vol. LII No. 3: (2015). Retrieved from: <https://unchronicle.un.org/article/sustainable-energy-all-empowering-women>
- Tebugulwa, A. 2016. "Understanding Technology Adoption: The Case of Improved Cook Stoves in Bunga, Central Uganda".



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