

Sharing Best Practices in Community Engagement for Geothermal Development – Kenya/New Zealand Partnership

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ABSTRACT

Throughout the world, geothermal power projects have often experienced challenges, delays and termination due to insufficient engagement with communities and their stakeholders. Often, the developer does not prioritize community engagement early in the project timeline. This can often lead to conflict between groups and delays or higher costs to projects. By having a strong community engagement strategy prior to starting work on a geothermal project, a developer will have the tools in place to more effectively engage local communities and stakeholders at appropriate times in the development timeline to help de-risk projects, keep their development on-track and create a shared value for all parties involved.

In recent years, the Kenya Electricity Generating Company (KenGen), the largest power producing company in the country, has encountered project delays or cancellations due to disagreements with local communities. KenGen has developed over 500 MWe of geothermal power generation at the Olkaria geothermal field near Naivasha, Kenya. In addition to hosting one of the world's premier geothermal resources, Olkaria is also home to a large population of the Maasai community. Community objections over transmission lines, pipeline infrastructure, and access roads have led to project delays, cost overruns, and even project cancellations. Relations between KenGen and the Maasai community and, other local tribes have often been tense.

Thousands of miles away, several members of New Zealand's power provide a model for how proactive stakeholder engagement can help energy developers design smart social and environmental programs. Experience in New Zealand's geothermal sector shows that community engagement which leads to partnership between the energy company and the community helps to avoid costly legal suits, project delays and civil disturbances while creating shared values.

Recognizing the similarity of the community issues in New Zealand and Kenya, Power Africa and its partners, the United States Energy Association (USEA) and the Geothermal Energy Association (GEA), have facilitated a Kenya–New Zealand Partnership between KenGen and three New Zealand entities to share best practices in community engagement for development of geothermal power.

1. Introduction

Kenya has set for itself the ambitious goal of becoming an industrialized economy by the year 2030 and has identified energy as a key enabler. The country is therefore implementing an ambitious energy infrastructure development program to ensure there is adequate electricity to power the planned economic growth.

As the country's largest power producing company, KenGen is one of the key players to realize this development blueprint. Focusing mainly on renewables, especially geothermal energy, KenGen has developed a strategy which will see it expand its energy portfolio by 721 MW by the year 2020. Currently, the company has an installed capacity of 1631 MW, with 534 MW (3.2%) from geothermal, making it the leading geothermal power producer in Africa. Despite KenGen having geothermal resources estimated at 10,000MW, new energy projects which are set for completion by 2020. The projects include the Olkaria V 140MW, Olkaria VI 140MW, Olkaria VII 140MW, Olkaria I Unit 6 70MW, Olkaria I Rehabilitation 5.7MW, and Olkaria I AU & IV topping plant 60MW.

2. Problem Statement

The Kenya Electricity Generating Company (KenGen), has encountered costly project delays due to unresolved grievances from communities. In addition to hosting one of the world's premier geothermal resources, Kenya is currently the ninth largest producer of geothermal power in the world, Olkaria is home to a population of indigenous Maasai pastoralists. Community objections over land acquisition and resettlement, transmission lines, pipeline infrastructure, and access roads have led to project delays and cost overruns. Throughout the world, geothermal power projects have often experienced challenges, delays and termination due to insufficient and sometimes inadequate engagement with communities and their stakeholders. Often, the developer does not prioritize community engagement early in the project timeline, which can often lead to the spread of misinformation, rumors, and prematurely formed opinions, all of which can cause delays and higher project costs.

By putting in place a strong community engagement strategy prior to starting work on a geothermal project, a developer will have the tools in place to engage with local communities and stakeholders at appropriate times in the development timeline as a tool to help de-risk projects, keep development on-track and create a shared value for all parties involved

Relations between KenGen and Maasai and other local communities have sometimes been tense. Consequently, the company has made a deliberate effort to improve relations with its neighbors. KenGen is currently working with partners, including USAID led Power Africa to develop a community engagement strategy with a view to delivering its power projects on time and within budget.

New Zealand's power sector serves as a model for how proactive stakeholder engagement can help energy developers design smart social and environmental programs. Experience in New Zealand's geothermal sector shows that community engagement helps to avoid costly litigation, project delays and public agitation while creating shared value among utilities and

indigenous groups. Based on the New Zealand partnership, the company has developed a value-based community engagement framework which outlines a shared set of values with host communities. The goal is to provide the foundation for conversations with different communities to empower KenGen deliver energy projects for the nation in a cost-effective, efficient, and sustainable manner. The framework helps to empower KenGen employees and communities to work together in a positive manner to reach win-win solutions. It helps to build respect, understanding, and trust among the parties by setting clear expectations to minimize pressure and conflict.

Recognizing the similarities between New Zealand and Kenya, Power Africa and its partners, the United States Energy Association (USEA), facilitated a Kenya–New Zealand Partnership to share experiences, models and best practice in community engagement for the development of geothermal power, community development, and cultural preservation. The New Zealand entities participating in this partnership included Contact Energy, Mercury, and Ngati Tahu, TN2 and Kenya was represented by KenGen and the Olkaria Maasai Community. From the outset of the partnership, the need to include the community groups in the exchanges and discussions was recognized, as only through collaboration and shared goals will each be successful. This program consisted of four total exchange visits in 2017, two to New Zealand and two to Kenya. Over these four visits, members from the partner organizations traveled to the other country to share experiences and lessons learned for community engagement in geothermal development.

3. Goals and objectives

3.1 KenGen's goals and objectives

KenGen set the following goals and objective based on shared values with the Community engagement.

- Provide specific guidance for KenGen to plan and conduct effective community participation and collaboration throughout the power project lifecycle
- Identify the best structures and methods for KenGen to provide communities with balanced and objective information on proposed power projects and community development initiatives in order to obtain their feedback and seek their input and attain and maintain a “social contract
- Develop strategies for KenGen to build strong and effective relationships with stakeholders, including the communities, regulatory officials, local and national government officials,
- Develop strategies for KenGen to build strong and effective relationships with stakeholders, including the communities, regulatory officials, local and national government officials,
- Integrate considerations for marginalized groups within the community, including ethnic minorities, persons with disabilities, vulnerable women, and children.
- Establish a mechanism for effective and timely resolution of community grievances.
- Continuously improve KenGen's community engagement practices through monitoring and evaluation of our activities.

3.2 Maasai Community Goals and Objectives

The community identified the following specific goals with regards engagement with KenGen

- Achieve cooperation and unity amongst themselves through one voice.
- Address historical land issues and local community empowerment.
- Conservation and preservation of cultural rights.
- Improve access to primary secondary, post-secondary education and in school.
- Life skills and technical trainings amongst the members of community for capacity building.
- Foster environmental sustainability and inclusively championing for the community interests.
- Sustain collaboration with KenGen and her partners for mutual success.

4. Community Engagement Strategy and Expected Outcomes

Over the course of the partnership, KenGen and Contact Energy worked together to develop a values-based community engagement strategy that KenGen could implement moving forward. Both the goals of KenGen and the goals of the Community were taken into account while creating this framework, to ensure that the final product will allow both company and community to succeed and flourish as additional geothermal resources are developed in Olkaria and throughout Kenya. KenGen's ability to effectively and respectfully engage communities will develop and enrich KenGen's ability to:

1. Attain initial buy-in (social license) for new power projects to reach financial close and proceed to construction and operational;
2. Enhance or maintain the social license for all existing power stations for the safe, continuous production of power for the country
3. Develop Community Long Term (50+ years) Strategic Plan Development
4. Develop a KenGen strategy to build capacity and capability within the community through:
 - a. Capacity building for Community on co-existence and legal structures
 - b. Improvement/revitalization of community center to make it a revenue source (*KenGen & Community*).
 - c. Analysis of other economic concepts/investment opportunities for Community.
5. Formation of Partnerships, hence identify topics for a relationship building program with communities with a view to:
 - a. Focus on Potential development opportunities around the cultural center.
 - b. Expand/strengthen stakeholder coordination committee – more regular meetings to identify shared values and interests, build respect and trust.

- c. Help Community to develop a communication plan to support communications both internally and with KenGen.
- d. Explore potential mutually beneficial monetary partnerships and cascading uses.

In order for KenGen to be truly effective and efficient in its community engagement initiatives, it must be will embedded within all levels of KenGen`s corporate structure permeating down through ALL departments of the organization, when relevant, all contractors. The strategy will therefore be rolled out to KenGen top management, staff, the communities and relevant stakeholders to help them understand and operate within KenGen`s values and principles.

4.1 KenGen`s Values-Based Approach to Community Engagement

KenGen seeks to achieve sustainable value creation, social license to operate and grow from good to great from generation to generation. This will be realized through a community engagement strategy as shown in **Figure 1** and **Table 1**.

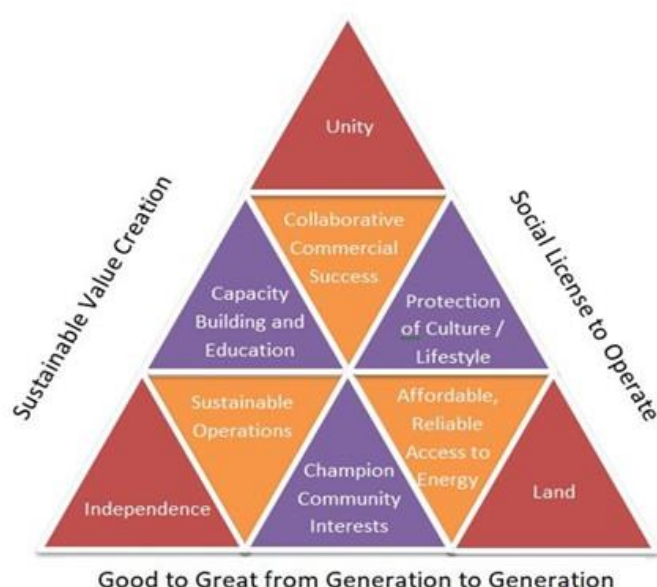


Figure 1: Key Principles of Community Engagement Strategy towards KenGen`s Strategic Goals

Table 1: Summary of principles, purpose and strategic actions in community engagement

Principle	Purpose	Strategies and Actions
Unity	A strong value-based relationship and common understanding of issues between KenGen, communities, and stakeholders. Creating and maintaining a win-win-win relationship for all parties.	KenGen Will: <ul style="list-style-type: none"> a) Endeavour to build trust through transparency with KenGen, communities and stakeholders. This starts with mapping stakeholders and committing to treating communities and stakeholders fairly.

		<ul style="list-style-type: none"> b) Build an understanding of the structures of communities and stakeholders. c) Review KenGen committees and communication vehicles to streamline these practices. Be a proactive leader in communication, coordination, and change. d) Establish a multi-disciplinary team to manage these initiatives. Foster respectful relationships and understanding of each other. <p>KenGen Will Not:</p> <ul style="list-style-type: none"> a) Promote individual interest over the community interest. Sponsor divisive or politically-sensitive initiatives or activities.
Collaborative Commercial Success	<p>Creating an enabling environment for KenGen and stakeholders' commercial success and sustainability. Balancing the priorities of KenGen's stakeholders, including commercial priorities of the Government of Kenya, KenGen shareholders, and the communities to create a win-win-win situation.</p> <p>Partnering with the communities to create and realize economic opportunities to benefit themselves, including promoting opportunities for women and marginalized groups.</p>	<p>KenGen Will:</p> <ul style="list-style-type: none"> a) Provide mentoring, employment and internships for communities. b) Use KenGen resources to help remove barriers to commercial opportunities for communities. Partner with communities to introduce alternative livelihoods/commercial streams. c) Make available KenGen resources, lands, etc. that are not otherwise being used to the communities for commercial operations. b) Seek partnerships on tourism/commercial endeavors. c) Providing/developing geothermal and other energy resources for community commercial ventures.

	<p>Partnering with the communities to meet their needs and reduce dependency on KG.</p> <p>Fostering the ability to be independent and develop solutions for themselves – leading their own destiny.</p>	<p>d) Providing business opportunities to communities during KenGen projects. Source corporate gifts from community vendors.</p> <p>e) Make in-kind support available to communities in setting up a business, legal affairs, education, marketing, health, accounting, etc.</p> <p>f) Develop a “menu” of potential investors for use by communities. Strive to spread benefits evenly among communities by operating in a clear and transparent manner.</p> <p>g) Ensure sustainability of human and financial resources, energy resources, assets, and revenue streams throughout corporate operations.</p> <p>KenGen Will Not:</p> <p>Make direct equity/debt investments in individual projects.</p>
Capacity Building & Community Education	<p>Build the capacity of KenGen staff and the communities to grow knowledge and awareness of legal, political, social, economic, commercial, and cultural systems that are important to one another.</p> <p>Growing literacy and supporting education among communities including adult education, life skills, and outreach about geothermal/energy technologies, sciences, and economics. Building an</p>	<p>KenGen Will:</p> <p>a) Support scholarship, internship, mentorship, life skills, and vocational programs for communities, including opportunities for KenGen staff to embed within the community and exchange knowledge.</p> <p>b) Deploy KenGen resources (human and financial) to spread knowledge of geothermal and other energy technologies, science, and economics.</p> <p>c) Support community open days and basic education about local power plants and energy systems and</p>

	<p>understanding of KenGen's role, rights, and limitations.</p>	<p>facilitate youth science and education competitions.</p> <ul style="list-style-type: none"> d) Support education on legal and political processes and serve as advocates for communities with county and national governments. e) Inform communities of KenGen's mandate, which does not allow direct sale of electricity. f) Support communities to set up long-term management structures to ensure responsible management, potentially through placing KenGen representatives as transitional trustees. g) Promote knowledge transfer by incorporating "associate directors" or another initiative to promote youth involvement in decision making. h) Attempt to reduce potential conflicts of interest by conducting ethical reviews of appointments to external committees with access to KenGen resources. i) Build internal staff capacity to serve the multidisciplinary team (and all of KenGen) for community engagement – including cultural inductions/education. j) Will promote do-no-harm principles. k) Promote employee participation in CSI. <p>KenGen Will Not:</p>
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Sustainable Operations	<p>Ensure the long-term commercial success of KenGen and its stakeholders through collaborating with stakeholders and communities to make the maximum possible contribution to the social and economic well-being of people and communities through meeting their energy needs both now and in the future. Optimizing resources to be deployed in an efficient and sustainable manner. Commitment to cooperating with communities to ensure environmental sustainability and preservation of important cultural sites, which could be managed through sustainability committees. Build a shared understanding among stakeholders and communities of KenGen's purposes and operations. Proactive efforts to protect clean water supplies and enable access for KenGen and communities to</p>	<p>KenGen Will:</p> <ul style="list-style-type: none"> a) Cooperating and sharing information with other developers, government, regulatory agencies, and relevant stakeholders to support sustainable operations. b) Minimize negative environmental impacts of KenGen projects. Establish and empower joint KenGen/community sustainability committees through training, education, etc. c) Use sustainability committees to educate communities about water management, land use, crop protection, and other environmental integrity priorities, as well as to build understanding of the energy-environment nexus. d) Promote green waste management practices. Arrange public events and initiatives to promote habitat conservation, animal protection, etc. e) Public education around invasive species. f) Facilitate the sharing of information about geothermal resource areas and develop co-management plans. <p>Facilitate employee cleanup days</p>

	sustainable water supply. Land management education to ensure sustainable feedstock.	KenGen Will Not: <ul style="list-style-type: none"> a) Promote projects that adversely affect the environment.
Land	<p>Acknowledgement that land is critical to both community well-being and long-term viability of KenGen's business. Educating communities about the importance of land title, trusts, and laws – and the benefits of communal connectivity. Protecting access to land for community cultural practices and livelihoods. Explore the possibility of mixed-use leases and rights-of-way on KenGen land parcels</p>	KenGen Will: <ul style="list-style-type: none"> b) Acknowledge and emphasize that KenGen understands that land is critical to community well-being and traditions. c) Work collaboratively with communities to meet each other's aspirations about land use. Explore the possibility of access and mixed-use leases and rights-of-way on KenGen land parcels. d) Inform the communities on protecting land rights, title, trust, and where possible and appropriate, act as advocates for community land rights. e) Support communities to map and protect community land and cultural sites by making available KenGen technical and legal resources. f) Help communities to understand land boundaries and uses by sharing mapping information. g) Involve communities in the life cycle of project development – planning, execution, project close. Provide fair compensation should relocation be required. KenGen Will Not:

		<ul style="list-style-type: none"> a) Uproot communities from rightful land or without prior and informed consent.
Champion Community Interests	<p>Understanding community interests and spreading that knowledge within KenGen.</p> <p>Empowering staff to take up and champion these causes. Acknowledging that some actions necessary for growth of the communities are outside of KenGen control, and being an advocate for community interests when they align with KenGen's engagement principles and strategy.</p>	<p>KenGen Will:</p> <ul style="list-style-type: none"> a) Incorporate cultural education (cultural inductions, etc.) for KenGen staff, management and contractors. b) Advocate on behalf of communities for additional resources from government where/when possible and in the best interest of communities' self-sufficiency. c) Preserve KenGen's status as a neutral and impartial party. Extend health and safety education from staff to communities. b) When possible, partner with communities to provide basic healthcare and consultative services. c) Research partnership opportunities with NGOs and volunteers to provide additional resources. d) Support communities to protect access to clean water, sanitary communities, and sustainable settlements. e) Consider employee volunteer days within the communities and other community outreach efforts. <p>KenGen Will not:</p> <ul style="list-style-type: none"> a) Marginalize communities by championing the interests of a particular group or individual over those of another.

		<ul style="list-style-type: none"> b) Interfere with communities' self-determination of their own interests. c) Participate in or sponsor protests or political dissidence.
Protection of Culture & Lifestyle	<p>Acknowledging that KenGen operates within cultural environments that should be respected and protected. Enabling communities to retain cultural traditions while also helping them to take part in the modern economy.</p> <p>Supporting community health aspirations while maintaining connection with traditional healing. Implementing a comprehensive health and well-being initiative with communities. Including engaging the community on HSE issues around geothermal, medical education and services. Extending health/safety education from staff to communities</p>	<p>KenGen Will:</p> <ul style="list-style-type: none"> a) Engage with stakeholders to create an awareness of the cultural context in KenGen projects. b) Undertake to work with communities to preserve cultural sites. Building awareness and respect of cultures among KenGen staff and stakeholders. c) Encouraging a community celebration week/day/forum/etc. to celebrate local communities' unique cultures. <p>KenGen Will Not:</p> <ul style="list-style-type: none"> a) Usurp government or community mandates for health and cultural initiatives.
Independence	<p>Recognize and respect KenGen's and communities' inherent rights to lead their own destiny, and empower one another to do so. Understanding that community self-sufficiency is a journey.</p>	<p>KenGen Will:</p> <ul style="list-style-type: none"> a) Support initiatives to help communities transition to self-sufficiency. b) Strive to enter equal partnerships with communities and stakeholders. <p>KenGen Will Not:</p>

		Invest in initiatives that do not contribute to communities' long-term self-sufficiency or create a culture of dependency.
Affordable, Reliable Access to Energy	KenGen's mandate is to provide affordable and reliable energy for the nation. The communities have a role to play in helping KenGen deliver on this mandate.	<p>KenGen Will:</p> <ul style="list-style-type: none"> a) Cooperate with communities to ensure social buy-in so that KenGen projects can deliver affordable, reliable power. b) Inform communities about how the local resources contribute to providing energy for the nation. c) Explore possible partnerships with communities to supply energy (excluding direct sale of electricity) for mutually beneficial commercial ventures. <p>KenGen Will Not:</p> <ul style="list-style-type: none"> a) Provide direct supply of electricity to communities or pay electricity bills.

4.1.2 Launch of the Community Engagement Strategy

The exchange programme reinforced the necessity of a comprehensive corporate community engagement strategy to achieve sustainable value creation, social license to operate as well as move the Company from good to great from generation to generation. To this end, the Company prepared a community engagement strategy. The structure of the community engagement comprises of the following:

- Overview of KenGen's Past & Current Experiences with Communities
- The underlying policy, legal and regulatory landscape in Kenya
- New/Pending Legislation and Financier Guidelines
- Purpose of the Strategy: Core Values and community Engagement Principles
- Goals & Objectives
- Constitution of a Community
- Community Engagement in the power project development cycle

- Action Plan and budget for implementation
- Respective responsibilities of staff and management within KenGen’s organization structure
- Policies and Procedures that may require review and modification
- Complementary policies on land and resettlement, KenGen foundation, environment, budgeting, knowledge management, Corporate Social responsibility and sustainable Investment, Human Resource and stakeholder engagement policies.
- Elements & Approach to Implementing Community Engagement.

Plans to Launch and roll out the Strategy are in progress.

4.2 Olkaria Maasai Community Vision 2050

While KenGen worked with Contact Energy to develop their values-based approach to community engagement, the Olkaria Maasai Community worked with representatives from Ngati Tahu to identify key areas that they would like to focus on for their community’s growth over the next 30 years in order to become self-sufficient and no longer dependent upon KenGen. They have decided that the document they will produce for the community will be called Vision 2050. The main areas that were identified by the group as priorities for the community were Education, Culture, Housing, Health, Unity/Cooperation, Land, and Business.

The Maasai representatives discussed their end goal in each of these topics and worked on creating a vision statement that would lead a community action plan. Within this group of 11 Maasai representatives, one was selected to be the “project manager” and to work closely with KenGen during the development of the Vision 2050 document to ensure that the two groups have complementary goals.

The community has set a long-term goal plan (Vision 2050) during which the following aspects shall have been realized through engagement, linkage and partnerships.

Table 2: Maasai Community Long-term Goal Plan (Vision 2050)

Focus area	Goals and Aspirations	Strategic Actions
1. Education	Provision of a boarding primary and secondary school and enhanced access to university education.	Sustainable initiatives to: <ul style="list-style-type: none"> • Build and equip Primary boarding schools and Secondary boarding schools. • Support university studies.
2. Culture	Learn, maintain, teach and preserve the Maasai culture and traditional values through generations on	Develop the Maasai Cultural Centre for: <ul style="list-style-type: none"> • Cultural teaching centres

	such aspects like marriage, respect, family roles	<ul style="list-style-type: none"> • protection of Maasai cultural sites/heritage and values by stakeholders
3. Housing	Affordable modern housing that embraces the traditional Maasai design, for the purpose of teaching the future generations	<p>Sustainable housing designs</p> <ul style="list-style-type: none"> • traditional Maasai architecture • intra/inter-generational teaching and linkages
4. Health	accessible health services for various health needs including maternity wings, accessible VCT centers	<p>Modern health service characterized with:</p> <ul style="list-style-type: none"> • centres for research on traditional herbal medicine • fully equipped health facilities and staff
5. Co-operation	A socially cohesive Maasai community united by a shared vision to genuinely articulate and represent community issues.	<p>shared vision and mutual respect to ensure</p> <ul style="list-style-type: none"> • Reliable Community leaders • Representation. • accountability
6. Land	Successful resolution of historical land issues.	<ul style="list-style-type: none"> • Successful apology, negotiation and settlement from the government.
7. Business development and employment	<p>Economically empowered Olkaria Maasai community, doing culturally sensitive.</p> <p>Develop sustainable businesses with a modern outlook and international linkages.</p>	<p>Develop business strategies</p> <ul style="list-style-type: none"> • This will be pursued through partnerships, financing, local business skills and extraction of Maasai natural resources Business proposals: • Marketing of goats to Islamic nations

		<ul style="list-style-type: none"> • Tourism opportunities for Maasai culture • Natural health remedies – Traditional herbal medicine • Maasai handmade craft <ul style="list-style-type: none"> ○ Marketing them overseas ○ Develop a website with the history of the indigenous community, Maasai culture, and the meaning of the different colors of the beads ○ Purchase the handmade craft for display in Whakarewarewa in New Zealand • Direct use of geothermal energy – Drying food and vegetables, bathing, dyeing of fabric
8. Employment	Equitably generate and share economic and employment opportunities	

5. Conclusion

In order for KenGen to be truly effective and efficient in its community engagement initiatives, it will be embedded within all levels of KenGen`s corporate structure permeating down through ALL departments of the organization and relevant contractors. The strategy will therefore be rolled out to KenGen top management, staff, the communities and stakeholders to help them understand and operate within KenGen`s values and principles.

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