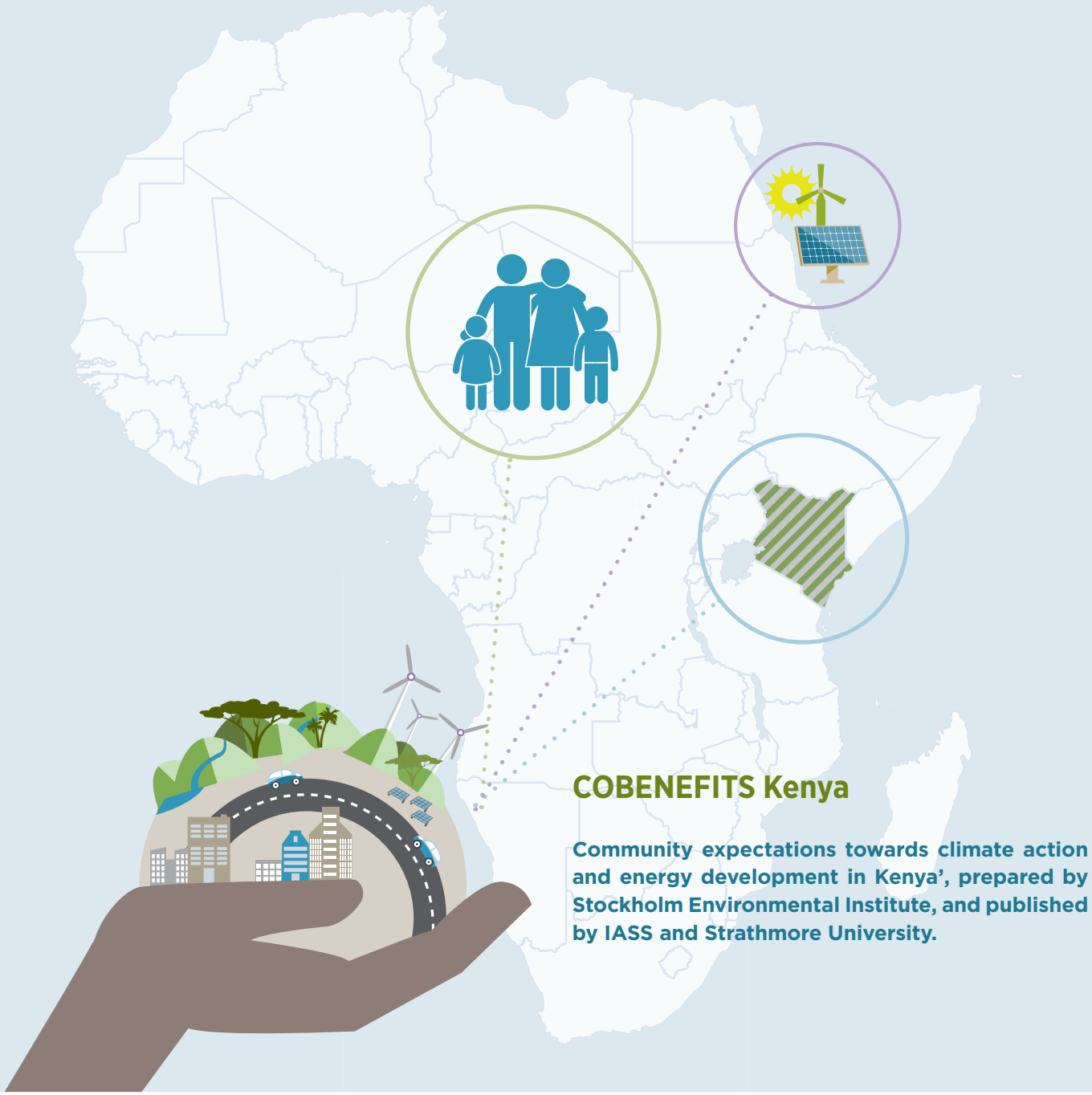
MAKING THE PARIS AGREEMENT A SUCCESS FOR THE PLANET AND THE PEOPLE OF KENYA

COP26 Briefing:
Community expectations towards climate action and energy development in Kenya

November 2021



COBENEFITS Kenya

Community expectations towards climate action and energy development in Kenya', prepared by Stockholm Environmental Institute, and published by IASS and Strathmore University.

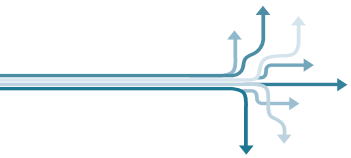
Key policy messages on climate action in the energy sector for policy makers and planners

- **Increasing the social performance of energy sector investments is important to reconcile climate action with community needs.** Frameworks such as the Social Performance Index (SPI) can contribute to highlighting the benefits or disadvantages of energy projects and investments while incorporating the voices and aspirations of local communities.

- **There is an acute lack of evidence on the social performance of energy investments in Kenya.** To support decision making, particular importance should be placed upon the creation of decent jobs, income generation opportunities, productive use of energy in local value chains, benefit-sharing plans, consideration of human rights, fairness and accountability by law, and community co-design of climate action.

- **International investments should strengthen climate action and increasing social performance for communities.** Procurement guidelines oriented towards climate action and increasing social performance for local communities should be considered, to align international investments with the Paris Agreement and related national and local policies.

Farmers using a solar irrigation pump outside of Kitale, Kenya. © Jeffrey M Walcott/IWMI (CC BY-NC-ND 2.0)



1. The missing social links in Kenya's current climate policy

Despite rich renewable energy resources, fossil fuels continue to be explored in Kenya. Kenya has high and diversified potential for renewable energy with abundant solar, hydro, wind, biomass, and geothermal resources. Nevertheless, fossil fuel exploration is ongoing in Turkana, and natural gas deposits have been discovered in Lamu. Kenya has an installed capacity of 2,819 megawatts (MW) of electrical power, including recently installed wind capacity of 310 MW in 2019. Geothermal and hydropower generate more than 70% of total electricity consumed in the country. In 2018, only around 56 per cent of the population had access to electricity.

Kenya's Least-Cost Power Development Plan targets both the expansion of renewables and the introduction of coal. Kenya is a signatory to the Paris Agreement, and developed the Climate Change Act (CCA) of 2016 to promote climate-resilient, low-carbon economic development, while the National Climate Change Action Plan (NCCAP) 2018–2022 presents Kenya's low-carbon development pathway options. The Plan includes eight priority areas and shares responsibilities between the National and County Governments for its implementation. In its National Determined Contribution, Kenya aims to achieve a 30 per cent reduction in economy-wide greenhouse gas emissions by 2030, compared to 143 million tons of carbon dioxide-equivalent ($MtCO_2e$) emitted under a business-as-usual scenario. The 2017–2037 Least-Cost Power Development Plan targeted expansion of solar, wind, and the introduction of a coal power plant to safeguard national energy security.

While almost 95% of grid power is renewables-based, it only reaches 26% of rural households. As of 2019, Kenya's renewable electricity mix in-grid was above 90% after commissioning the 310 MW Lake Turkana Wind Power and 50 MW Garissa solar projects, and steadily forging towards 95% in 2020 by commissioning the 100 MW Kipeto wind farm. Nevertheless, household access to electricity is 88% in urban areas and only 26% in rural areas, demonstrating marked urban/rural inequality. As such, the various policy instruments related to climate change actions and energy access lack "pro-poor" targets when assessing large investments for power generation, rather than supporting grid-less local access with affordable prices, particularly in rural areas and poor communities.

Food security and nutrition, affordable universal health care, affordable housing, and enhancing manufacturing represent Kenya's pivotal development objectives. Kenya's main strategic document is Kenya Vision 2030, with aspirational goals for a better society by the year 2030. The government's Big 4 Agenda focuses on developing four pillars of the economy: food security and nutrition, affordable universal health care, affordable housing, and enhancing manufacturing.

There is an acute lack of evidence to support decision making on the social performance of Kenya's energy system, for both fossil-based and renewable electricity. Some assessments, particularly on bioenergy, have examined sustainability indicators (UNEP, 2020). Yet, the various policies seem to contradict each other while trying to achieve targets; in particular, the focus on meeting energy demand through electrification based on fossil fuels conflicts with climate change targets. This applies particularly to priority 7—on promoting low-carbon technologies to improve efficiency and reduce emissions intensity by facilitating approaches and uptake of technologies that support low-carbon and climate-resilient development; and priority 11—to mainstream the principle of sustainable development within planning for and decision-making on climate change responses. These statements also seem to contradict SDG 7 on energy access for all and SDG 11 on climate action.

2. Lamu country as conflict zone of Kenya's energy development pathways

Solar panels at the Lamu Jetty in Lamu Old Town © SEI

Lamu World Heritage Site facing energy challenges. Lamu County is located on Kenya's north coast and is one of the six counties in the country's coastal region. The county comprises an archipelago of 65 islands with rich biodiversity, unique ecosystems, and cultural value and was the first seaport in East Africa and a UNESCO-recognised Heritage Site. The total population in 2019 was of 141,909, with a poverty rate of 15.6 %,. The Lamu County Integrated Development Plan 2018 – 2022 recognises the county's energy challenges, although it has already been connected to the grid, with electricity and solar as the main sources (apart from biomass for cooking). The National Government's Vision 2030 promoted power generation throughout Kenya and proposed a coal power plant (disputed) and a wind farm (approved) for power generation in Lamu County.

Lamu coal plant licence is challenged over environmental and social disputes. The Lamu coal plant project, a potential 1,050 MW coal-fired thermal power station, was first proposed in 2015 but was halted in 2019 —in part due to opposition by environmentalists and from community lobby groups that expressed major environmental concerns (marine life, heritage sites, and land), social (land and health) and international political economy surrounding coal production in Kenya. Several reports cited serious social impacts, including air and water pollution and loss of livelihoods. The National Environment Tribunal (NET) cancelled the licence and indicated that the Environment Management Authority (NEMA) had "issued the environmental impact assessment (EIA) licence to Amu Power Company Ltd without following the law" and was not accordance with the Climate Change Act. Save Lamu, one of the organisations opposing the licence, stated: It's a project that highly affects communities. They need to listen to what the communities say". The project would affect more than 1,000 people in the area and their livelihoods, mostly fishers and farmers.

[1] https://knoema.com/atlas/Kenya/Lamu

[2] https://kenya.opendataforafrica.org/urwhbig/poverty-estimates?region=1000130-lamu

[3] Pier, Lisa. "LFFU at a glance-Kenya." (2020). http://www.leavefossilfuelsunderground.org/wp-content/uploads/2020/03/LFFU-in-Kenya-.pdf

[4] China Dialogue. "Kenyan coal project shows why Chinese investors need to take environmental risks seriously." (2021). https://chinadialogue.net/en/energy/lamu-kenyan-coal-project-chinese-investors-take-environmental-risks-seriously/https://chinadialogue.net/en/energy/lamu-kenyan-coal-project-chinese-investors-take-environmental-risks-seriously [quoting Khadija Shekuwe, coordinator of Save Lamu]

The Lamu wind project is expected to displace more than 600 families. The Lamu County Assembly has already approved a proposed 200 million USD wind farm to be located in Kiongwe, Bahari Ward – Mpeketoni (Lamu West), approximately 20 km from the proposed Lamu Port. The project involves a partnership between Electrawinds (Belgium) and Kenwind Company (Kenya). The wind farm is expected to generate around 90 MW of electricity, but would occupy 800 ha and result in the displacement of more than 600 families (who would be compensated to relocate). In June 2020 the Local Assembly decided to halt the project; however, land acquisition had already started, and by November 2020 several of those displaced who were awaiting compensation requested the Kenyan President to go ahead with the project.

Displaced former resident of Lamu County in front of his abandoned house. © SEI

Table 1: Country profile – Lamu County, Kenya (KNBS 2019)

Population	Households	Main income-generating activities
25,385	5,090	Fishing, tourism, trade

Table 2: Household cooking fuels in Lamu County (KNBS 2019[5])

Electricity	Solar	Firewood	Gas (LPG)	Paraffin/ Kerosene	Biogas	Charcoal
0.7%	0.3%	60.6%	9%	1.6%	0.5%	27.3%

Table 3: Household lighting fuels in Lamu County (KNBS 2019; other fuels = 3%)

Electricity	Solar	Firewood	Gas (LPG)	Paraffin/ Kerosene	Biogas	Charcoal
43.2%	34.1%	1.4%	0.1%	11%	1.4%	5.8%

[5] https://www.knbs.or.ke/?wpdmpro=2019-kenya-population-and-housing-census-volume-iv-distribution-of-population-by-socio-economic-characteristics

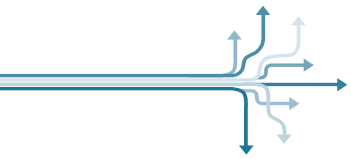
3. Assessing community expectations of energy development options

Community representatives from Lamu County. © SEI

A Social Performance Index of the proposed coal power plant and wind farm in Lamu has been co-designed with local communities, following the methodology from IASS (2021a,b) with a modified methodology from Diaz-Chavez (2014). This assessment presented the community's expectations of the two proposals and a selection of categories and indicators (primary and secondary).

> "Social performance of energy sector investments refers to direct and positive social impacts to the well-being of individuals and communities during the development and implementation of energy projects and the usage of locally generated energy, either in a monetary or non-monetary way."
>
> IASS (2021). The Social performance index (SPI). Assessing and monitoring community well-being through energy sector investments.

The overall purpose is to assess the social and economic co-benefits of energy projects though their life cycle and from the perspectives of the stakeholders involved. In addition, the methodology aims to compare these co-benefits between renewable energy projects and fossil fuel projects. The assessment involved the application of surveys and interviews (32 total: 30 in Lamu, 2 in Nairobi) to: i) construct the DPI by selecting appropriate categories and indicators; ii) gather information about stakeholders' expectations and their priorities; iii) and rank indicators in order of importance. The qualitative information from the surveys was complemented by a literature review (see tables below) and compared to an operational wind farm project in Turkana where only 6 % of households (7,646) have access to electricity.



Six categories were selected for the SPI by the stakeholders: a) Creation of decent jobs (direct and indirect); b) Increased income-generation opportunities; c) Clear benefit-sharing plan; d) Co-creating measures to mitigate negative impacts of proposed plants; e) Consideration of human rights; f) Fairness and accountability by law; g) Productive use of energy for local value chains. From these criteria, 20 social performance indicators were selected by the communities, from which the results of three priority indicators will be presented in this briefing note.

Table 4: Interviewed community groups

Community groups	
Amu BMU	Lamu Youth Alliance
Amu Council of Elders	Maendeleo ya wanawake (Women's Development)
Baraza la Imam (CIPK: Council of Iman and Pastors in Kenya)	Member women's group – Chairlady
Beach Management Unit (BMU)	Mpeketoni Environmental Conservation and Beautification (MECOBY) group
Chairperson Inter-religious	Persons Living with Disability (PLWD)
Council of Elders	Sauti ya Wanawake – Lamu East
Jicho La Lamu	Shimo La Tewa Creek Conservancy
Kililani Farmers	Sister for Change
Kiliani Women Group – Secretary	Treasury Amu BMU
Lamu Coastal Indigenous Peoples Rights for Development (LCIPRD)	Voice of Justice
Lamu Empowerment youth group	

Table 5: Interviewed Non-Governmental/Civil Society Organisation and Governments stakeholders

Non-Governmental / Civil Society Organisation	Government
Bawe CBO	Department of Social Development, Lamu
Lamu Women Alliance	Energy Regulatory Commission of Kenya EPRA
Mtangawanda Mangrove Restoration Women Group	Kenya Forest Service (KFS)
Natural Justice	Lamu Municipality
Save Lamu	National Environment Management Authority (NEMA) Mokowe and Nairobi Offices

4. Exploring the social performance of coal and wind power

This briefing summarises preliminary study results on the top-three social performance indicators, based on the ranking by community representatives: i) Access to affordable health care; ii) Creation of decent jobs (direct and indirect); iii) Economic prospects of tourism. Overall, the social performance criteria and selected indicators reflected the expectations and concerns of the local communities. Comparison with the operational Lake Turkana Wind Power project shows that similar issues were also considered by that community prior to construction of the project.

Access to affordable health care: The stakeholders considered access to health as highly important. Approximately 40% of respondents feel that the coal plant project should include significant contributions to accessing affordable healthcare, notably the construction of new hospitals or clinics. In addition, the communities are concerned about the impacts of the plant related to emissions into air and water and how this will affect the health of those living in the nearby communities.

How do you expect the proposed coal plant to contribute to your current situation with access to affordable health care?

I don't know much about coal; what I heard is the project is very dangerous to human beings. It will not help me to afford health care (Bawe CBO)

How do you expect the proposed wind farm to contribute to your current situation with access to affordable health care?

Not much contribution. Not beneficial for the community…the loss is more than the gain (Lamu Women Alliance)

Creation of decent jobs: On job creation, 19% of study respondents expected the coal plant to make an insignificant contribution towards creating decent jobs, while 30% placed high significance on the plant actually delivering decent jobs. Some of the job opportunities mentioned include transport of materials to the plant site in addition to other formal and informal jobs at the plant depending on the education and skill-set available. On the other hand, 27% of respondents said they were unsure of the plant's potential for job creation. On the proposed wind plant, more than 30% of the respondents indicated that it may have a significant impact on job creation, with fair recruitment and employment opportunities. Another group of respondents (4%) consider the wind plant will have insignificant impact on creation of decent jobs, as the system will be automated and require little human input.

How do you expect the proposed coal plant to contribute to your current job creation situation?

I haven't even thought of how the coal looks like, II cannot say of it looks like and how people do jobs, only materials will be transported to the site either by using ships or road (Mecoby Group)

How do you expect the proposed wind farm to contribute to your current job creation situation?

Maybe it will generate job opportunities but to only those who are educated (Lamu Women Alliance)

Considering that just over 50% of Lamu's population has finished primary school, educational attainment seems to be a concern for securing employment from these projects. In addition, only a few respondents considered the project will provide local job opportunities. This also seems to be the case for the Turkana Wind Farm, where one of the benefits mentioned was that it provided "employment to a few locals" (Women's group). The focus groups for the Turkana project shared that some jobs created include security duties at the plant.

Prospects of tourism: Tourism was ranked as the third criteria in Lamu. Considering that the county has recently been ranked among the top three most prosperous counties in Kenya, it is not surprising that tourism activities are considered important. Lamu Island has recently been connected to the mainland electrical grid, marking an important breakthrough for local development. Despite the need for electricity access, community expectations are not positive for this important activity in the region:

The surveys found that more than 35% of respondents are unsure how the coal plant will contribute to their current situation on tourism. However, 23% thought that the coal plant would have a very significant negative contribution on local tourism which is highly dependent on marine life that will be affected by wastewater from the coal. Preliminary findings support this as the main concern to negatively impact tourism activities in Lamu with potential conflict areas and hazardous emissions.

How do you expect the proposed coal plant to contribute to your current tourism industry?

Coal will destroy tourism totally as more damage will be on the ocean killing millions of sea animals where most of the tourists come to Lamu for snorkelling and alike so if fish are killed where will the tourist go for snorkelling? (Community member)

How do you expect the proposed wind farm to contribute to your current tourism industry?

It will look funny when turbines are moving while generating power, so tourists will be very interested in visiting also it is adjacent to the beach and kipini (Mecoby Group)

Listening to the expectations of the communities, their concerns and disappointments represents the starting point to co-development and participation in energy projects amongst local communities, project proponents, and both local and national authorities.

5. Policy implications for Kenya

Harmonising international climate commitments with national action plans: Opposing energy development options in Lamu county – namely coal versus wind power – demonstrate that local energy planning is not aligned with national and international climate policy. National Action Plans should be paired with International Climate Change Agreements, not counteract them. Genuine harmonisation of policies and implementation plans will avoid contradictions and adjust climate commitments with the fulfilment of energy needs and the support of local communities.

International investments should strengthen climate action, not contradict it. As the contested coal power project in Lamu has shown, the lure of international investment is accompanied by the risk of neglecting environmental and climate policy targets. Local resistance and court rulings have also proved the importance of national legislation and voicing local concerns in aligning international investment with national and local policies. Governments should not allow the interests of investors to take precedence over those of local communities nor contravene their own policies. Climate-action-oriented procurement guidelines should be considered in order to align international investments with the Paris Agreement and related national and local policies.

Involving communities in energy planning to maximise social performance: Political deliberations and planning processes on climate action in the energy sector need to consider the social performance of energy projects and social and economic co-benefits. The activism demonstrated in Lamu has halted the proposed coal power plant and one of the main investors has even recognised that the plan was a mistake[6]. While balancing energy needs at a national level requires fine-tuning of needs versus impacts, it is not possible to ignore the voices of those that are affected.

Ensuring long-term energy security for citizens by considering climate change risks and resilience: Besides including social performance criteria, investments in large energy projects should also consider criteria pertaining to climate change risks and resilience/adaptation, in line with the National Adaptation Plan 2015 – 2030, to ensure long-term energy security for Keyna's citizens. Power plants located on small islands (such as in Lamu County) should consider future sea level rise and higher temperatures, which may represent risks to the secure operation and cooling of thermal power plants.

[6] https://chinadialogue.net/en/energy/lamu-kenyan-coal-project-chinese-investors-take-environmental-risks-seriously/

Recommended reading

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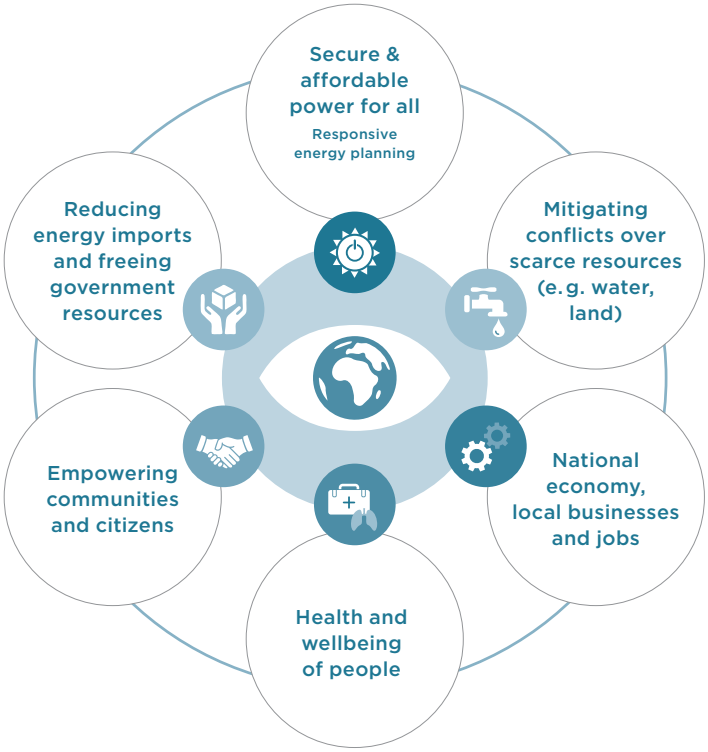

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Supported by:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

based on a decision of the German Bundestag

INTERNATIONAL CLIMATE INITIATIVE (IKI)

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