

		Will the provision of electricity/LPG access in Kibera enable or inhibit the achievement of the Target, and/or the achievement of the Target enable or inhibit the provision of electricity/LPG access?										How will the interventions for electricity/LPG access in Kibera impact the achievement of the Target?												
GOAL OR TARGET IN THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT		Electricity				LPG				Electricity Interventions						LPG Interventions								
		Enable	Inhibit	Reasoning	Sample Reference	Enable	Inhibit	Reasoning	Sample Reference	Enable	Inhibit	Intervention Outcome	Intervention	Reasoning	Considerations	Sample Reference	Enable	Inhibit	Interventions Outcome	Intervention	Reasoning	Considerations	Sample Reference	
Goal 1: End poverty in all its forms everywhere																								
1.1	By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day			Proven interlinkages between provision of access to modern energy services, living standards and income. Expansion of the grid could support the creation of new jobs and the provision of electricity services.	(1) Wilcox et al. 2015, Utilising Electricity Access for Poverty Reduction (Practical Action Consulting) (2) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			Proven interlinkages between provision of access to modern energy services, living standards and income.	(1) Hussein & Fithri. 2012. Analysis of energy as a precondition for improvement of living conditions and poverty reduction in sub-Saharan Africa (2) Seaman. 2015. Sustainable Development Goals: The Role of Energy (3) World Bank & ESMAP. 2015. Bringing global best practices to transform Kenya's slum electrification program.			Strengthening Enablers	Strengthening Supply Chain Community Engagement	Expansion of distribution grid networks and community participation means improved availability of electricity and the creation of new jobs	Interventions must be inclusive of residents in informal settlements	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II. (2) The World Bank & ESMAP. 2015. Bringing global best practices to transform Kenya's slum electrification program.			Strengthening Enablers	Strengthening Supply Chain	Increase the number of LPG outlets and/or the establishment of local enterprises as distributors and dealers in Kibera to improve the availability of LPG and the creation of new jobs	Dependence on LPG imports ultimately limits the energy sovereignty of Kenya.	(1) Seaman. 2015. Sustainable Development Goals: The Role of Energy (2) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)	
	By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions			As 1.1				As 1.1					Strengthening Enablers	Strengthening Supply Chain Community Engagement	Expansion of distribution grid networks and community participation means improved availability of electricity and the creation of new jobs	Interventions must be inclusive of residents in informal settlements	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II. (2) The World Bank & ESMAP. 2015. Bringing global best practices to transform Kenya's slum electrification program.			Strengthening Enablers	Strengthening Supply Chain	Increase the number of LPG outlets and/or the establishment of local enterprises as distributors and dealers in Kibera to improve the availability of LPG and the creation of new jobs	Dependence on LPG imports ultimately limits the energy sovereignty of Kenya.	(1) Seaman. 2015. Sustainable Development Goals: The Role of Energy (2) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)
	Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable			Evidence that social protection measures can include energy access interventions. Financing innovations can make electricity more affordable to low-income households provided they reach the targeted households.	(1) Futo Nettei et al. 2018. Mapping the Synergies and Trade-offs between energy and the Sustainable Development Goals (Nature Energy) (2) de Bergeot & Monstadt. 2018. The Kenya Slum Electrification Program: Local policies of electricity networks in Kibera (Energy Research & Social Science)			Social protection measures can include energy access measures provided they reach targeted households.	(1) Futo Nettei et al. 2018. Mapping the Synergies and Trade-offs between energy and the Sustainable Development Goals (Nature Energy) (2) van den Berg. 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank) (3) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			Strengthening Enablers	Financial Incentives	Policy must be context-responsive, appropriately implemented and monitored. Direct financial incentives must be implemented to ensure they reach targeted households and achieve policy goals.	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II. (2) de Bergeot & Monstadt. 2018. The Kenya Slum Electrification Program: Local policies of electricity networks in Kibera (Energy Research & Social Science)			Strengthening Enablers	Financial Incentives	Consideration of informal settlements in national policy and decision-making and inclusion of the needs of households. Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	Policy must be context-responsive, appropriately implemented and monitored. Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)		
1.4	By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance			As 1.3			As 1.3					Strengthening Enablers	Financial Incentives	Policy must be context-responsive, appropriately implemented and monitored. Direct financial incentives must be implemented to ensure they reach targeted households and achieve policy goals.	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II. (2) de Bergeot & Monstadt. 2018. The Kenya Slum Electrification Program: Local policies of electricity networks in Kibera (Energy Research & Social Science)			Strengthening Enablers	Financial Incentives	Consideration of informal settlements in national policy and decision-making and inclusion of the needs of households. Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	Policy must be context-responsive, appropriately implemented and monitored. Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)		
	By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters			Legal electricity for lighting as a substitute for kerosene to fossil-based fuels, reduces the impact of fluctuations in the global oil price.	(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			Kenya has no domestic reserves of crude oil and is dependent on imports, the price of which is elastic with global oil prices.	(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			Strengthening Enablers	Strengthening Supply Chain	Increase of Renewable Energy Sources for electricity generation reduces dependence on fuel imports.	Climate resilient power generation	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II.			Create Enablers Limit Inhibitors	Strengthening Supply Chain	Domestic reserves of LPG improves supply security, stabilises prices, and enables import economy scale but Kenya remains dependent on imports.	Dependence on LPG imports ultimately limits the energy sovereignty of Kenya.	(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)	
	Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions			"Kenya Slum Electrification Program" Kenya Electricity System Improvement Project and "The Last Mile Connectivity" are enabled through external support.	(1) Kenya Power. 2019. Kenya Electricity System Improvement Project (KESSIP) Kenya Electricity System Improvement Project Framework (2) African Development Fund. 2014. Last Mile Connectivity Project. (3) The World Bank. 2015. Bringing global best practices to transform Kenya's slum electrification program.			Cross-sectoral initiatives, private-public partnerships, NGOs programmes supported by Kenya's Ministry of Energy and Petroleum to promote the use of LPG	(1) BEAAM. 2016. Kenya Action Agenda (Government of Kenya)			Interlinkages Stand		"Kenya Slum Electrification Program" Kenya Electricity System Improvement Project Framework (2) African Development Fund. 2014. Last Mile Connectivity Project. (3) The World Bank. 2015. Bringing global best practices to transform Kenya's slum electrification program.			Interlinkages Stand		Cooperation and knowledge sharing above the local of LPG supply chain and realised through existing institutions, partnerships and programmes e.g. World Bank, GACC.	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II.		(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)		
1.b	Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions			A sound "pro-poor" policy framework takes into account the potential of electricity for poverty eradication provided it is context-responsive.	(1) de Bergeot & Monstadt. 2018. The Kenya Slum Electrification Program: Local policies of electricity networks in Kibera (Energy Research & Social Science)			Success of initiatives such as Kenya Petroleum Technical Assistance Project (KEPTAP) aiming to strengthen Kenyan petroleum supply chain and capacity measured against indicators that include effective policies. A sound "pro-poor" policy framework takes into account the potential of LPG for poverty eradication, provided it is context-responsive.	(1) World Bank. 2020. Kenya Petroleum Technical Assistance Project (KEPTAP) Kenya Petroleum Technical Assistance Project (KEPTAP) Kenya Petroleum Technical Assistance Project (KEPTAP) (2) de Bergeot & Monstadt. 2018. The Kenya Slum Electrification Program: Local policies of electricity networks in Kibera (Energy Research & Social Science)			Strengthening Enablers	Financial Incentives	Policy must be context-responsive, appropriately implemented and monitored to achieve goals. Direct financial incentives - subsidies, flexible pricing, flexible tariffs - improve affordability of electricity for households.	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II. (2) de Bergeot & Monstadt. 2018. The Kenya Slum Electrification Program: Local policies of electricity networks in Kibera (Energy Research & Social Science)			Strengthening Enablers	Strengthening Supply Chain	Consideration of informal settlements in national policy and decision-making and inclusion of the needs of households. Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	Policy must be context-responsive, appropriately implemented and monitored to achieve goals. Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)		
	By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round			Electricity access reduces the household burden on women and/or allows household-based labour activities with positive consequences for child care, which, combined with better exposure to environmental contamination, may result in improved child nutritional status. Electricity access supports household appliances, unaffordable energy can increase burden on household income.	(1) Galaher et al. 2013. Urban Agriculture, social capital, and food security in the Kibera slum of Nairobi, Kenya (Agriculture & Human Values) (2) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO) (3) de Bergeot & Monstadt. 2018. The Kenya Slum Electrification Program: Local policies of electricity networks in Kibera (Energy Research & Social Science)			LPG access reduces the household burden on women and/or allows household-based labour activities with positive consequences for child care, which, combined with better exposure to environmental contamination, may result in improved child nutritional status. Unaffordable energy can increase the burden on household income.	(1) Payne et al. 2011. Hunger and Food Security in Nairobi's Slum: An Assessment Using RT Models (Journal of Urban Health) (2) van den Berg. 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank) (3) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			Overcome Inhibitors	Financial Incentives	Direct financial incentives - subsidies, flexible pricing, flexible tariffs - improve affordability of electricity for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II. (2) The World Bank & ESMAP. 2015. Bringing global best practices to transform Kenya's slum electrification program.			Overcome Inhibitors	Financial Incentives	Direct financial incentives - subsidies, flexible pricing, flexible tariffs - improve affordability of electricity for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)	
	By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons			As 2.1 Electricity access for productive purposes can increase household income level and therefore allow for the purchase of inputs for urban agriculture which can increase food security and income. The variety of food, particularly vegetables, consumed.	(1) Galaher et al. 2013. Urban Agriculture, social capital, and food security in the Kibera slum of Nairobi, Kenya (Agriculture & Human Values) (2) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			As 2.1 LPG access for productive purposes can increase household income level and therefore allow for the purchase of inputs for urban agriculture which can increase food security and income. The variety of food, particularly vegetables, consumed.	(1) Galaher et al. 2013. Urban Agriculture, social capital, and food security in the Kibera slum of Nairobi, Kenya (Agriculture & Human Values) (2) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			Strengthening Enablers	Financial Incentives	Direct financial incentives - subsidies, flexible pricing, flexible tariffs - improve affordability of electricity for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II. (2) The World Bank & ESMAP. 2015. Bringing global best practices to transform Kenya's slum electrification program.			Strengthening Enablers	Financial Incentives	Direct financial incentives - subsidies, flexible pricing, flexible tariffs - improve affordability of electricity for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)	
Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture																								
2.1	By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round			Electricity access reduces the household burden on women and/or allows household-based labour activities with positive consequences for child care, which, combined with better exposure to environmental contamination, may result in improved child nutritional status. Electricity access supports household appliances, unaffordable energy can increase burden on household income.	(1) Galaher et al. 2013. Urban Agriculture, social capital, and food security in the Kibera slum of Nairobi, Kenya (Agriculture & Human Values) (2) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO) (3) de Bergeot & Monstadt. 2018. The Kenya Slum Electrification Program: Local policies of electricity networks in Kibera (Energy Research & Social Science)			LPG access reduces the household burden on women and/or allows household-based labour activities with positive consequences for child care, which, combined with better exposure to environmental contamination, may result in improved child nutritional status. Unaffordable energy can increase the burden on household income.	(1) Payne et al. 2011. Hunger and Food Security in Nairobi's Slum: An Assessment Using RT Models (Journal of Urban Health) (2) van den Berg. 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank) (3) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			Overcome Inhibitors	Financial Incentives	Direct financial incentives - subsidies, flexible pricing, flexible tariffs - improve affordability of electricity for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II. (2) The World Bank & ESMAP. 2015. Bringing global best practices to transform Kenya's slum electrification program.			Overcome Inhibitors	Financial Incentives	Direct financial incentives - subsidies, flexible pricing, flexible tariffs - improve affordability of electricity for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)	
	By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons			As 2.1 Electricity access for productive purposes can increase household income level and therefore allow for the purchase of inputs for urban agriculture which can increase food security and income. The variety of food, particularly vegetables, consumed.	(1) Galaher et al. 2013. Urban Agriculture, social capital, and food security in the Kibera slum of Nairobi, Kenya (Agriculture & Human Values) (2) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			As 2.1 LPG access for productive purposes can increase household income level and therefore allow for the purchase of inputs for urban agriculture which can increase food security and income. The variety of food, particularly vegetables, consumed.	(1) Galaher et al. 2013. Urban Agriculture, social capital, and food security in the Kibera slum of Nairobi, Kenya (Agriculture & Human Values) (2) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			Strengthening Enablers	Financial Incentives	Direct financial incentives - subsidies, flexible pricing, flexible tariffs - improve affordability of electricity for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II. (2) The World Bank & ESMAP. 2015. Bringing global best practices to transform Kenya's slum electrification program.			Strengthening Enablers	Financial Incentives	Direct financial incentives - subsidies, flexible pricing, flexible tariffs - improve affordability of electricity for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)	
	By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons			As 2.1 Electricity access for productive purposes can increase household income level and therefore allow for the purchase of inputs for urban agriculture which can increase food security and income. The variety of food, particularly vegetables, consumed.	(1) Galaher et al. 2013. Urban Agriculture, social capital, and food security in the Kibera slum of Nairobi, Kenya (Agriculture & Human Values) (2) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			As 2.1 LPG access for productive purposes can increase household income level and therefore allow for the purchase of inputs for urban agriculture which can increase food security and income. The variety of food, particularly vegetables, consumed.	(1) Galaher et al. 2013. Urban Agriculture, social capital, and food security in the Kibera slum of Nairobi, Kenya (Agriculture & Human Values) (2) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)			Strengthening Enablers	Financial Incentives	Direct financial incentives - subsidies, flexible pricing, flexible tariffs - improve affordability of electricity for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) ONESED 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II. (2) The World Bank & ESMAP. 2015. Bringing global best practices to transform Kenya's slum electrification program.			Strengthening Enablers	Financial Incentives	Direct financial incentives - subsidies, flexible pricing, flexible tariffs - improve affordability of electricity for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) Kamukazi et al. 2008, Energy Access for the Urban Poor (AFREIPENFWO)	

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7.1	By 2030, ensure universal access to affordable, reliable and modern energy services	Electricity is a modern energy service. Unavailable electricity may inhibit access.	(1) SE4All 2016, Kenya Action Agenda (Government of Kenya) (2) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	LPG is a clean burning fuel, classified as a 'modern' energy service. Unavailable LPG may inhibit access.	(1) Gani & Van Leeuwen, 2019, Sustainable Development Goals the Contribution of LPG (Global LPG Partnership (GLPOP) and the World LPG Association (WLPGA)) (2) Bhutta et al. 2016, Beyond Connections: Redefining Energy Access (World Bank) (3) Pado-Schiavone et al. 2017, The cost of recovery: assessment and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	Overcome Inhibitor	Political Recognition Financial Incentives Strengthening Supply Chain Community Engagement	Interventions developed to support universal, affordable and reliable energy access. Policy must be context-responsive, appropriately implemented and monitored. Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	Overcome inhibitors	Financial Incentives	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)
7.2	By 2030, increase substantially the share of renewable energy in the global energy mix	Grid electricity can be met through renewable or fossil-based energy sources.	(1) SE4All 2016, Kenya Action Agenda (Government of Kenya)	LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore not a renewable energy source.	(1) Munro et al. 2017, Energy justice for all: Redefining SDG 7 through struggles over traditional energy practices in Sierra Leone (Energy Policy)	Strengthen Enabler Limit Inhibitor	Strengthening of Supply Chain Financial Incentives	Renewable energy sources in electricity generation. Financial direct incentives do not consider source of electricity generation.	(1) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	Interlinkages Stand			LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable
7.3	By 2030, double the global rate of improvement in energy efficiency	Legal and formal electricity access enables supply efficiency.	(1) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	LPG has a higher calorific value per unit than alternative fuels including biomass and coal	(1) Gani & Van Leeuwen, 2019, Sustainable Development Goals the Contribution of LPG (Global LPG Partnership (GLPOP) and the World LPG Association (WLPGA)) (2) Bhutta et al. 2016, Beyond Connections: Redefining Energy Access (World Bank)	Interlinkages Band		Legal and formal electricity access enables supply efficiency	(1) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	Interlinkages Band			LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable
7.4	By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	International cooperation through financial initiatives support electrification programmes.	(1) The World Bank & ESMAP, 2015, Bringing global best practices to transform Kenya's gas into reducing energy poverty (World Bank)	Cross-sectoral initiatives, cross-public perceptions, NDCs programmes supported by Kenya's Ministry of Energy and Petroleum to strengthen LPG supply chain. Kenya has domestic reserves of crude oil and is dependent on imports.	(1) Gani & Van Leeuwen, 2019, Sustainable Development Goals the Contribution of LPG (Global LPG Partnership (GLPOP) and the World LPG Association (WLPGA)) (2) Kijima, 2011, The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)	Interlinkages Band		Cooperation and knowledge programmes realised through to transform Kenya's gas into reducing energy poverty. e.g. World Bank	(1) The World Bank & ESMAP, 2015, Bringing global best practices to transform Kenya's gas into reducing energy poverty (World Bank)	Limit Inhibitors	Strengthening Supply Chain	Domestic reserves of oil improves supply security, stabilises prices, and enables import economy of scale but Kenya remains dependent on imports.	(1) Kijima, 2011, The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) van den Berg, 2018, Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Gas (World Bank) (3) Munro et al. 2017, Energy justice for all: Redefining SDG 7 through struggles over traditional energy practices in Sierra Leone (Energy Policy)
7.5	By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support	Expanded infrastructure, gas pipelines, enables electricity access.	(1) African Development Fund, 2014, Last Mile Connectivity Project (African Development Fund) (2) SE4All 2016, Kenya Action Agenda (Government of Kenya)	As 7.a	(1) SE4All 2016, Kenya Action Agenda (Government of Kenya) (2) van den Berg, 2018, Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)	Strengthens Enabler	Strengthening of Supply Chain	Electricity access through expansion of distribution network grid.	(1) African Development Fund, 2014, Last Mile Connectivity Project (African Development Fund) (2) SE4All 2016, Kenya Action Agenda (Government of Kenya)	Limit Inhibitors	Strengthening Supply Chain	Domestic reserves of oil improves supply security, stabilises prices, and enables import economy of scale.	(1) Kijima, 2011, The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) van den Berg, 2018, Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Gas (World Bank) (3) Munro et al. 2017, Energy justice for all: Redefining SDG 7 through struggles over traditional energy practices in Sierra Leone (Energy Policy)
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all													
8.1	Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	Electricity access enables productive employment. Electricity access enables SMEs' growth and contribution to the formal economy, increasing turnover, profitability and employee level.	(1) Kijima et al. Energy Access for the Urban Poor (AFREPRENFWCI) 2008 (2) WIEGO, 2015, Myths & Facts about the Informal Economy (Women in Informal Employment: Globalizing and Organizing)	LPG enables productive employment in SMEs and within the supply chain for fuel. LPG access enables SMEs' growth and contribution to the formal economy, increasing turnover, profitability and employee level.	(1) Gani & Van Leeuwen, 2019, Sustainable Development Goals the Contribution of LPG (Global LPG Partnership (GLPOP) and the World LPG Association (WLPGA)) (2) Kimmetts and Argenstein, 2012, Productive Uses of Biogas Energy and Fuel Transitions in Urban South Africa (Energy & Environment Research) (3) WIEGO, 2015, Myths & Facts about the Informal Economy (Women in Informal Employment: Globalizing and Organizing)	Strengthens Enabler	Strengthening Supply Chain Community Engagement	Expansion of distribution grid networks and community participation means improved availability of electricity and the creation of new jobs	(1) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	Strengthen Enablers	Strengthening Supply Chain	Increase the number of LPG outlets and/or the establishment of local enterprises as distributors and dealers in Kilima means improved availability of LPG the creation of new jobs	(1) Besen, 2015, Scale Versus Subsidies? Lessons from a Context-Responsive Approach to Market-Based Stove Development in Western Kenya (Decentralized Solutions for Developing Economies) (2) Kijima, 2011, The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)
8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	As 8.1	As 8.1	As 8.1	(1) Gani & Van Leeuwen, 2019, Sustainable Development Goals the Contribution of LPG (Global LPG Partnership (GLPOP) and the World LPG Association (WLPGA)) (2) Munro et al. 2017, Energy justice for all: Redefining SDG 7 through struggles over traditional energy practices in Sierra Leone (Energy Policy)	Strengthens Enabler	Strengthening Supply Chain Community Engagement	Expansion of distribution grid networks and community participation means improved availability of electricity and the creation of new jobs	(1) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	Strengthen Enablers	Strengthening Supply Chain	Increase the number of LPG outlets and/or the establishment of local enterprises as distributors and dealers in Kilima means improved availability of LPG the creation of new jobs	(1) Besen, 2015, Scale Versus Subsidies? Lessons from a Context-Responsive Approach to Market-Based Stove Development in Western Kenya (Decentralized Solutions for Developing Economies) (2) Kijima, 2011, The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)
8.3	Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	As 8.1	As 8.1	As 8.1	(1) Gani & Van Leeuwen, 2019, Sustainable Development Goals the Contribution of LPG (Global LPG Partnership (GLPOP) and the World LPG Association (WLPGA)) (2) Munro et al. 2017, Energy justice for all: Redefining SDG 7 through struggles over traditional energy practices in Sierra Leone (Energy Policy)	Strengthens Enabler	Strengthening Supply Chain Community Engagement Political Recognition	Expansion of distribution grid networks and community engagement means improved availability of electricity and the creation of new jobs Political recognition of Kilima means consideration of informal settlements in national policy and decision-making encouraging SMEs	(1) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	Strengthen Enablers	Strengthening Supply Chain Political Recognition	Increase the number of LPG outlets and/or the establishment of local enterprises as distributors and dealers in Kilima means improved availability of LPG the creation of new jobs Consideration of informal settlements in national policy and decision-making can encourage the growth of SMEs.	(1) Besen, 2015, Scale Versus Subsidies? Lessons from a Context-Responsive Approach to Market-Based Stove Development in Western Kenya (Decentralized Solutions for Developing Economies) (2) Kijima, 2011, The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)
8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead	As 7.3	As 7.3	As 8.1, LPG has a higher calorific value per unit than alternative fuels	(1) Gani & Van Leeuwen, 2019, Sustainable Development Goals the Contribution of LPG (Global LPG Partnership (GLPOP) and the World LPG Association (WLPGA)) (2) Bhutta et al. 2016, Beyond Connections: Redefining Energy Access (World Bank)	Interlinkages Band		Legal and formal electricity access enables supply efficiency	(1) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	Interlinkages Band			
8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	As 8.1	As 8.1	As 8.1, LPG access reduces income for rural producers of biomass	(1) Gani & Van Leeuwen, 2019, Sustainable Development Goals the Contribution of LPG (Global LPG Partnership (GLPOP) and the World LPG Association (WLPGA)) (2) Munro et al. 2017, Energy justice for all: Redefining SDG 7 through struggles over traditional energy practices in Sierra Leone (Energy Policy)	Strengthens Enabler	Strengthening Supply Chain Community Engagement	Expansion of distribution grid networks and community engagement means improved availability of electricity and the creation of new jobs	(1) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	Strengthen Enablers	Strengthening Supply Chain	Increase the number of LPG outlets and/or the establishment of local enterprises as distributors and dealers in Kilima means improved availability of LPG the creation of new jobs	(1) Besen, 2015, Scale Versus Subsidies? Lessons from a Context-Responsive Approach to Market-Based Stove Development in Western Kenya (Decentralized Solutions for Developing Economies) (2) Kijima, 2011, The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)
8.6	By 2020, substantially reduce the proportion of youth not in employment, education or training	As 8.1 and 4.3	As 8.1 and 4.3	As 8.1, LPG has a higher calorific value per unit than alternative fuels	(1) Gani & Van Leeuwen, 2019, Sustainable Development Goals the Contribution of LPG (Global LPG Partnership (GLPOP) and the World LPG Association (WLPGA)) (2) Munro et al. 2017, Energy justice for all: Redefining SDG 7 through struggles over traditional energy practices in Sierra Leone (Energy Policy)	Strengthens Enabler	Strengthening Supply Chain Community Engagement	Expansion of distribution grid networks and community engagement means improved availability of electricity and the creation of new jobs	(1) ONESD 2014, Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II: Global Network on Energy for Sustainable Development for The Energy, Environment and Development Network for Africa (AFREPRENFWCI)	Strengthen Enablers	Strengthening Supply Chain	Increase the number of LPG outlets and/or the establishment of local enterprises as distributors and dealers in Kilima means improved availability of LPG the creation of new jobs	(1) Besen, 2015, Scale Versus Subsidies? Lessons from a Context-Responsive Approach to Market-Based Stove Development in Western Kenya (Decentralized Solutions for Developing Economies) (2) Kijima, 2011, The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)

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10.b	Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes				Cross-sectoral initiatives, private-public partnerships, NDCs programmes promote the access to electricity.	(1) SE4ALL 2016, Kenya Action Agenda (Government of Kenya)				Cross-sectoral initiatives, private-public partnerships, NDCs programmes promote the access to electricity.	(1) SE4ALL 2016, Kenya Action Agenda (Government of Kenya)	Interlinkage Stands		Cross-sectoral initiatives, private-public partnerships, NDCs programmes promote the access to electricity.	(1) SE4ALL 2016, Kenya Action Agenda (Government of Kenya)	Interlinkage Stand		Mobilisation of direct financial resources and investment in LPG infrastructure realised through existing initiatives, partnerships and programmes e.g. World Bank, GACC.	(1) SE4ALL 2016, Kenya Action Agenda (Government of Kenya) (2) Singh et al. 2014, Energy Access Realities in Urban Poor Communities of Developing Countries: Assessments and Recommendations (Global Network on Energy for Sustainable Development)
10.c	By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent																		
Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable																			
11.1	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums				Legal electricity access supports basic services and reduces risk of electrification. Fees caused by faulty electricals and can be included in slum upgrading programs. Unaffordable energy can increase burden on household income limiting access to basic services.	(1) QNESD 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II (2) The World Bank & ESMPAP, 2015. Bringing global best practices to transform Kenya's slum electrification program			LPG, as a substitute for biomass, reduces LPG and associated physical hazards. Unaffordable energy can increase burden on household income limiting access to basic services.	(1) Kojima, 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) van den Berg, 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)	Strengthen Enabler Overcome Inhibitors	Political Recognition Financial Incentives	Political recognition of Kibera means consideration of informal settlements in national policy and decision-making and inclusion of the needs of households. Financial direct incentives - subsidies, income tariffs, flexible pricing - improves affordability of electricity for households. Policy must be context-responsive, appropriately implemented and monitored. Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) QNESD 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II (2) The World Bank & ESMPAP, 2015. Bringing global best practices to transform Kenya's slum electrification program.	Strengthen Enablers	Financial Incentives	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) QNESD 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II (2) van den Berg, 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)	
11.2	By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons								LPG offers an alternative vehicle fuel with lower GHG and particulate emissions. LPG for vehicle fuel can compete with LPG for cooking fuel.	(1) Kojima, 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) van den Berg, 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)	Strengthen Enablers	Strengthening Supply Chain	Domestic reserves of LPG improve supply security, improving the availability of the fuel for all uses, reducing, but not eliminating competition for LPG as a vehicle fuel versus cooking fuel.	Dependence on LPG imports adversely limits the energy sovereignty of Kenya.	(1) Kojima, 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) van den Berg, 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)				
11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries				Electricity access and use can empower otherwise marginalised groups socio-economically, giving voice in planning and policy-making.	(1) Singh et al. 2014, Energy Access Realities in Urban Poor Communities of Developing Countries: Assessments and Recommendations (Global Network on Energy for Sustainable Development)			LPG access can empower other less marginalised groups socio-economically, giving voice in planning and policy-making	(1) Singh et al. 2014, Energy Access Realities in Urban Poor Communities of Developing Countries: Assessments and Recommendations (Global Network on Energy for Sustainable Development)	Strengthen Enablers	Political Recognition Community Engagement	Political recognition of Kibera means consideration of informal settlements in national policy and decision-making and inclusion of the needs of households. Policy must be context-responsive, appropriately implemented and monitored. Community engagement supports inclusive and participatory decision-making.	(1) QNESD 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II (2) The World Bank & ESMPAP, 2015. Bringing global best practices to transform Kenya's slum electrification program.	Strengthen Enablers	Strengthening Supply Chain	Consideration of informal settlements in national policy and decision-making and inclusion of the needs of households. Increase the number of LPG outlets and/or the establishment of local enterprises as distributors and dealers in Kibera means improved availability of LPG for the creation of new jobs.	(1) QNESD 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II (2) van den Berg, 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)	
11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage				Formal, legal supply of electricity increases efficiency of use and reduces dependence on dirty fuels. Electricity through household sources contributes to better air pollution.	(1) Eggle & Senelick, 2003. Social impact assessments of large dams throughout the world: lessons learned over two decades (Impact Assessment and Project Appraisal)	Interlinkage Stand		Loss of cultural heritage with decreased demand for charcoal production, due to LPG access, resulting in loss of associated knowledge and skills in rural areas. As a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable	(1) Munro et al. 2017. Energy justice for off-Grid through struggles over traditional energy practices in Sierra Leone (Energy Policy) (2) Kojima, 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)	Interlinkage Stand		Increased electricity consumption must be coupled with sustainable electricity production generation and distribution.	(1) Eggle & Senelick, 2003. Social impact assessments of large dams throughout the world: lessons learned over two decades (Impact Assessment and Project Appraisal) (2) Kenya Power, 2015. Kenya Electricity System Improvement Project Readiness Policy Framework (3) African Development Fund, 2014. Last Mile Connectivity Project	Interlinkage Stand		LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable	(1) Munro et al. 2017. Energy justice for off-Grid through struggles over traditional energy practices in Sierra Leone (Energy Policy) (2) Kojima, 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)	
11.5	By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations								LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable	(1) Munro et al. 2017. Energy justice for off-Grid through struggles over traditional energy practices in Sierra Leone (Energy Policy) (2) Matthews 2014, Opportunities and Challenges for Petroleum and LPG Markets in Sub-Saharan Africa (Energy Policy) (3) Kojima, 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)	Interlinkage Stand		Increased electricity consumption must be coupled with sustainable electricity production generation and distribution.	(1) Eggle & Senelick, 2003. Social impact assessments of large dams throughout the world: lessons learned over two decades (Impact Assessment and Project Appraisal) (2) Kenya Power, 2015. Kenya Electricity System Improvement Project Readiness Policy Framework (3) African Development Fund, 2014. Last Mile Connectivity Project	Interlinkage Stand		LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable	(1) Munro et al. 2017. Energy justice for off-Grid through struggles over traditional energy practices in Sierra Leone (Energy Policy) (2) Matthews 2014, Opportunities and Challenges for Petroleum and LPG Markets in Sub-Saharan Africa (Energy Policy) (3) Kojima, 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)	
11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management				Formal, legal supply of electricity increases efficiency of use and reduces dependence on dirty fuels. Electricity through household sources contributes to better air pollution.	(1) Kijkasat et al. Energy Access for the Urban Poor (PREP/NO 2008) (2) International Energy Agency, 2016. Energy and Air Pollution	Strengthen Enabler Limit Inhibitor	Strengthening Supply Chain Financial Incentives	Renewable energy sources in electricity generation. Increased electricity consumption must be coupled with sustainable electricity production generation and distribution. Financial direct incentives do not consider source of electricity generation.	(1) van Leeuwen, 2015. Sustainable Development Goals: the Contribution of LPG (Global LPG Partnership) (GLPGP) and the World LPG Association (WLPGA) (2) Bratta et al. 2016. Beyond Connections: Realising Energy Access (World Bank)	Interlinkage Stand		Increased electricity consumption must be coupled with sustainable electricity production generation and distribution.	(1) Eggle & Senelick, 2003. Social impact assessments of large dams throughout the world: lessons learned over two decades (Impact Assessment and Project Appraisal) (2) Kenya Power, 2015. Kenya Electricity System Improvement Project Readiness Policy Framework (3) African Development Fund, 2014. Last Mile Connectivity Project	Interlinkage Stand		LPG is a fossil fuel whose use reduces income for rural producers of biomass (charcoal and firewood)	(1) van Leeuwen, 2015. Sustainable Development Goals: the Contribution of LPG (Global LPG Partnership) (GLPGP) and the World LPG Association (WLPGA)	
11.7	By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities																		
11.8	Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning				Electricity access through expansion of transmission and distribution grids, in urban, peri-urban and rural areas.	(1) African Development Fund, Last Mile Connectivity Project (2014)	Interlinkage Stand		LPG, as a substitute for biomass, will reduce income for rural producers of biomass (charcoal and firewood)	(1) Munro et al. 2017. Energy justice for off-Grid through struggles over traditional energy practices in Sierra Leone (Energy Policy)	Interlinkage Stand		Interventions must be inclusive of residents in informal settlements.	(1) African Development Fund, Last Mile Connectivity Project (2014)	Interlinkage Stand		Consideration of informal settlements in national policy and decision-making and inclusion of the needs of households.	LPG, as a substitute for biomass, will reduce income for rural producers of biomass (charcoal and firewood)	(1) Munro et al. 2017. Energy justice for off-Grid through struggles over traditional energy practices in Sierra Leone (Energy Policy)
11.9	By 2030, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels				Electricity access through expansion of transmission and distribution grids, in urban, peri-urban and rural areas.	(1) African Development Fund, Last Mile Connectivity Project (2014)	Strengthen Enablers	Political Recognition Limits Inhibitor	Political recognition of Kibera means consideration of informal settlements in national policy and decision-making and inclusion of the needs of households. Policy must be context-responsive, appropriately implemented and monitored.	(1) QNESD 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II	Strengthen Enablers	Strengthening Supply Chain	Domestic reserves of LPG improve supply security, improving the availability of the fuel for all uses, reducing, but not eliminating competition for LPG as a vehicle fuel versus cooking fuel.	Dependence on LPG imports adversely limits the energy sovereignty of Kenya.	(1) QNESD 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II (2) van den Berg, 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)				
11.c	Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials																		
Goal 12: Ensure sustainable consumption and production patterns																			
12.1	Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries				As 7.3 LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable	(1) Kojima, 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)	Interlinkage stand		Awareness programmes can reduce the safe and efficient use of electricity.	(1) QNESD 2014, Country report (Kenya). Energy poverty in developing countries: urban poor communities, assessments and recommendations. Urban and Peri-urban energy access II	Interlinkage Stand							LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable	

12.2	By 2030, achieve the sustainable management and efficient use of natural resources	As 7.3				As 7.3 LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable	(1) Gan & Van Leeuwen. 2019. Sustainable Development Goals: the Contribution of LPG (Global LPG Partnership) (GLPGP) and the World LPG Association (WLPAs) (2) Kojima. 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)		Interlinkage stand			Awareness programmes can include the safe and efficient use of electricity.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities' assessments and recommendations. Urban and Peri-urban energy access III			Interlinkages Stand			LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable
12.3	By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses					Electricity access supports refrigerators and food storage.	(1) Kariakoo et al. Energy Access for the Urban Poor (AFREP/UPD 2008)		Interlinkage stand			Electricity access supports refrigerators and food storage.	(1) Kariakoo et al. Energy Access for the Urban Poor (AFREP/UPD 2008)						
12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment					Electricity access through market power regulation, good management of waste.	(1) Republic of Kenya. Ministry of Energy. 2018. National Energy Policy		Interlinkage Stand			Increase in electricity consumption can release waste and chemicals from electricity generation.	(1) Republic of Kenya. Ministry of Energy. 2018. National Energy Policy			Strengthen Enablers Overcome Inhibitors	Strengthening Supply Chain Community Engagement	Standardise LPG cylinders and appliances and enforcement of national standards, laws, regulations and monitoring mechanisms reduces safety risk of LPG. Programmes to raise awareness must be context responsive and consider the fuel preferences of households Programmes to raise awareness educate households in the safe use and storage of LPG.	(1) Kojima. 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) Puzoski et al. 2019. Supply considerations for scaling up clean cooking fuels for household energy in low- and middle-income countries (Geohub) (3) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities' assessments and recommendations. Urban and Peri-urban energy access III.
12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse																		
12.6	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle					Imports of LPG requires large and transnational companies as key actors. LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable.	(1) Kojima. 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) van den Berg. 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)								Strengthen Enablers	Strengthening Supply Chain	Large and transnational companies as key actors, improving bulk-import storage facilities and port infrastructure, depots, storage and bottling facilities	LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement - and therefore its sustainability is questionable	
12.7	Promote public procurement practices that are sustainable, in accordance with national policies and priorities					Procurement management can optimize future electrification programs.	(1) The World Bank & ESMAP. 2018. Kenya National Electrification Strategy Key Highlights.		Interlinkage Stand			Procurement management can optimize future electrification programs.	(1) The World Bank & ESMAP. 2018. Kenya National Electrification Strategy Key Highlights.			Create Enabler	Strengthening Supply Chain	Public procurement of LPG to strengthen supply chain	
12.8	By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature					Information and awareness about electricity access opportunities key to adopt sustainable energy practices.	(1) The World Bank. Bringing global best practices to transform Kenya's slum electrification program (2015).		Strengthen Enabler	Community Engagement	Awareness programmes can educate households in the safe and efficient use of electricity.	Programmes to raise awareness must be context-responsive and consider the fuel preferences and practices of households	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities' assessments and recommendations. Urban and Peri-urban energy access III			Strengthen Enabler	Community Engagement	Programmes to raise awareness educate households in the safe use and storage of LPG. Programmes to raise awareness must be context responsive and consider the fuel preferences of households	(1) Kojima. 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) Puzoski et al. 2019. Supply considerations for scaling up clean cooking fuels for household energy in low- and middle-income countries (Geohub) (3) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities' assessments and recommendations. Urban and Peri-urban energy access III.
12.9	Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production					Technological capacity can enable RET for power production. Poor institutions can inhibit efficient uptake if the preferences of the host country are not taken into account.	(1) Kariakoo & Kithyomo. 2003. RENEWABLE ENERGY DEVELOPMENT: The Workshop for African Energy Experts on Operationalizing the NEPAD Energy Initiative (Republic of Senegal and United Nations)		Interlinkage Stand			Technological capacity can enable RET for power production. Poor institutions can inhibit efficient uptake if the preferences of the host country are not taken into account.	(1) Kariakoo & Kithyomo. 2003. RENEWABLE ENERGY DEVELOPMENT: The Workshop for African Energy Experts on Operationalizing the NEPAD Energy Initiative (Republic of Senegal and United Nations)						
12.b	Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products																		
12.c	Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities					Target reduces burden on national budget which frees money for electrification programmes, provided it is complemented with financial support covering the increased electricity tariffs for the poor.	(1) Whitley & van der Burg. 2015. Fossil Fuel Subsidy Reform in Sub-Saharan Africa: From Rhetoric to Reality (New Climate Economy)		Strengthen Enabler Overcome Inhibitor	Strengthening Supply Chain Financial Incentives	Target supports uptake of RET. Direct financial incentives - i.e. subsidies, flexible pricing, rebates, tariffs - improves affordability of electricity for households. Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) Singh et al. 2015. Energy access realities in urban poor communities: assessments and recommendations (ONESD)			Create Enabler Overcome Inhibitor	Financial Incentives	Direct financial incentives - i.e. subsidies and removal of VAT - improves affordability of LPG for households. Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) Singh et al. 2015. Energy access realities in urban poor communities: assessments and recommendations (ONESD) (2) Puzoski et al. 2019. Supply considerations for scaling up clean cooking fuels for household energy in low- and middle-income countries (Geohub)
Goal 13. Take urgent action to combat climate change and its impacts																			
13.1	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries					Efficient energy planning can increase energy systems resilience. Electricity access through climate-vulnerable energy sources, e.g. hydro power, increases resilience of Kenya's energy system.	(1) Bonga. 2018. The Role of Hydropower in Climate Change Mitigation and Adaptation: A Review (Engineering) (2) Republic of Kenya. Ministry of Energy. 2018. National Energy Policy (3) SE4All. 2016. Kenya Action Agenda		Strengthen Enabler Limit Inhibitor	Strengthening Supply Chain Financial Incentives	Renewable energy sources in electricity generation. Financial direct incentives do not consider source of electricity generation.	Increased electricity consumption must be coupled with sustainable electricity production generation and distribution.	(1) Bonga. 2018. The Role of Hydropower in Climate Change Mitigation and Adaptation: A Review (Engineering) (2) Republic of Kenya. Ministry of Energy. 2018. National Energy Policy (3) SE4All. 2016. Kenya Action Agenda			Create Enabler	Strengthening Supply Chain	Domestic reserves of LPG improve supply security, strengthening the resilience and adaptive capacity of Kenya. LPG is a fossil fuel - a byproduct from natural gas and crude oil extraction and refinement.	Dependence on LPG imports ultimately limits the energy sovereignty of Kenya. Production and combustion of fossil-fuel contributes to the Climate Crisis and therefore climate-related hazards and natural disasters.
13.2	Integrate climate change measures into national policies, strategies and planning					Electricity access can be provided through renewable as well as fossil-based energy.	(1) Republic of Kenya. 2018. Ministry of Energy. National Energy Policy (2) Government of Kenya. 2018. National Climate Change Action Plan (3) Kenya. 2018-2022. Nairobi: Ministry of Environment and Forestry.		Strengthen Enabler Overcome Inhibitor	Strengthening Supply Chain	Integration of renewable energy sources in power production.		(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities' assessments and recommendations. Urban and Peri-urban energy access III			Limit Inhibitor	Strengthening Supply Chain	Domestic reserves of LPG improve supply security, strengthening the resilience and adaptive capacity of Kenya.	Dependence on LPG imports ultimately limits the energy sovereignty of Kenya.
13.3	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	As 12.8				As 12.8 Kenya has no domestic reserves of LPG and relies on imports: a concern for security of supply	(1) Kojima. 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) Matthews 2014. Opportunities and Challenges for Petroleum and LPG Markets in Sub-Saharan Africa (Energy Policy)		Strengthen Enabler	Community Engagement	Programmes to raise awareness educate households in the safe and efficient use of electricity as well as Climate Change and Sustainable Development	Programmes to raise awareness must be context responsive and consider the fuel preferences and practices of households	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities' assessments and recommendations. Urban and Peri-urban energy access III			Strengthen Enablers Limit Inhibitor	Strengthening Supply Chain Community Engagement	Domestic reserves of LPG improve supply security, strengthening the resilience and adaptive capacity of Kenya. Programmes to raise awareness educate households in the safe use and storage of LPG as well as Climate Change and Sustainable Development	(1) Kojima. 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) van den Berg. 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)

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16.7	Ensure responsive, inclusive, participatory and representative decision-making at all levels			Electricity access can empower other wise marginalised groups socio-economically, giving voice in planning and policy-making	(1) Singh, R. et al. Energy Access Realities in Urban Poor Communities of Developing Countries: Assessments and Recommendations (Global Network on Energy for Sustainable Development, 2014).			LPG access can empower other wise marginalised groups socio-economically, giving voice in planning and policy-making	(1) Singh et al. 2014. Energy Access Realities in Urban Poor Communities of Developing Countries: Assessments and Recommendations (Global Network on Energy for Sustainable Development)			Strengthen Enabler	Political Recognition	Political recognition of Kiln means consideration of informal settlements in national policy and requires defined roles and responsibilities of institutions	Policy must be context-responsive, appropriately implemented and monitored.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II. (2) Singh et al. 2015. Energy access realities in urban poor communities of developing countries: assessments and recommendations (ONESD)			Strengthen Enablers	Political Recognition	Consideration of informal settlements in national policy and decision-making.	(1) Singh et al. 2015. Energy access realities in urban poor communities of developing countries: assessments and recommendations (ONESD)
16.8	Broaden and strengthen the participation of developing countries in the institutions of global governance																					
16.9	By 2030, provide legal identity for all, including birth registration											Creates Enabler	Political Recognition	Political recognition of Kiln means consideration of informal settlements in national policy and inclusion in national census; reliable data enables effective policy-making, programmes and projects enabling electricity access	Policy must be context-responsive, appropriately implemented and monitored.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities: assessments and recommendations. Urban and Peri-urban energy access III. (2) van den Burg 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)			Creates Enabler	Political Recognition	Consideration of informal settlements in national policy and decision-making; reliable data enables effective policy-making, programmes and projects enabling LPG access	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities: assessments and recommendations. Urban and Peri-urban energy access III. (2) van den Burg 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)
16.10	Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements			As 12.8				As 12.8				Strengthen Enabler	Community Engagement	Programmes to raise awareness educate households in the safe and efficient use of electricity as well as information to protect fundamental freedoms.	Programmes to raise awareness must be implemented and consider the full preferences and practices of households	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities: assessments and recommendations. Urban and Peri-urban energy access III			Strengthen Enabler	Community Engagement	Programmes to raise awareness	As 12.8 - awareness raising
16.a	Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime																					
16.b	Promote and enforce non-discriminatory laws and policies for sustainable development			Electricity access can empower other wise marginalised groups socio-economically, giving voice in planning and policy-making	(1) Singh et al. 2014. Energy Access Realities in Urban Poor Communities of Developing Countries: Assessments and Recommendations (Global Network on Energy for Sustainable Development)			LPG access can empower other wise marginalised groups socio-economically, giving voice in planning and policy-making	(1) Singh et al. 2014. Energy Access Realities in Urban Poor Communities of Developing Countries: Assessments and Recommendations (Global Network on Energy for Sustainable Development)			Strengthen Enablers	Political Recognition	Political recognition of Kiln means consideration of informal settlements in national policy and decision-making		(1) Singh et al. 2015. Energy access realities in urban poor communities of developing countries: assessments and recommendations (ONESD)			Strengthen Enablers	Political Recognition	Consideration of informal settlements in national policy and decision-making	(1) Singh et al. 2015. Energy access realities in urban poor communities of developing countries: assessments and recommendations (ONESD)
Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development																						
17.1	Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection			Financing innovations can make electricity more affordable to lower-income households provided they reach the targeted households	(1) Fuso Nerini et al. 2018. Mapping the Synergies and Trade-offs between Energy and the Sustainable Development Goals (Nature Energy). (2) de Berranger & Morstad. 2018. The Kenya Rural Electrification Program: Local politics of electricity networks in Kiln Energy Research & Social Science			Financing innovations can make LPG more affordable to lower-income households provided they reach the targeted households	(1) Fuso Nerini et al. 2018. Mapping the Synergies and Trade-offs between Energy and the Sustainable Development Goals (Nature Energy). (2) van den Burg 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)			Strengthen Enablers Overcome Inhibitors	Financial Incentives	Direct financial incentives - i.e. subsidies, flexible pricing, bill relief, improves affordability of electricity for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals.	(1) Singh et al. 2015. Energy access realities in urban poor communities of developing countries: assessments and recommendations (ONESD) (2) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities: assessments and recommendations. Urban and Peri-urban energy access III			Strengthen Enablers Overcome Inhibitors	Financial Incentives	Direct financial incentives subsidies, removal of VAT on micro-finance - improves affordability of LPG for households.	Direct financial incentives must be implemented and monitored to ensure they reach targeted households and achieve policy goals. (3) Kijana. 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank)
17.2	Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries																					
17.3	Mobilize additional financial resources for developing countries from multiple sources			External funding can support electricity access programmes.	(1) African Development Fund. 2014. Last Mile Connectivity Project (2) SE4All 2016. Kenya Action Agenda			Cross-sectoral initiatives, private-public partnerships, NGOs programmes supported by Kenya's Ministry of Energy and Petroleum to promote the use of LPG and related resource mobilization	(1) SE4All 2016. Kenya Action Agenda (Government of Kenya) (2) Singh et al. 2014. Energy Access Realities in Urban Poor Communities of Developing Countries: Assessments and Recommendations (Global Network on Energy for Sustainable Development) (3) Haspelt et al. 2017. Reflections on experience with the global network on energy for sustainable development as a South-South global knowledge network (Energy for Sustainable Development)			Interlinkages Stand		External funding can support electricity access programmes.		(1) African Development Fund. 2014. Last Mile Connectivity Project (2) SE4All 2016. Kenya Action Agenda			Interlinkages Stand		Mobilisation of direct financial incentives - subsidies, removal of VAT, micro-finance - to improve affordability of LPG for households realised through existing initiatives, partnerships and programmes e.g. World Bank, GACC.	(1) SE4All 2016. Kenya Action Agenda (Government of Kenya) (2) Singh et al. 2014. Energy Access Realities in Urban Poor Communities of Developing Countries: Assessments and Recommendations (Global Network on Energy for Sustainable Development)
17.4	Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress			Strengthening of electricity provision requires investment in infrastructure.	(1) SE4All 2016. Kenya Action Agenda (Government of Kenya)			Strengthening of LPG supply chain requires investment in infrastructure.	(1) SE4All 2016. Kenya Action Agenda (Government of Kenya)			Strengthen Enabler Limit Inhibitor	Strengthening Supply Chain	Strengthening through renewable energy energy sources: solar, domestic, affordable and available energy for electricity production.	External funding can support electricity access programmes.	(1) African Development Fund. 2014. Last Mile Connectivity Project (2) SE4All 2016. Kenya Action Agenda			Strengthen Enablers Limit Inhibitors	Strengthening Supply Chain		
17.5	Adopt and implement investment promotion regimes for least developed countries			Expansion of electricity transmission and distribution requires investments in infrastructure.	(1) OECD. Enabling Investment in Sustainable Energy Infrastructure, OECD and Paris 2016. Reflections, (Organisation for Economic Cooperation and Development)			Strengthening of LPG supply chain requires investment in infrastructure.	(1) SE4All 2016. Kenya Action Agenda (Government of Kenya)			Interlinkages Stand		Expansion of electricity transmission and production requires investments in infrastructure.		(1) OECD. Enabling Investment in Sustainable Energy Infrastructure, OECD and Paris 2016. Reflections, (Organisation for Economic Cooperation and Development)			Interlinkages Stand		Mobilisation of direct financial incentives and investment in LPG infrastructure realised through existing initiatives, partnerships and programmes e.g. World Bank, GACC.	(1) SE4All 2016. Kenya Action Agenda (Government of Kenya) (2) Singh et al. 2014. Energy Access Realities in Urban Poor Communities of Developing Countries: Assessments and Recommendations (Global Network on Energy for Sustainable Development)
17.6	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism			Cross-sectoral initiatives, private-public partnerships, NGOs programmes supports electricity access.	(1) Haspelt et al. 2017. Reflections on experience with the global network on energy for sustainable development as a South-South global knowledge network (Energy for Sustainable Development)			As 17.3				Interlinkages Stand		Cross-sectoral initiatives, private-public partnerships, NGOs programmes supports electricity access.		(1) Haspelt et al. 2017. Reflections on experience with the global network on energy for sustainable development as a South-South global knowledge network (Energy for Sustainable Development)			Interlinkages Stand		Cooperation and knowledge sharing above the local of LPG supply chain and realised through existing initiatives, partnerships and programmes e.g. World Bank, GACC.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities: assessments and recommendations. Urban and Peri-urban energy access III.
17.7	Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed			As 12.a				As 17.3				Interlinkages stand		Renewable Energy Technology electricity generation. Initiatives to support efficient scale. If the preferences of the host country are not taken into account.		(1) African Development Fund. 2014. Last Mile Connectivity Project (2) SE4All 2016. Kenya Action Agenda (3) Kariakoo & Kariakoo. 2003. RENEWABLE ENERGY DEVELOPMENT: The Workshop for African Energy Experts on Operationalizing the NEPAD Energy Initiative (Republic of Senegal and United Nations)			Interlinkages Stand		Cooperation and knowledge sharing above the local of LPG supply chain and realised through existing initiatives, partnerships and programmes e.g. World Bank, GACC.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries: urban poor communities: assessments and recommendations. Urban and Peri-urban energy access III.
17.8	Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology			Electricity access, through innovations, supports ICT	(1) Sanyal et al. 2016. Stimulating Pay-As-You-Go Energy Access in Kenya and Tanzania: The Role of Development Finance (World Resource Institute)							Interlinkages stand		Electricity access, through innovations, supports ICT.		(1) Sanyal et al. 2016. Stimulating Pay-As-You-Go Energy Access in Kenya and Tanzania: The Role of Development Finance (World Resource Institute)			Creates Enabler	Financial Incentives	Information and communications technology can enable mobile payment methods. Subsidies, removal of VAT, micro-finance - to improve affordability of LPG for households.	Direct financial incentives subsidies, removal of VAT, micro-finance, improves affordability of LPG for households. e.g. World Bank, GACC.

17.9	Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation			As 17.6			As 17.3			Interlinkages stand		Cross-sectoral initiatives, private public partnerships, NGOs programmes supports electricity access.	(1) Haselt et al. 2017. Reflections on experience with the global network on energy for sustainable development as a South-South global knowledge network (Energy for Sustainable Development)		Interlinkages Stand	Cooperation and knowledge sharing above the locale of LPG supply chain and realised through existing initiatives, partnerships and programmes e.g. World Bank, GACC.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II.	
17.10	Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda																	
17.11	Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020																	
17.12	Realize timely implementation of duty-free and quota free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access																	
17.13	Enhance global macroeconomic stability, including through policy coordination and policy coherence			Electricity access can be met by renewable energy sources or fossil-based sources.	(1) Republic of Kenya. Ministry of Energy. National Energy Policy (2018) (2) SE4All. 2016. Kenya Action Agenda		Price of LPG is elastic with global oil price therefore relevant on global macroeconomic stability	(1) Kojima. 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) van den Berg. 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)		Strengthening Enabler Lime inhibitor	Strengthening Supply Chain	Integration of renewable energy sources mean domestic, affordable and available energy.	(1) African Development Fund. 2014. Last Mile Connectivity Project (2) SE4All. 2016. Kenya Action Agenda		Interlinkages Stand	Global oil price above the locale of LPG supply chain	(1) Kojima. 2011. The Role of Liquefied Petroleum Gas in Reducing Energy Poverty (World Bank) (2) van den Berg. 2018. Kenya's Strategy to Make Liquefied Petroleum Gas the Nation's Primary Cooking Fuel (World Bank)	
17.14	Enhance policy coherence for sustainable development			Coherent policies recognise the energy needs of the urban poor that supports sustainable development.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II. (2) Republic of Kenya. Ministry of Energy. National Energy Policy (2018) (3) SE4All. 2016. Kenya Action Agenda		Coherent policies recognise the energy needs of the urban poor that supports sustainable development.	(1) SE4All. 2016. Kenya Action Agenda (Government of Kenya) (2) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II. Report prepared for the Global Network on Energy for Sustainable Development by The Energy, Environment and Development Network for Africa (AFREPRENFWC)		Strengthen Enabler	Political Recognition	Political recognition of Kibera means consideration of informal settlements in national policy and inclusion of the energy needs of households.	Policy must be context-responsive, appropriately implemented and monitored.		Strengthen Enabler	Consideration of informal settlements in national policy and inclusion of the energy needs of households.	Policy must be context-responsive, appropriately implemented and monitored.	
17.15	Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development			Consideration of energy sovereignty to enable energy access	(1) Cassin Broto et al. 2018. Energy justice and sustainability transitions in Mozambique (Applied Energy)		Consideration of energy sovereignty to enable energy access	(1) Cassin Broto et al. 2018. Energy justice and sustainability transitions in Mozambique (Applied Energy)		Strengthen Enabler	Strengthening Supply Chain	Domestic energy resources, e.g. hydro power, solar power or geothermal power, to strengthen energy sovereignty of Kenya.	(2) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II.		Strengthen Enabler	Strengthening Supply Chain	Domestic reserves of LPG improve supply security, strengthening the energy sovereignty of Kenya.	Dependence on LPG imports ultimately limits the energy sovereignty of Kenya.
17.16	Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries			As 17.6			As 17.3			Interlinkages Stand		Cross-sectoral initiatives, private public partnerships, NGOs programmes supports electricity access.	(1) Haselt et al. 2017. Reflections on experience with the global network on energy for sustainable development as a South-South global knowledge network (Energy for Sustainable Development)		Interlinkages Stand	Cooperation and knowledge sharing above the locale of LPG supply chain and realised through existing initiatives, partnerships and programmes e.g. World Bank, GACC.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II.	
17.17	Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships			As 17.6			As 17.3			Interlinkages Stand		Cross-sectoral initiatives, private public partnerships, NGOs programmes supports electricity access.	(1) Haselt et al. 2017. Reflections on experience with the global network on energy for sustainable development as a South-South global knowledge network (Energy for Sustainable Development)		Interlinkages Stand	Cooperation and knowledge sharing above the locale of LPG supply chain and realised through existing initiatives, partnerships and programmes e.g. World Bank, GACC.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II.	
17.18	By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts			Reliable data enables effective policy-making, programmes and projects enabling electricity access.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II. Report prepared for the Global Network on Energy for Sustainable Development by The Energy, Environment and Development Network for Africa (AFREPRENFWC)		Reliable data enables effective policy-making, programmes and projects enabling LPG access.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II. Report prepared for the Global Network on Energy for Sustainable Development by The Energy, Environment and Development Network for Africa (AFREPRENFWC)		Strengthen Enabler	Political Recognition	Political recognition of Kibera means consideration of informal settlements in national policy and inclusion in national census; reliable data enables effective policy-making, programmes and projects enabling electricity access.	(2) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II.		Strengthen Enabler	Consideration of informal settlements in national policy and inclusion in national census; reliable data enables effective policy-making, programmes and projects enabling LPG access.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II.	
17.19	By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries			As 17.18			As 17.18			Interlinkages Stand		Existing initiatives, partnerships and programmes e.g. World Bank promote electricity access.	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II.		Interlinkages Stand	Existing initiatives, partnerships and programmes e.g. World Bank, GACC promote LPG access	(1) ONESD 2014. Country report (Kenya). Energy poverty in developing countries' urban poor communities: assessments and recommendations. Urban and Peri-urban energy access II.	
COUNT		105	42			84	38			111	25				95	21		