



Annex 1: Energy dimensions of the Sustainable Development Goals

Links have been identified between migration and 30 targets, across 13 goals, in addition to the targets that mention migration issues. Each of these targets has an energy dimension, with a uni-directional or bi-directional link to energy (i.e. SDG 7). These energy and migration links are summarised below.

Relevant SDGs and targets	Link to migration and energy
Goal 1 End poverty	
1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day	Migration has a positive impact on incomes and human development. Universal access to modern energy services will be essential for poverty eradication. Migration can help improve levels of access to energy.
1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable	Migrants may not be eligible or covered by formal social protection programmes and energy consumer subsidies.
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	Migration can help improve incomes, savings and investment in countries of origin, which can have an impact on levels of access to modern energy services.
1.5 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	The poor are the most vulnerable to climate change, but have least capability to migrate. Resilient energy systems and access to electricity can help reduce the effects of shocks and disasters.
1.a 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	Labour migrants contribute to public revenues and social insurance schemes. Remittances can be used to improve energy infrastructure and services, and development generally.
Goal 2 Zero hunger	
2.2 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	Migrants may not be reached by social assistance programmes to improve nutrition. Access to clean energy for cooking can affect nutrition outcomes.
Goal 3 Good health and well-being	
3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	Access to health care may be depend on residency status. Migrants can experience higher maternal mortality than host populations. Access to modern energy services can improve the quality of health care and, through reduced air pollution, the health status of women.
3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	Migrants' access to health care may be depend on residency status. Access to modern energy services in health facilities can improve the availability of quality health-care services.



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Goal 4 Quality education	
4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	Migration helps improve education in origin countries. Access to education in host countries for children of migrants may be limited. Modern energy services are required to ensure quality education.
4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education	Migration helps improve education in origin countries. Access to education in host countries for children of migrants may be limited. Modern energy services are required to ensure quality education.
4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	Many migrants lack the skills to access decent jobs. Technical and vocational training requires access to electricity, and is required to deliver modern energy services.
4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations	Migration helps improve education in origin countries. Access to education in host countries for children of migrants may be limited. Access to clean energy for cooking can free time for girls to attend school.
4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	Education has a positive effect on social integration and mobility for migrants. Access to electricity improves education and access to information. Renewable energy and energy efficiency enable more sustainable lifestyles.
Goal 5 Gender equality	
5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	Women migrants can experience violence at all stages of the migration process. Access to modern energy services can improve safety from violence for women and girls.
5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	Many migrant domestic workers are female and low-paid. Unpaid domestic work to collect fuel and cook is reduced with access to clean fuels and technologies for cooking.
Goal 6 Clean water and sanitation	
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	Large-scale migration can increase pressure on water supplies. Access to electricity can help improve water services. Renewable energy and energy efficiency can reinforce this.
6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	
Goal 8 Decent work and economic growth	
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	Through remittances, migration can contribute to economic growth and job creation in origin countries. Migrants may experience de-skilling in host countries. Modern energy services are required for productive employment.
8.8 Protect labour rights and promote safe and secure working environments for all workers,	Action may be required on labour rights and working conditions in energy systems (e.g. in fuel supply)



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including migrant workers, in particular women migrants, and those in precarious employment	chains and power plants). Safe and secure working environments can be supported by modern energy services.
Goal 9 Industry, innovation and infrastructure	
9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	Migration can foster innovation in host and origin countries. Technology and innovation in renewable energy and energy efficiency is required to achieve the SDGs.
Goal 10 Reduced inequalities	
10.1 By 2030, progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average	Migration can reduce global inequalities, but the poorest are often unable to migrate. Income growth for the poorest requires access to modern energy services. Higher incomes will increase energy consumption.
10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status	Education can improve social, economic and political inclusion. Access to electricity can enhance education and improve access to information and communications, which can promote inclusion.
10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	Removal of legal barriers to education and providing a legal identity for migrants would enhance opportunities, including access to modern energy services.
10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality	Migrants may be ineligible for social protection and energy subsidies. Policies can be a barrier to access to modern energy services.
10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies	Access to modern energy services for migrants is necessary to ensure safe and responsible migration. Energy is essential for lighting, cooking and communications during migration, as well as for mobility. Migration policies should consider migrants' needs for energy services.
10.c By 2030, reduce to less than 3% the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5%	Energy prices are unlikely to affect the transaction costs of sending remittances. However, access to modern energy services can be essential to enable remittances to be sent (e.g. for electronic or phone transfers). Remittances can be used to improve recipients' access to energy.
Goal 11 Sustainable cities and communities	
11.3 By 2030, enhance inclusive and sustainable urbanisation and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	Inclusive urbanisation and urban planning systems would take migrants' needs into account. This includes planning for urban energy systems, which address air quality and greenhouse gas emissions as well as access.
Goal 13 Climate action	
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	Remittances help origin communities to cope with seasonal variation, extreme events and long-term trends. Access to modern energy services can contribute to resilience, but use of fossil fuels increases need for adaptation.



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13.2 Integrate climate change measures into national policies, strategies and planning	Climate change plans need to take migration into account. They will affect energy systems, and help achieve targets for renewables and energy efficiency.
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	Remittances help origin communities to cope with the effects of climate change and can support adaptation and mitigation, including the promotion of renewable energy and energy efficiency.
13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	Consider migration as a response to climate change when providing support for mitigation and adaptation actions. International support required to enable developing countries to switch to renewable energy systems.
Goal 16 Peace, justice and strong institutions	
16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children	Action may be required in relation to forced labour, slavery, trafficking, etc. in energy systems. For instance, this requires the immediate end of child labour in energy systems.
16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels	Residency status can prevent migrants' participation in decision-making and access to services. Inclusive, participatory decision-making required in energy systems.
Goal 17 Partnerships for the goals	
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	Improved data and evidence about migration are required. Science and technology capacity-building will have an effect on developing countries' ability to achieve renewable energy and energy efficiency targets.
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	Target includes capacity-building activities relating to energy systems (e.g. for solar, wind power and efficient cook stoves). The development of sustainable energy systems depends on capacity building efforts; and underpinning data to monitor the energy access / sustainability challenges (e.g. World Bank's Global Tracking Framework).

Source: Foresti and Hagen-Zanker, 2017; McCollum et al., 2018; Nerini et al., 2017.