

Migration in a Changing Climate

What Role Can Migrants' Remittances Play in Innovative Financing for the Clean Energy Transition?

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Ever since the Industrial Revolution, energy use and access to energy have shaped the way people move. As hydro and steam power replaced human and animal power, many people migrated from rural areas towards new industrial centers, hereby creating transformative and durable societal changes that still shape our contemporary societies. The nexus between migration and energy is an emerging field of study at research and policy level, but the lack of empirical evidence and academic research on the topic impedes policymakers' ability to develop and implement solutions to observed challenges. In that perspective, this paper seeks to ignite a discussion on a specific dimension of migration—remittances—and the clean energy transition with a special focus on displacement. This article uses the definition of migrants and diaspora as proposed by the International Organization for Migration (IOM) (Sironi et al. 2019: 132–133).¹

¹ According to IOM Glossary, migrant is an umbrella term, not defined under international law, reflecting the common lay understanding of a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons. The term includes a number of well-defined legal categories of people, such as migrant workers; persons whose particular types of movements are legally defined, such as smuggled migrants; as well as those whose status or means of movement are not specifically defined under international law, such as international students. Diaspora are migrants or descendants of migrants whose identity and sense of belonging, either real or symbolic, have been shaped by their migration experience and background. They maintain links with their homelands, and to each other,

Key Migration Trends

An estimated 12 percent of the world's population is either an international or internal migrant. In 2020, this represented around 281 million people living outside of their country of origin (McAuliffe/Triandafyllidou 2021). If current trends continue, the number of international migrants could reach 400 million by 2050 (IOM 2017:2). It is harder to estimate the number of people on the move within their own countries, but a report from 2009 indicated that at the time, at least 740 million people were internal migrants (UNDP 2009: 55). Global trends like increased urbanization and overall population growth are expected to fuel the growth of internal migration in the decades ahead, as close to 70% of the world's population is projected to live in urban areas by 2050 (UNDESA 2019: 1).

If most people move of their own accord, a significant minority is forced into leaving their habitual places of residence. In 2021, forced migration as a result of persecution, armed conflict or generalized violence was at a record high with 89.3 million individuals living in displacement in different contexts. Out of these 89.3 million people, 27.1 million were refugees² residing outside of their countries of origin, 4.6 million were seeking asylum, and another 53.2 million were internally displaced people (IDPs)³ within their own countries (UNCHR 2022). Other estimates confirm that more people are internally displaced worldwide than ever, with estimates of 59.1 million forced to move because of conflict, violence and disasters linked to natural hazards (IDMC 2022: 12)³.

based on a shared sense of history, identity, or mutual experiences in the destination country. Sironi, Alice/Bauloz, Céline/Emmanuel, Milen (eds.) (2019) : "Glossary on Migration." In *International Migration Law*, No. 34, pp 132–133. https://publications.iom.int/system/files/pdf/iml_34_glossary.pdf

- 2 A refugee is a person who, "owing to a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinions, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country. (Art. 1(A)(2), Convention relating to the Status of Refugees, Art. 1A (2), 1951 as modified by the 1967 Protocol).
- 3 The internationally recognized Guiding Principles on Internal Displacement define IDPs as: persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural

Displacement linked to disasters has become increasingly visible, with examples such as floods and droughts, displacing nearly 1.4 million people in Afghanistan since 2018 (IDMC 2022: 12). While conflicts and violence have led to the internal displacement of 7.6 million people per year on average between 2008 and 2017, disasters have been displacing three times more people, with an average of 24.6 million people per year (IDMC 2019: 6). This trend is likely to continue as the effects of climate change are predicted to intensify and increase the frequency of both extreme weather and climate events. Furthermore, it is likely that significant numbers of people are also on the move across international borders due to disasters and climate impacts, but consolidated estimates on these kinds of movements are not available. Finally, more subtle environmental disruptions linked to slow-onset climatic change also impact both internal and international migration (Traore Chazalnoël/Randall 2021: 5–7). As economic means of livelihoods are negatively affected by slow onset change, for instance the degradation of land used for pastures and agriculture or ocean acidification in areas where fishing represents a primary source of income, the number of people on the move in the coming decades might increase further.

In addition to conflicts and disasters, millions of people are also displaced due to infrastructural projects often linked to energy provision. Even if exact estimates are not available, some incidents outline however the scope of the issue. For example, in 2017, the Internal Displacement Monitoring Center estimated that 80 million people had been displaced by dam construction only (IDMC 2017: 2).

The mining industry is another example of a double edge sword when it comes to migration and the energy transition. As the world struggles to replace fossil fuel sources with renewables, current debates highlight the “dual role of the mining industry as both a negative impactor and a supplier of energy transition metals (ETMs) that are crucial for climate change mitigation” (Svobodova et al. 2020: 4). According to a World Bank study, over a 1000% rise in minerals supply is needed for energy storage technologies under a 2 degrees climate scenario (World Bank 2017: 35). These minerals include aluminum, cobalt, iron, lead, lithium, manganese, and nickel—and the impacts of their extraction on migration are complex.

or human-made disasters, and who have not crossed an internationally recognized State border (United Nations, 1998 (E/CN.4/1998/53/Add.2).

Migration in the mining sector includes a wide variety of mobility patterns, however the linkages to the clean energy transitions have not yet been fully explored. An ILO report on the topic noted that the number of migrants moving to work in mines is uncertain, especially as “the mining industry is a sector in which direct employment multiplies indirectly the number of jobs created and these are at times and, in certain circumstances, likely to be filled by migrants from neighboring countries” (Coderre-Proulx/Campbel/Mandé 2016: ix).

On the one hand, increased mining activities can provide a push factor for people to move as they search for livelihood opportunities working in mines or around its support infrastructures. For example, international migrants work in nickel mines such Chinese migrant workers in the Ramu Nickel mine in Papua New Guinea or Filipino migrant workers in the Koniambo mine in New Caledonia (Coderre-Proulx/Campbel/Mandé 2016: 47–55).

On the other hand, it is widely acknowledged that mine development-related displacement, relocation, and resettlement pose significant social risk (Owen/Kemp 2015: 486), as outlined in debates on environmental justice (Temper/del Bene/Martinez-Alier 2015: 272). However, displacement and resettlement as part of the unintended consequences of the clean energy transition have not been sufficiently studied and integrated into policy making. Evaluating the migration costs versus the benefits in terms of raw materials needed for the clean energy is potentially a loaded public policy issue with no easy answers. While some resettled communities report positive relocation experiences, many communities suffer through coercive measures and are forced to move due to mining (Rüttinger et al. 2020: 20). Mining also impacts the availability and accessibility of natural resources in the area of operations which can in return impact people’s decision to migrate as their livelihoods and vital space shrink. In any case, these examples demonstrate the clear link between mining and migration as an important area to consider in the clean energy transition and climate justice debates.

Migration is a dynamic phenomenon that defies at times classification. Traditionally, migration literature distinguished between forced and voluntary forms of migration. Yet, for example in migration linked to slow onset climate impacts, it is becoming harder to determine how voluntary migration is, as people usually move out of degraded areas in anticipation of or to adapt to worsening conditions. On the ground, migration realities are nuanced, and multiple realities coexist in the same space. The concept of

mixed migration refers to migration flows where both voluntary and forced migrants travel on the same routes and means of transportation (Sironi et al. 2019: 141). This concept also acknowledges that people usually move due to a combination of factors: economic, political, social and environmental (Sironi et al. 2019: 142). For example, in the case of the Lake Chad Basin, political drivers, such as protracted conflict, combined with environmental factors, such as drought, come together to drive people to migrate.

Millions of people are already migrating, many in search of or due to basic services, like energy needs. Millions more people are expected to be on the move in the coming decades, especially due to climate change impacts (Viviane et al. 2021: xv). These people, like any others, have energy needs that need to be met to ensure their wellbeing, safety, human rights and access to economic development.

Why Is Migration Important When Discussing the Clean Energy Transition?

The link between migration and energy is complex, partly due to the fluid nature of migration flows as described above. However, both migration and energy policymakers agree on the need to examine these linkages and propose a wide range of integrated policy and operational solutions that respond to a large spectrum of observed challenges, including the following:

1. Access to and availability of energy sources can drive fully or in part people's decision to migrate. For instance, a case study in Nepal suggests that access to affordable, reliable, and clean energy services can alleviate poverty and accelerate development in rural areas, which in turn can lower the rate of out-migration from rural areas (Zahnd 2013).
2. Climate change mitigation policies can displace people from their homes and land, for example through the development of large-scale renewable energy solutions and mining activities that are needed to make clean energy technologies. The exact magnitude of such development-induced displacement is currently unknown, but it is estimated that millions of people per year are forced to migrate due to infrastructure constructions and mining.

3. At the same time, the development of large-scale renewable energy solutions can improve livelihoods and standards of living conditions, and therefore reduce forced migration as people are better able to live fulfilling lives in their areas of origin. Some empirical studies outline that development and poverty reduction impact migration patterns through access to energy. For instance, the Government of Brazil evaluated the impact of electrification in rural settings and found that rural out-migration was reversed after access to modern energy services was improved, with 5% of migrants returning to their communities of origin. It also found that 1.7% of the households who intended to migrate decided to stay following the provision of energy services (Government of Brazil 2013).
4. People in transit towards their final destinations also have specific energy needs. For instance, in migrant transit centers, reliable access to energy is needed to ensure that people can cook and have access to water supplies or communicate with their families and communities.
5. Energy access for displaced populations is essential at different levels: to ensure basic survival (cooking, heating, cooling, etc.), lessen protection issues and safeguard human dignity (access to adequate WASH facilities, improved safety in camps through lighting), and promote long-term development that will benefit both mobile and host populations.
6. Large-scale movements of people can put pressure on access to and availability of energy sources. Competition to access energy resources might create tensions and social unrest in the community. In situations where large numbers of displaced are housed in camps settings, governments and humanitarian agencies might struggle to ensure that energy needs are met due to lack of infrastructure and funding. In situations where people migrate or are displaced into communities, their presence can put pressure on existing energy infrastructure and increase the cost of services. For instance, the large numbers of Syrian refugees in the Hashemite Kingdom of Jordan increased the overall energy needs in the country. As a result, the Jordanian Government pioneered the Jordan Response Platform for the Syria Crisis (JRPSC), a model bringing together the existing refugee response and national development planning under one national planning and coordination framework. Access to energy is one of the sectoral priorities under the JRPs, with a clear articulation of need and budgetary estimations to address this issue. The JRPSC illustrates

how humanitarian response can be better aligned with development objectives to ensure that the energy needs of displaced people and host communities are comprehensively accounted for (Huber/Mach 2019).

7. Even when energy is available and accessible, energy sources available to migrants might not be clean and can create further environmental damage, for instance, deforestation. This is most evident in the case of firewood fuel collection in Sub-Saharan African countries where refugee populations do not have access to or cannot afford alternative fuel supplies (Cross et al. 2019: 22–24).

One of the key public policy issues is therefore how to ensure that mobile populations have access to clean energy, at all stages of their migration journeys (before departure, while on the move and once they arrive at destination). This enormous endeavor can only be achieved by large scale investments in climate mitigation measures, strong partnerships with private energy specialists and the systematic consideration of migration dimensions in energy and development policy.

However, government-led efforts can be complemented by those of migrants themselves. For millions, migration is a positive experience that allow people to improve their standards of living, access to education and general wellbeing. Migrants' communities established abroad have a long tradition of providing financial and technological support to their communities and families who remained in their places of origin. Diasporas and migrants abroad have long been recognized as agents of development, but their role in climate action and renewable energy access remain underexplored.

Remittances—A Potential Source for Blended Finance

One of the key benefits of migration, remittances represent a vital support for millions of people worldwide. In 2020, worldwide remittance flows to low- and middle-income countries amounted to 540 billion dollars (World Bank 2022a), compared to the total global official development assistance (ODA) at 162.17 billion dollars (OECD 2021). As such, migrant contributions in the form of remittances were more than three times more than ODA from official donor countries. Remittance flows are likely to be much higher when informal channels are included beyond the officially recorded data.

At the household level, they complement income needed to meet immediate needs such as getting and sustaining access to basic services, including food, shelter, water and sanitation, education, and health care. All these services necessitate reliable and sustainable access to energy to function properly. Remittances can also help cope with decreasing income levels in times of crisis, which is becoming increasingly relevant in the light of more severe and more frequent weather-related disasters linked to climate change and a post-COVID 19 world threatened by recurring pandemics.

The United Nations (UN) estimates that around three quarters of remittances are used to cover essential things and services (UNDESA Undated). The rest—representing over 100 billion dollars every year globally—can be either saved or invested in longer-term development, such as assets that increase standards of living or activities that generate income. Once basic needs are met, remittances can be leveraged for community projects aimed to increase quality of life and sustain livelihoods, for example through establishing and increasing access to water, sanitation and hygiene or energy services (UNDESA Undated).

Excluding China, remittance flows have been the largest source of external finance for low- and middle-income countries since 2015, including in countries where the largest numbers of internally displacement persons (IDPs) and refugees live (World Bank 2022b: 9). For instance, the African continent accounts for more than a third of the world's displaced people (NRC 2022) and many countries receive billions of dollars yearly in remittances. Remittance inflows to Sub-Saharan Africa increased to 49 billion dollars in 2021, with Nigeria, the largest remittance recipient country in the region, receiving 19.2 billion dollars in remittances in 2021 while the Democratic Republic of Congo received 1.3 billion. In 2020, remittances as a share of gross domestic product (GDP) were the highest in Somalia and South Sudan. Another example, Ukraine before the 2022 war received 15 billion dollars in remittances, or 9.9% of its GDP (World Bank 2022a).

This has potentially tremendous implications for energy policy makers. Since finance is key to sustainable development, climate action and the energy transition, more thinking should be done on how migration and remittances can support the energy transition in low- and middle-income countries and contribute to transforming the lives of communities in countries of origin that are affected by large-scale displacement.

The transformative power of regulated remittance investments in clean energy was recognized in the early 2000s (IADB 2009). The RemitEnergy project for example was launched to help channel remittances from the US-based Haitian diaspora to finance renewable energy projects in Haiti (RemitEnergy 2021). This business model was piloted in 2012 in Haiti and proved that remittances can be a viable means to finance and/or co-finance clean energy projects. Since 2009, the RemitEnergy model has also been implemented in Bolivia with migrant workers living in Spain financing solar water boilers for their communities of origin (RemitEnergy 2021).

However, while studies on the impact of remittances on economic growth are widely available, evidence focusing on the linkages between remittances and energy are scarce (Akçay/Demirtaş 2015). One of the available empirical studies was conducted in Bangladesh, one of the largest refugee hosting countries, by Das et al. (2021). This study found that increased remittance inflows to Bangladesh generated additional demand for modern renewable technology such as solar home systems, and therefore contributed to national energy transition efforts.

Existing examples suggest that remittances can help increase access to energy services and support the clean energy transition in countries of origin, including in countries that experience large-scale displacement and populations' movements. However, more research and evidence are needed to bring this nexus to the attention of policy makers, increase confidence in the validity of this model and encourage the development of programs and policies that help increase the use of remittances to support clean energy access.

Diaspora Bonds—Financing Investment at the National Level

One of the specific policy measures that can be developed to leverage remittances for energy access and the energy transition is the development of diaspora bonds. The Migration Policy Institute defines diaspora bonds as a “government debt security with investors drawn from the country’s nationals living abroad, their descendants, or those with another connection to the nation” (Migration Policy Institute 2021). Diaspora bonds are issued by a government with the primary purpose to diversify their investment base and attract alternative financing from their diaspora, often borrowing at below-market rates and during crisis (Idem).

Through diaspora bonds, migrants living abroad invest in national-level projects in a formal and regulated way, unlike remittances that are sent informally to households. According to a World Bank study, diaspora bonds have been successfully used by Israel and India to channel diaspora investments into government-led initiatives. The state of Israel has engaged its diaspora since 1951 to raise 32.4 billion dollars, while India issued diaspora bonds on three occasions to raise 11.3 billion dollars by the early 2000s (Ketkar/Ratha 2007: 2). The same study also examined the situation of several other countries that are potential candidates for issuing diaspora bonds, including those experiencing large-scale displacement and/or low energy access rates, such as Bangladesh, Haiti, Afghanistan, Somalia, Democratic Republic of Congo and Mozambique (Ketkar/Ratha Undated: 3). The potential of such bonds to fund infrastructure projects for the energy transition is clear, but under specific conditions, including additional credit enhancements and investor protection.

Indeed, existing case studies outline some of the risks associated with diaspora bonds for energy infrastructure. On the African continent, Ethiopia pioneered the issuance of diaspora bonds as early as 2008. The money raised through bond issuance was intended to finance a hydroelectric power project of the Ethiopia Electric Power. Another attempt in 2011 focused on increasing energy security through financing the construction of a dam on the Blue Nile. Both initiatives failed to deliver the expected results due to the diaspora's concerns about the high probability of default and the environmental risks related to the power and dam projects. Even if these bonds attracted relatively few investors due to perceived high risks, it is noteworthy that the first attempt to leverage diaspora bonds as a source of finance in Sub-Saharan Africa focused on increasing access to energy. This policy choice highlights how critical energy access is to national development and the need to turn to innovative financing sources to ensure that national energy needs are met.

Other initiatives from the continent have successfully raised finance for infrastructure projects, including for power generation. Kenya issued its first diaspora bond in 2009, raising 164 million euros for transport, energy, and water projects. In 2017 Nigeria, with one of the largest African diaspora populations in the world, launched its diaspora bonds to leverage diaspora finance and raised nearly 300 million dollars to finance the country's budget deficit linked to capital-intensive investment projects (Brookings 2022).

Another policy issue of interest is linked to non-financial remittances and how some migrants' specific expertise and knowledge on energy could complement financial remittances. However, remittances should complement national policy efforts to provide energy access and support the transition towards sustainable energy but not replace these efforts, at the risk of placing a disproportionate burden on individual migrants and diaspora communities. Given the weight of remittances and the perceived wealth of diaspora communities, mobilizing diaspora investments can potentially play a key role in leveraging further investment or co-financing projects in the countries of origin. Such blended finance would merit further research and economic modelling especially for those countries that struggle with underdevelopment, low access to energy rates, high dependency on fossil fuels and the burden of displacement. In that respect, intergovernmental policy discussions are key to increase awareness of this potential and encourage the development of more analysis and evidence to support policy making.

Remittances in Global Policy Discussions

The potential of remittances is acknowledged in many multilateral policy discussions dedicated to migration and conducted among United Nations Member States. Through international policy instruments, such as the 2015 Sustainable Development Goals and the Global Compact for Safe, Orderly and Regular Migration (GCM), the international community recognized the positive role of remittances in socio-economic development and its potential in reducing inequalities within and among countries (Sustainable Development Goal 10).

The necessity to increase the efficiency of remittances and leverage them for sustainable development was reflected in SDG 10.c. target, which focuses on reducing the cost of sending money back home: "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". At the 2022 High-Level Political Forum on Sustainable Development, Member States re-committed to supporting the implementation of SDG 10.c. and leveraging remittances for sustainable development (United Nations Economic and Social Council 2022: 25).

In 2018, the first global migration policy instrument negotiated among UN Member States reiterated the commitment expressed in SDG 10.c., with Objective 2o of the Global Compact for Migration to “*Promote faster, safer and cheaper transfer of remittances and foster financial inclusion of migrants*”. The GCM looks at the issue of remittances mostly from a financial perspective, and outlines policy actions states can take to optimize financial flows and reduce transaction costs (Basaran/Piper 2018). From an energy perspective, action point ‘g’ (*Develop programmes and instruments to promote investments from remittance senders in local development and entrepreneurship in countries of origin, such as through matching grant mechanisms, municipal bonds and partnerships with hometown associations, in order to enhance the transformative potential of remittances beyond the individual households of migrant workers at skills levels*) provides an entry point to promote the role of remittances for energy infrastructure development as it considers remittances as a blended finance tool for local development.

In 2022, the first International Migration Review Forum served as the primary intergovernmental global platform to discuss and share progress on the implementation of all aspects of the GCM four years after its adoption. The Progress Declaration resulting from the International Migration Review Forum recognized the crucial role remittances played during the global COVID-19 pandemic, and many countries “eased regulations [...], facilitated greater digitalization, offered incentives and abolished or waived transaction fees” (United Nations 2022). Looking ahead, states committed to redouble efforts to reduce the average transaction cost of remittances to less than 3 percent by 2030, including through the widespread use of digital solutions.

Migration considerations are increasingly discussed in climate policy, notably the annual climate negotiations conducted among United Nations Member States. While the 2015 Paris Agreement does not specifically refer to remittances, broader climate change discussions conducted under the UN climate action agenda and follow-up mechanisms consider the role of remittances, for example, in relation to financing Loss and Damage (Handmer/Nalau 2017: 2). ‘Green remittances’ have also been explored in Ghana and Burkina Faso as complementary sources of financing for adaptation and mitigation (Ferro 2021, Musah-Surugu et al. 2017). Remittances are important enough to be mentioned in the Nationally Determined Contributions (NDCs), the primary policy instruments translating the global commitment of the Paris Agreement into national level action. Remittance flows have

been mentioned in NDCs as ‘shrinking’ financial resources due to the impact of the COVID-19 pandemic and global recession in the NDC of Somalia (The Federal Republic of Somalia 2021: 1), Ethiopia (Federal Democratic Republic of Ethiopia 2021: 3) and Jordan (Ministry of Environment of the Hashemite Kingdom of Jordan 2021: 6). The NDC of Tajikistan referred to remittances as an enabling tool for poverty eradication and sustainable development (Republic of Tajikistan 2021: 18).

The Glasgow Climate Pact negotiated at the 26th Conference of the Parties in 2021 acknowledged and recalled the commitment of Parties to consider their respective obligations on migrants and consider them when taking climate action (UNFCCC 2022: 2–3). It also called upon Parties “to continue to explore innovative approaches and instruments for mobilizing finance” (UNFCCC 2022: 11). While remittances were not explicitly mentioned, the examples mentioned above demonstrate that they could contribute to innovative financing.

The Addis Ababa Action Agenda of the Third International Conference on Financing for Development dedicated paragraph 40 to remittances, acknowledging the vital role of remittances to “meet part of needs of recipient households” and the need to “ensure that adequate and affordable financial services” to optimize such money transfers and reduce “average transaction cost of migrants”. While remittances are not directly mentioned in the context of the energy transition and for displacement settings, the Action Agenda refers to promoting “both public and private investment in energy infrastructure and clean energy technologies” (United Nations 2015: 19).

The role of remittances has also been highlighted in thematic and regional policy discussions. For example, the Small Island Developing States (SIDS) Accelerated Modalities of Action (Samoa Pathway), an international policy instrument focused on sustainable development in SIDS, outlined remittances and “their importance for the economic growth of small island developing States” (United Nations 2014: 10). SIDS are among the most climate vulnerable countries in the world and already experiencing irreversible environmental changes linked to climate change, such as sea-level rise and unpredictable weather patterns, threatening the lives and livelihoods of communities in the Pacific, Caribbean, and Indian Ocean islands. They are also highly reliant on imported fossil fuels, which was also recognized as “major source of economic vulnerability” by the Samoa Pathway (United Nations 2014: 26). Migration, both in economic and forced forms, is already

a reality for many of the SIDS. In this complex context, remittances could provide the necessary co-investment needed in climate-resilient infrastructure and locally produced energy. It would also allow to shift away from imported, costly fuel sources, which have been a factor hindering the “growth prospects of the small island developing States” (Idem).

The importance of remittances is acknowledged across major global and regional policy discussions. In turn, these discussions can promote better understanding of the issue and enhance the willingness of states to develop provisions at the national level to lower the cost of remittances and propose specific schemes, such as diaspora bonds, to leverage the use of remittances for national and local development, including energy access and energy provision. However, discussions on the specific link between remittances and clean energy transition are not yet widespread, and there is little emphasis on examining and analyzing lessons learned from existing initiatives in countries that face large-scale displacement. Yet, increased consideration of migration issues in policy areas not traditionally concerned with the topic—notably climate change mitigation and adaptation -, offers the opportunity to enhance awareness of the remittance-energy nexus and analyze the opportunities but also associated risks in forced migration contexts.

Looking Ahead: Starting Small and Privileging Action at the Community Level

Analyzing the development benefits of migration, including of remittances and knowledge transfer, represents a new frontier for research and policy development in the energy transition context. Across the globe, powerful examples demonstrate how remittances can help finance renewable energy technologies and the development of sustainable energy markets in countries of origin of migrants. The very existence of such initiatives and the lessons learnt from their implementation should encourage policymakers to look at how structured, national-level programs, such as diaspora bonds, can help co-finance the energy transition.

Remittances will most likely continue to be used to meet immediate basic needs of recipients, including in terms of access to energy. But the portion of remittances not used to meet immediate needs have a real potential to positively impact local communities, especially in underdeveloped and un-

derfunded displacement settings. While remittances cannot replace climate finance, they can help support climate action if appropriate incentives are provided to channel remittances towards adaptation and mitigation and risks for investors are mitigated (Berdandi/Pauw 2016). Migrants sending remittances back home might have more emotional, financial, and social incentives to invest in energy projects that directly impact their households and communities at the local level. While there is certainly room for ambitious national level schemes to leverage remittances, policymakers might want to increase pilot projects at the community level that directly and immediately benefit households who receive remittances. In that context, leveraging remittances as a blended finance mechanism complemented by public or private sector investment could help quickly set up much needed clean energy projects at the community level, that would in turn improve the daily lives but also the future prospects of households and local communities.

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