GGGI INSIGHT BRIEF NO. 6

Key Actions for a Just Transition through Green Jobs in Cities

June 2022

PART OF GGGI'S INSIGHT BRIEFS SERIES

1. Mind the Gap: Bridging the Climate Financing Gap with Innovative Financial Mechanisms, Eric Plunkett, Vikalp Sabhlok, December 2016.
2. Solutions for the Missing Middle: The Case for Large-Scale Mini-Grid Development, Gulshan Vashistha, Eric Plunkett, September 2017.
3. Assessment and Main Findings on the Green Growth Index, December 2019.
4. Green Deals to Accelerate Climate Action Post-COVID-19, Frank Rijsberman, October 2020.
5. Unlocking Climate Change Project Potential: Lessons Learned from the Call for Project Concept Notes of the GCF Readiness Programme, November 2021.
6. Key Actions for a Just Transition Through Green Jobs in Cities, Stelio Grafakos, June 2022.

Global Green Growth Institute
Jeongdong Building 19F
21-15 Jeongdong-gil
Jung-gu, Seoul 04518
Republic of Korea

This policy brief examines actions for a just transition that are fundamental for the socio-economic transformations of local job markets in developing countries' cities. It outlines how this transition can create 'winners' and compensate 'losers'. Green jobs in cities are premised on ensuring a just transition of local employment markets, both formal and informal, and making cities function more sustainably. They are part of a wider inclusive green economy aiming at carbon-neutrality and resource efficiency with a focus on human well-being and social equity while paying special attention to local nature-based solutions.

Cities account for around 75 percent of greenhouse gas emissions, 70 percent of global energy consumption and 75 percent of natural resource consumption. They are likely to be home to around 70 percent of the world population by 2050. The relevant economic sectors for a just transition are predominantly in cities: buildings and construction, infrastructures for sustainable energy supply and use, mobility, waste management, and support for a circular economy.

These transformations will have a great impact on intermediary cities with one to five million inhabitants, which are the fastest growing urban areas today (United Nations, 2018). These cities have the potential for building the necessary technical capacity and expertise to guide an economic transformation, while at the same time being still sufficiently small to allow close partnerships between stakeholders in private and public sector, as well as civil society. Fast-growing intermediary cities urgently need to expand their urban areas and create new infrastructure networks, which should already be part of the transformation process towards an inclusive green economy.

A just transition towards an inclusive green economy has important implications for jobs and employment worldwide. It holds great potential for new job opportunities through greener economic activities, although some may only materialise in the medium to long-term. At the same time, compensating short-term employment losses in carbon- or resource-intensive sectors is needed for social cohesion. Both are two sides of the required just transition. To break the carbon lock-in and transform all economic sectors towards more sustainable and environmentally friendly practices, it is necessary to "develop […] new perspectives for and with those who stand to lose" (IISD 2018), including future generations, but also to unlock the innovative potential of those who can benefit from the transformation.

Creating winners: Urban climate and environmental action can create green jobs in cities by solving urban problems and making cities function in a nature-positive and CO_2-neutral way, leading to new job profiles such as: energy auditors, experts and workers in a circular economy making use of waste and by-products (e.g., "urban mining"), engineers and urban planners connecting green and resilient infrastructure, architects and construction experts for retrofitting buildings with nature-based and renewable energy solutions, e-mobility vehicle maintenance workers, and urban hydrologists for water cycle management. These new occupations can contribute to greener and more liveable cities with more green jobs. While we cannot accurately quantify the global impact on job markets, the International Labour Organization estimates a net gain potential of 18 million jobs through sustainability transitions, mostly at medium skill levels (ILO, 2019).

Compensating losers: Climate and other environmental policies will likely have negative effects on existing jobs in carbon or resource intensive sectors, such as fossil energy production and mining, construction, heavy industries, combustion engine-based car manufacturing, mobility services and many others, including a wide range of supply and maintenance companies for these sectors. Some industries may face a loss of competitiveness if forced to comply with strict regulations too quickly; or when their financial capabilities are not stable, or they need to operate in a highly competitive environment. This may lead to job losses or even to the relocation of industries to countries with lower levels of regulation (Schlegelmilch et al., 2017). The employment shifts across enterprises, industries, and sectors may entail adjustment costs for enterprises and workers. Additional government policies, both at national and international levels, may become necessary to support or even trigger these transitions. Shifting employment patterns will require the development of new skills and re-training as well as adjustments of the education system (ILO and UNEP 2012). The impact will differ from city to city depending on the prevailing economic sectors, the role they play in a globalised economy, and the extend the education and vocational training systems in provide the necessary skills to the labor force.

We can identify seven interrelated fields of action for cities where the trade-offs between **'winners' (+)** and **'losers' (-)** may materialize:

Sectoral actions	Horizontal actions
(+) Integrated land use planning towards a compact city concept, addressing informal urban development, disaster risks, food security and strategic land-use planning for green infrastructure and circular economy	**(+)** Expand or retrofit green, blue and hybrid urban infrastructure services as a cross-cutting issue in integrated planning (e.g. just and resource efficient water supply systems)
(-) Short term job losses in the informal sector and increased costs for planning and construction, given longer time needed and increased complexity	**(-)** Temporary job losses in dominant infrastructure and mobility sectors (car manufacturing, conventional construction sector)
(+) Green buildings and construction materials to retrofit the existing building stock and guide new constructions including the development of a locally anchored green construction sector	**(+)** Urban tech for people-centred smart cities and urban tech that enhances both the quality and efficiency of urban services, while creating decent jobs and support for keeping and attracting digitally savvy knowledge workers
(-) Need for immediate training of workers, and development, production and marketing of construction materials	**(-)** Relatively small number of jobs, risk of growing inequalities and access gaps for low-skilled workers and digitally not savvy citizens
(+) Sustainable mobility and urban transportation by developing mobility options with locally applicable technology and job creation, also at the level of unskilled workers	**(+)** Circular economy approaches ensuring solid waste avoidance and management, repairing, sharing, and recycling, to tap unexhausted potentials and create jobs, also for unskilled workers
(-) Temporary job losses and skills devaluation related to individual, combustion-based transport, such as taxi drivers, or car manufacturing and maintenance	**(-)** Job losses in the informal circular economy activities, such as urban recycling, by formalising waste management and recycling systems
(+) Support investments in renewable energy infrastructure, while at the same time addressing energy efficiency as a cross-cutting issue for the built environment, manufacturing and transport	
(-) Job losses in fossil fuel energy, such as coal mining, refinery and risk of higher energy prices	

Source: Own compilation based on Scholz and Fink (forthcoming 2022), DIE Working Paper.

These fields of action can serve to identify interest constellations and to discuss options to develop transformative initiatives with local stakeholders. Strengthening the city level as outlined in the New Urban Agenda is key for this: enabling municipalities to raise own resources and to attract business and innovation agents, as well as to develop and implement green, blue and hybrid infrastructure projects.

A myriad of relevant and suitable local solutions is already in place worldwide. While just transitions will vary across cities and countries, knowledge transfer of promising practices is critical to accelerate learning and achieve greater scale. South-South cooperation and knowledge transfer can help to replicate and scale up promising approaches. The vast knowledge and experience of municipal, academic and private sector experts hold an enormous potential for deepening international, regional (e.g. Southeast Asia) and national networks to exchange ideas, co-produce knowledge and co-design tailor-made solutions. Experts from African and Asian cities could, for example, learn from their Latin American counterparts about recycling, public transport systems, and civic participation. Experts from Asia, on the other hand, could contribute insights about smart city solutions. Development cooperation could advance local South-South "just transition partnerships" that organise peer exchange on green place-based economic development with city networks and associations, national and multilateral development banks, as well as philanthropies. This would be a local building block for national efforts such as the multi-donor Just Energy Transition Partnership with South Africa.

National policy and institutional structures to catalyse green investments in cities

Apart from these city-based solutions, an enabling national framework for green jobs is needed. This requires the design of a complex policy mix covering fiscal, environmental, economic, employment, training, and innovation aspects. Governments should work towards creating a stable and enabling policy environment to attract private investments in the green sectors while reducing borrowing costs for developers. This can be done by introducing or strengthening existing policies and regulations that promote the deployment of green technologies, including fiscal and financial incentives. Providing clear policy signals of long-term support for green sectors by setting medium and long term targets for renewable energy, energy efficiency, e-mobility, circular economy in national determined contributions (NDCs) and Long Term Low Emission Development Strategies (LT-LEDS) could mobilise project developers and institutional investors. In addition, local climate actions must be vertically integrated with LT-LEDS and NDCs, whereas urban LT-LEDS could be developed and align with national climate strategies.

Yet policy design should aim to catalyse adequate financing; globally the estimated needs for sustainable urban infrastructure exceed 4.5 trillion USD (CCFLA 2015). Green taxation can help to bridge parts of this finance gap. Eco-social fiscal reforms at national level can also increase cities' fiscal leeway. Most cities in developing countries lack own resources and have a weak tax base. Revenues from carbon taxes, for instance, could be earmarked for the promotion of green urban development initiatives. Land value capture instruments could be utilized by cities to harness the benefits and finance low carbon and nature-based infrastructure projects. Development cooperation should thus significantly expand its efforts to support the existing approaches for socially inclusive, ecological fiscal reforms in developing and emerging countries (Altenburg et al. 2022; Cottrell et al. 2016). The second reform needed is vocational training and re-skilling of both formal and informal labour force to compensate job losses and ensure social cohesion and political stability. The adoption of innovative green and low carbon technologies is expected to lead to demand for high skilled labor in sectors like renewable energy, e-mobility, circular economy and should be carefully addressed through the collaboration of higher education and vocation training institutions, the private sector and national and city governments (GGGI, 2020). Multilateral organizations can also provide support and could bring in international experience for enhanced learning and sharing best practices, in partnership with national and sub-national governments. European experiences in dual educational systems can serve as inspiration.

REFERENCES

Altenburg, T. et al. (2022). Ökologische Strukturpolitik: Ein starker Profilbaustein für die deutsche Entwicklungszusammenarbeit. DIE Discussion Paper (unpublished). Bonn: Deutsches Institut für Entwicklungspolitik.

CCFLA. 2015. State of City Climate Finance 2015. Cities Climate Finance Leadership Alliance.

Cottrell, J., K. Schlegelmilch, M. Runkel & A. Mahler (2016). Environmental tax reform in developing, emerging and transition economies. DIE Discussion Paper 93, Bonn: Deutsches Institut für Entwicklungspolitik.

Grafakos, S., Senshaw, D., Quezada, D., and Toro A., (2020), Employment Assessment of Renewable Energy: Power sector pathways compatible with NDCs and National Energy Plans, Global Green Growth Institute (GGGI), Seoul.

ILO (International Labour Organization) (2019). Skills for a Greener Future. Geneva.

ILO (International Labour Organization) & UNEP (United Nations Environment Programme) (2012). Working towards sustainable development: opportunities for decent work and social inclusion in a green economy. Geneva.

IISD (International Institute for Sustainable Development) (2018). Real people, real change: Strategies for just energy transitions.

Schlegelmilch, K., Eichel, H. & Pegels, A. (2017). Pricing environmental resources and pollutants and the competitiveness of national industries. In: Altenburg, T & Assmann, C (Eds.) (2017), Green Industrial Policy. Concept, Policies, Country Experiences (p. 102–119). Geneva, Bonn: UN Environment; German Development Institute (DIE).

United Nations (2018). 2018 Revision of World Urbanization Prospects. Department of Economic and Social Affairs. United Nations, New York.

The Global Green Growth Institute

19F Jeongdong Building, 21-15, Jeongdong-gil,
Jung-gu, Seoul, Korea 04518

Follow our activities on Facebook and Twitter.

www.GGGI.org