Cities, climate change and corruption

Briefing note to accompany the webinar held on January 16, 2018

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The issue in a nutshell

Rapid urbanisation and climate change are two mega-dynamics of our times that profoundly re-configure our societies and economies. The numbers are well rehearsed. More than half of all people already live in cities, by 2050 it will be 70% and basically all future population growth will occur in cities. Cities are also at the centre of our global response to climate change. They account for 70% of all energy-related CO_2 emissions. And cities, particularly its poorer residents that often live in precarious conditions, are bearing the brunt from the extreme weather events associated with rising temperatures.

At the same time, corruption is one of the major challenges to effective governance from local to international level. Commonly defined as *abuse of power for private gain* it takes a variety of different forms and shapes from street-level bribery for services all the way to state capture. Corruption is ubiquitous and consequential. To just flag a few top-line figures: Around 25% of households across developing countries typically have to pay bribes when accessing essential services in a given year. Corruption is estimated to eat up between 10-40% of precious public resources, it corrodes essential trust in governments and markets and the majority of people around the world think it has gotten worse.[1]

This means, that when devising an effective urban response to climate change and when plotting strategies to channel urbanisation into inclusive human development it is of paramount importance to take into account how corruption intersects with these dynamics and how it can be addressed in a practical manner. This briefing note complements the webinar on this issue. It presents empirical evidence for how corruption impacts upon various policy parameters and dynamics related to climate change. Then it adopts a risk perspective to assess corruption challenges in cities and finally it offers some practical action options for different stakeholder groups to engage on addressing corruption in the urban climate change challenge.

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[1] Sources: Transparency International: Global Corruption Barometer 2017 and various case studies cited in Transparency International (2008). Global Corruption Report 2008. Corruption in the Water Sector, Cambridge: University Press.

The big empirical picture – how corruption affects climate change and environmental policies

There is an extensive body of evidence that documents the pernicious effects of corruption on environmental and climate change related issues. Of relevance to mitigation, more corruption is associated with higher per capita CO2[2] and higher rates of illicit deforestation[3]. Corruption waters down the stringency of energy and environmental policies.[4] It paves the way for manipulating air pollution reporting[5], more extensive use of coal in China[6] and it facilitates the large-scale cheating on car emission tests in Mexico City[7] or New York.[8] The higher corruption levels the longer it takes for countries to reach a turning point in their economic development from which rising incomes are not any more linked to higher but lower per capita pollution levels (the so called environmental Kuznets curve).[9]

Equally problematic and well documented are the impacts of corruption on parameters of relevance to climate change vulnerability and adaptation: Higher corruption levels are significantly associated with less access to improved drinking water and sanitation, as well as lower infrastructure quality more generally at city level, all key areas for implementing effective adaptation efforts.[10] Industry surveys highlight that the construction industry is one of the sectors most afflicted by corrupt practices.[11] 83% of all deaths from building collapses in earthquakes in the last 30 years occurred in highly corrupt countries due to massive corruption-fuelled violations of building codes. This track record is troubling, because amending such building rules and enforcing their implementation will be essential to protect the built environment against more frequent flooding, storms and other extreme weather fall-outs associated with climate change.[12] Yet corruption also undermines climate resilience on a more fundamental level: it has been amply documented to corrode social capital, public trust and community cohesion[13], all important factors in building resilient cities. Moreover, risk analyses indicate that emergency relief and humanitarian aid have several characteristics, such as rapid deployment of resources in weak-governance contexts, that make them exceptionally vulnerably to corruption, thus posing additional obstacles for emergency responses in extreme climate events.[14] Finally, there is also troubling early evidence that a history of high corruption leads countries into climate policy-making that is less ambitious and less cooperative at international level. [15]

[2] Cole, M.A. (2007). Corruption, income and the environment: An empirical analysis, Ecological Economics 62, 637-47

[3] Koyuncu, C., & Yilmaz, R. (2009). The impact of corruption on deforestation: a cross-country evidence. *The Journal of Developing Areas*, *42*(2), 213-222.

[4] Fredriksson, P.G. and J. Svensson (2003). Political Instability, Corruption and Policy Formation: The Case of Environmental Policy, Journal of Public Economics 87, 1383-1405.

[5] Chen, Y., Jin, G. Z., Kumar, N., & Shi, G. (2012). Gaming in air pollution data? Lessons from China. *The BE Journal of Economic Analysis & Policy*, *12*(3).

[6] Jia, R. (2017). Pollution for promotion. (March 21, 2017). Available at SSRN: https://ssrn.com/abstract=3029046

[7] Oliva, P. (2014). Environmental Regulations and Corruption: Automobile Emissions in Mexico City.

[8] Pierce, L., & Snyder, J. A. (2012). Discretion and manipulation by experts: Evidence from a vehicle emissions policy change. *The BE Journal of Economic Analysis & Policy*, *12*(3).

[9] López, R. & Mitra, S. (2000). Corruption, Pollution and the Kuznets Environment Curve, Journal of Environmental Economics and Management 40(2), 137-50

[10] Kaufmann, D. et al. (2005). *Governance and the City: An Empirical Exploration into Global Determinants of Urban Performance*, Policy Research Working Paper no. 3712. Washington DC: World Bank.

[11] Hardoon, D., & Heinrich, F. (2011). Bribe payers index 2011. *Transparency International, Berlin*.

[12] Ambraseys, N., & Bilham, R. (2011). Corruption kills. *Nature*, *469*(7329), 153-155; Bilham, R., & Gaur, V. (2013). Buildings as weapons of mass destruction. *Science*, *341*(6146), 618-619

[13] Rothstein, B. (2013). Corruption and social trust: Why the fish rots from the head down. *social research*, *80*(4), 1009-1032; Uslaner, E. M. (2013). Trust and corruption revisited: how and why trust and corruption shape each other. *Quality & Quantity*, 1-6.

[14] Saharan, V. (2015). Disaster Management and Corruption: Issues, Interventions and Strategies. In *Strategic Disaster Risk Management in Asia* (pp. 193-206). Springer India.

[15] Fredriksson, P. G., & Neumayer, E. (2016). Corruption and climate change policies: do the bad old days matter? *Environmental and resource economics*, *63*(2), 451-469.

An urban risk perspective – how salient are corruption risk factors in the urban climate response

Against this backdrop of multiple well documented adverse effects of corruption on environmental/ climate practices and policies, what are the distinctive risk profiles for cities and the climate challenges they face? A scan of the major drivers of corruption and how they apply to urban environments points at an exceptionally high and imminent urban climate corruption challenge:

- *Risk factor 1: A high corruption context – norms and practices that abet corruption*

Eight out of ten countries expected to experience the most rapid urbanisation dynamics between 2014 and 2050 are regarded as significantly corrupt and rank in the bottom half of a global ranking in terms of perceived corruption levels. Likewise, eight out of ten countries most vulnerable to extreme weather events rank among the bottom third of most corrupt countries in the world.[16] This points to a perfect storm of high corruption, climate and urbanisation stressors coinciding in many urban areas.

- *Risk factor 2: Fragmented governance framework and low capacities – entry points for corrupt behaviour and weakened oversight*

Many fast-growing cities have long outgrown their official governance boundaries. As a result, the central municipal authorities cover only fractions of actual city residents in a metropolitan area (e.g. less than half of the actual residents in cities such as Manila, Kolkata, Buenos Aires, Jakarta or Karachi[17]). Coordinating policies across the entire functional governance area of a city therefore often requires to sync up dozens (Sao Paulo, Mexico City) or even hundreds (Abidjan) of fragmented local jurisdictions.[18] Capacity challenges are also paramount for the urban climate response. Smaller cities with lower governance capacities will be at the centre of urbanisation in the years to come, yet they also have less capacity to deal with climate change. Crucial technical expertise is in extremely short supply. Whereas countries such as the UK have 37 certified urban planners per 100,000 people South Africa has to make do with only 3 per 100,000 people, while in India one of the biggest urbanizers in scale and scope this ratio is as low as 0.23.[19]

- *Risk factor 3: Service shortages and bottlenecks: inviting illicit gate-keepers, corrupt competition*

Large segments of urban residents are still excluded from essential public services. Swelling urban populations in combination with more frequent services outages and failures in case of extreme weather events put further pressure on these scarce services, opening opportunities for corrupt brokers and gatekeepers to extract extra payments and lock in predatory provision systems. For example, an estimated 150 million city dwellers face perennial water shortages, a number that is expected to climb up to 1 billion by 2050. [20] Such shortages further empower corrupt water rackets and raise water prices for the poor with corruption as both a driver and result of such shortage conditions. [21]

- *Risk factor 4: Influx of massive resources to fund complex, large-scale projects: multiple leakage points and opportunities for project mis-specifications tailored to vested interests*

Developed countries have agreed to provide at least USD 100 billion per year for climate finance. These sums pose considerable challenges for financial management and for the tracking of flows down to national and local level. At the same time, protecting large-scale urban infrastructures against the impact

[16] Author calculations based on data from UNDESA (2014). World Urbanization Prospects. The 2014 Revision; Germanwatch (2018). Long-Term Global Climate Risk Index (LT-CRI 2018) and Transparency International (2017). Corruptions Perception Index 2016.

[17] See LSE Cities: Governing city populations: https://lsecities.net/media/objects/articles/governing-city-populations/en-gb/

[18] IPCC (2014). Climate Change 2014: Impacts, Adaptation, and Vulnerability. WGIII contribution to the Fifth Assessment Report. chapter 8

[19] Lall, S. et al. (2017). Africa's Cities: Opening Doors to the World. Washington DC: World Bank.

[20] IPCC (2014). Climate Change 2014: Impacts, Adaptation, and Vulnerability. WGIII contribution to the Fifth Assessment Report. chapter 8

[21] Anbarci, N., M. Escaleras, and C.A. Register (2009). The Ill Effects of Public Sector Corruption in the Water and Sanitation Sector, Land Economics 85(2), 363-77; Transparency International (2008). Global Corruption Report 2008. Corruption in the Water Sector, Cambridge: University Press.

of climate change often means to initiate highly technical, complex and multi-faceted infrastructure projects, such as upgraded sewage and drainage systems, dams or storm surge barriers. All these require particularly careful project design and implementation oversight in order to ensure that specifications do not favour politically connected bidders and illicit enrichment can hide behind short-cuts in execution.[22]

- *Risk factor 5: Vested interests dominate public interest in local climate response*

The distribution of power at local level does not bode well for inclusive, equitable urban climate responses. Poor urban communities in precarious conditions and settlements are the most vulnerable and should be at the centre of effective adaptation yet they are most likely to have very limited voice and power in urban decision-making. Similarly, future generations and a dispersed general public are the prime beneficiaries of mitigation, while present related costs often fall on powerful, concentrated industries and interests. And these uneven power configurations take place against a general backdrop of urban policy-making that many believe is already tilted towards the rich and influential. For example, more than three-quarters of urban residents in a sample of African cities believe that due to corruption it is public officials and the rich that benefit most from urban reforms. 60% think the same in Asian cities.[23] All this suggests that climate policy capture by special interests is a distinctive risk in many cities.[24]

What to do? Practical options for addressing the urban climate corruption challenge

Corruption risks in urban responses to climate change and environmental problems are high and imminent, yet not insurmountable. Viable engagement options exist for all stakeholders.

City governments

City leaders and their administrations can deploy diagnostic tools, such as → *the local integrity system analysis[a]* to take a thorough look at all local-level institutions that support integrity, identify the weakest areas in urgent need of reform and use this exercise to convene relevant local stakeholders to jointly prioritise and plot integrity reforms. City governments can also harness existing templates, standards and peer learning communities to raise the transparency and efficacy of key anti-corruption safeguards. They can adopt → *open budgets[b]* and → *open contracting[c] practices*, upgrade systems for → *disclosing beneficial ownership in real estate* and land holdings (the natural persons that ultimately own and exercise control over the property/land)[d] or rely on tried and tested ways for more →*effective asset, income and interest declarations[e]* for public officials.

Private sector

Businesses can play a pivotal, albeit often overlooked role in advancing a city integrity agenda.[25] At local level they can join or help launch → *integrity pacts[f]* –multi-stakeholder partnerships to strengthen anti-corruption and monitoring mechanisms – when participating in large-scale public works projects.[26] At sectoral level they can also partake in the →*Construction Sector Transparency Initiative[g]*, that facilitates learning and assists construction companies in shoring up compliance and integrity throughout their operational value chains.

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[22] See webinar case study for Panama City, Panama.

[23] UN-Habitat (2008): *State of the World's Cities 2008/2009. Harmonious Cities*, London: Earthscan.

[24] See webinar case study for Dhaka, Bangladesh.

[25] For some fascinating contrasting case studies from cities in Spain and Italy where local business associations played a pivotal role in fomenting more integrity see Drapalova. E. (2016). *Good Apples on Bad Trees. Explaining Variation in Levels of Corruption in South-European Local Government*, PhD thesis. Florence: European University Institute.

[26] Innovations for Successful Societies (2015). A blueprint for transparency: Integrity pacts of public works, El Salvador, 2009-2014. Princeton: ISS.

Civil society

Civil society groups can mobilise their constituencies or engage directly with an extensive set of → *social accountability mechanisms[h]*, from participatory budgeting to social audits. They can help → *track the flow of climate funds[i]* down to project level, support the design of inclusive and appropriate adaptation and mitigation policies and lend a *critical friend* perspective to some of the collective action mechanisms already mentioned above. Civil society groups can also spark a race to the top and incentivise responsible city leadership by ranking and comparing cities in a country with regard to their transparency and integrity qualities, as for example is being done for broader transparency measures in → *Slovakia[j]*, the → *Ukraine[k]* or exclusively on open budgets in →*South Africa[l]*.

Donors

Finally, donors can bring great momentum to urban climate integrity initiatives. They can support local integrity champions and their initiatives, as well as helping build critical capacities, for example →*anti-corruption education for urban planners*.[m] Equally important, they can align their own implementation practices with progressive transparency and accountability standards. For example, donors can adhere to transparency and reporting standards for their programming, such as the ones laid out by the →*International Aid Transparency Initiative (IATI)[n]*. And they can adapt lessons learnt in *tackling corruption in humanitarian assistance[o]* to cut corruption vulnerabilities in emergency response and relief efforts.

As this brief overview highlights, tackling corruption risks in the urban response to climate change can rely on a plethora of established methodologies, practical mechanisms and collective action initiatives. No city has to go it alone. There are plenty of engagement opportunities for all stakeholders to do their part in ensuring that our path towards cities that create sustainable prosperity for all and are central engines in responding to climate change is not derailed by corruption.

Action assets and policy resources

[a] Integrity Systems Analysis:
https://www.transparency.org/whatwedo/publication/local_integrity_system_assessment_toolkit

[b] Open budgets at subnational level: https://www.internationalbudget.org/wp-content/uploads/Measuring-Subnational-Budget-Transparency-Participation-and-Accountability-mali_final.pdf

[c] Open contracting initiative: https://www.open-contracting.org/

[d] Transparency of urban real estate holdings: Sao Paulo example
https://www.transparency.org/news/feature/us2.7_billion_of_saeo_paulo_brazil_property_linked_to_offshore_companies

[e] Framework for income and asset disclosure: World Bank (2014). Income and Asset Disclosure. Case Study Illustrations. Washington DC: World Bank.

[f] Integrity pacts: https://www.transparency.org/whatwedo/tools/integrity_pacts/5

[g] Construction sector transparency initiative: http://www.constructiontransparency.org/home

[h] Knowledge repository on social accountability mechanisms: http://www.thegpsa.org/sa/

[i] Climate funds tracking: https://policy-practice.oxfamamerica.org/work/climate-change/adaptation-finance-accountability-initiative-afai/

[j] Open cities analysis: Slovakia example: http://samosprava.transparency.sk/

[k] Open cities analysis: Ukraine example: https://transparentcities.in.ua/en/

[l] Open budgets at subnational level: https://www.internationalbudget.org/publications/introduction-of-the-south-africa-metro-open-budget-index/

[m] Anti-corruption course module for urban planners: www.transparency.org/urbanintegrity

[n] International aid transparency initiative: https://www.aidtransparency.net/

[o] Handbook for corruption risks in humanitarian aid:
https://www.transparency.org/whatwedo/activity/humanitarian_aid_integrity_programme