



# REVIEWING NATIONALLY DETERMINED CONTRIBUTIONS: OPPORTUNITIES FOR MORE AMBITIOUS TRANSPORT ACTIONS IN AFRICA AND ASIA

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#### Abstract

The COVID-19 crisis has revealed how vulnerable our societies and economies are to systemic risks, not just pandemics. Climate change remains one of the main, if not the main, systemic threats to the world. As the fastest growing source of GHG emissions, transport plays a crucial role in the global lowcarbon transition. Despite the global economic downturn and the disruptive "new normality" that will likely follow the COVID-19 pandemic, the world's demand for transport is still expected to grow exponentially. Socio-economic dynamics in Africa and Asia will be central in driving this dramatic change. Unless African and Asian LMICs introduce plans for transformative changes in their transport sectors, the risk of underachieving the Paris climate targets and, with it, the SDGs remains very high. However, an analysis of transport measures in submitted NDCs reveals that they currently lack the ambition and comprehensiveness required to avoid dangerous levels of climate change. This is why, as African and Asian countries revise their NDCs during this historic moment, they must put forward bold transport mitigation targets and measures. This policy note provides four recommendations for including more ambitious transport targets and measures in NDCs: 1) Include transport-specific GHG mitigation targets, in line with the 1.5°C goal of the Paris Agreement; 2) Include comprehensive, balanced, equitable and ambitious transport measures; 3) Incorporate climate change adaptation and resilience for transport systems with specific targets, plans and measures; 4) Align national financing and investment strategies to the decarbonisation and resilience of transport systems.

Keywords	NDCs, low-carbon transport, Paris Agreement, SDGs, Avoid Shift and Improve (A-S-I)
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### AN HISTORIC CHALLENGE AND OPPORTUNITY FOR SUSTAINABLE TRANSPORT

The COVID-19 crisis has revealed how vulnerable our societies and economies are to systemic risks, not just pandemics. Climate change remains one of the main, if not *the* main, systemic threats to the world, due to its manifest impact on the lives and livelihoods of billions in Africa and Asia, including climate-related risks on health, food security, water supply, human security, and economic growth (IPCC 2018).

In the coming months, while trillions of dollars will be mobilised globally for the COVID-19 crisis recovery, policy makers face a one-in-a-life-time decision. They could choose to use those dollars to boost short-term economic demand and perpetuate the carbon-intensive, vulnerable and inequitable economies of today. Or, they could rise to the historic occasion and use those resources to ensure the long-term transition to a more green, low-carbon, and resilient society.

As the fastest growing source of global greenhouse gas (GHG) emissions, transport plays a crucial role in the global low-carbon transition. Transport accounted for 24% of global CO<sub>2</sub> emissions in 2017, but was responsible for a third of emission growth since 2010 (IEA 2019). The Intergovernmental Panel on Climate Change (IPCC) estimates that transport emissions must reduce by almost nine times by 2050 in order to achieve the Paris Agreement's goal of a 1.5°C temperature increase. The current "business as usual" trajectory shows emissions rising much more steeply (SLOCAT 2019) (Fig. 1).

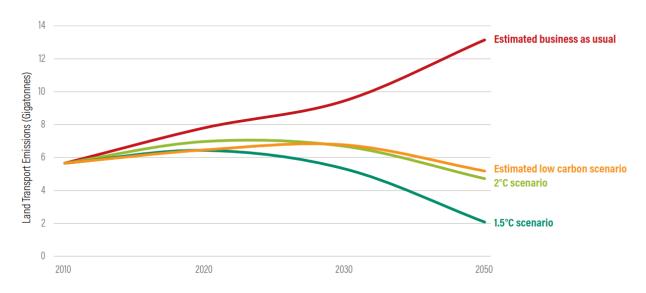


Figure 1. Projected and targeted land transport emissions curves (Fransen et al. 2019)

Despite the global economic downturn and the disruptive "new normality" that will likely follow the COVID-19 pandemic, the world's demand for transport is still expected to grow exponentially. Indeed, the Coronavirus crisis has made it abundantly clear that transport is one of the most strategic and essential services of our nations, keeping the economic backbone of food, work, school, and health services together. The International Transport Forum (2019) projects that global transport demand (both passenger and freight) will triple between 2015 and 2050.

The shaping of sustainable transport is in the hands of the policy makers of today. Some major trends will have a significant impact (positive and/or negative) on the transition to low-carbon transport in the next decades. These include a massive uptake in shared mobility; the electrification of public and private transport; the rapid growth of e-commerce related freight; and the adoption of high-speed internet and teleworking.



# **AFRICA AND ASIA MUST TAKE THE LEAD**

Socio-economic dynamics in Africa and Asia will be central in driving this dramatic change. The world population is projected to reach 9.7 billion in 2050. More than half of that growth will occur in just nine countries: India, Nigeria, Pakistan, the Democratic Republic of the Congo, Ethiopia, the United Republic of Tanzania, Indonesia, Egypt and the United States of America (in descending order of the expected increase) (UNDESA 2019). Moreover, about 2.3 billion more people will live in cities by 2050, with 80% of this growth in urbanisation happening in Africa and Asia (excl. China) alone (UNDESA 2018). In many African and Asian countries, the labour force is forecasted to double or triple (EIT 2015), bringing about unprecedented demand for mobility services.

This is why, as African and Asian countries revise their National Determined Contributions (NDCs)<sup>1</sup> during this historic moment, they must put forward bold transport mitigation targets and measures in line with the Paris Agreement's goal of limiting global warming to below 1.5°C.

Indeed, unless African and Asian Low- and Middle-Income Countries (LMICs) introduce plans for transformative changes in their transport sectors, the risk of underachieving the Paris climate targets and, with it, the Sustainable Development Goals (SDGs) remains very high. About half of the SDGs are directly or indirectly linked to sustainable transport, including targets on road fatalities; fossil fuel subsidies; access to public transport; access to quality rural roads and freight movements. For example, the World Health Organisation estimates that, every year, indoor and outdoor air pollution causes nearly 4.2 million premature deaths, ten times the COVID-19 confirmed deaths as of 12 June 2020, and 1.35 million people die in traffic crashes (Fransen et al. 2019).

However, an analysis of transport measures in submitted NDCs reveals that they currently lack the ambition and comprehensiveness required to avoid dangerous levels of climate change. In fact, while 76% of submitted NDCs highlighted the transport sector as a mitigation source, only 8% included transport-specific greenhouse gas mitigation targets (SLOCAT 2020). Importantly, despite freight transport accounting for 40% of energy use in the transport sector and its demand projected to triple by 2050, less than a quarter of NDCs mentioned freight mitigation measures (*Ibid.*). Finally, only 16% of NDCs mentioned transport resilience and adaptation (*Ibid.*).

As those that will primarily drive the global growth in transport, Asia and Africa will also be those who can benefit the most from its low-carbon transition. While billions of African and Asian citizens will move to cities, pursuing ambitious sustainable transport policies will not only increase climate resilience, but also help harvest sizable co-benefits in energy security, economic development, and quality of life (see Fig. 2). In addition, including bold evidence-based mitigation targets and measures for the transport

Lower Less noise energy costs Better Less road safety & imported fuel **Better** Less less accidents energy security externalities Reduced Sustainable Less congestion & health risks transport time savings Stronger economic Increased development quality of life Lower More welfare costs local jobs (hospitals, etc.) Increased Better private air quality investments

Figure 2. Co-benefits of sustainable transport (GIZ 2016)

<sup>1</sup> In 2020, countries are requested to update their NDCs. Originally submitted in 2015, NDCs contain the national commitments on climate action to comply with the Paris Agreement on climate change.



sector in NDCs will allow LMICs, which have accounted for a small portion of global emissions, to achieve two benefits: 1) put pressure on the big emitters, without which the Paris goals cannot be met, to match the rise in ambition; and 2) attract more climate finance inflows and international support to be used to pursue greener and more climate resilient transport systems, thus unleashing all the co-benefits of sustainable transport.

# FOUR RECOMMENDATIONS FOR INCLUDING MORE AMBITIOUS TRANSPORT TARGETS AND MEASURES IN NDCs

- 1) Include transport-specific GHG mitigation targets that are in line with the 1.5 Degree Celsius goal of the Paris Agreement. The targets should be:
  - Ambitious, to comprehensively harness all co-benefits of low-carbon transport
  - Evidence-based to ensure their achievement will be sufficient to bring about the required emission reduction in line with a zero-carbon transport in the long-term
  - Specific and quantified, setting goals for transport sub-sectors
  - Built on wide stakeholder engagement, including cities and regions, the private sector, civil society, and academia
- 2) Include comprehensive, balanced, equitable and ambitious transport measures
  - Include a balanced approach of all <u>Avoid</u>, <u>Shift</u>, <u>and Improve</u> (A-S-I) measures such as:
    - Avoid unnecessary transport: e.g. smart infrastructure planning for transport demand management, enable more remote working, rethink freight systems
    - Shift to cleaner transport modes: e.g. walking and cycling, urban public transport/ mass transit and shared mobility, high-speed rail versus domestic air and road transport
    - Improve vehicles' fuel economy, energy source, and size: e.g. phase out the sale and
      use of internal combustion engine vehicles (ICEVs), accelerate the electrification of
      public and private mobility, promote the use of small and energy-efficient cars
  - Add specific measures for the aviation, maritime and freight sectors, which account for a large portion of transport emissions
  - *Use integrated planning* to define transport measures that are in line with energy, urban, land-use plans and that promote gender and social inclusion.
- 3) Incorporate climate change adaptation and resilience for transport systems with specific targets, plans and measures
  - As LMICs are disproportionally vulnerable to climate change, it is fair and reasonable for their NDCs to maintain a *balanced importance between mitigation and adaptation*
  - Raising the profile of transport adaptation in NDCs now only covered with specific strategies by 4% of NDCs – will support the resilience of the long-term mitigation investments, hence making NDCs stronger overall
- 4) Align national financing and investment strategies to the decarbonisation and resilience of transport systems
  - Include targets and plans to eliminate fossil fuel subsidies and phase ICEVs out
  - Define the financial requirements and potential sources to underpin the A-S-I strategy, also taking into consideration the "new normality" of post-COVID-19 transport
  - Ensure that the COVID-19 recovery / stimulus packages are in line with NDCs and the SDGs, and are used to promote green and resilient growth
  - Involve multiple ministries and stakeholders (incl. the planning and finance ministries) to plan for the reallocation of resources as sustainable transport co-benefits materialise (e.g. savings from health to be invested in active mobility).



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