



MARRAKECH COP22|CMP12
UN CLIMATE CHANGE CONFERENCE 2016

COP-22: Two Degrees and Beyond

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Acknowledgement: I am borrowing
(with permission) quite liberally
from work by Sudhir Gota and
SLoCaT

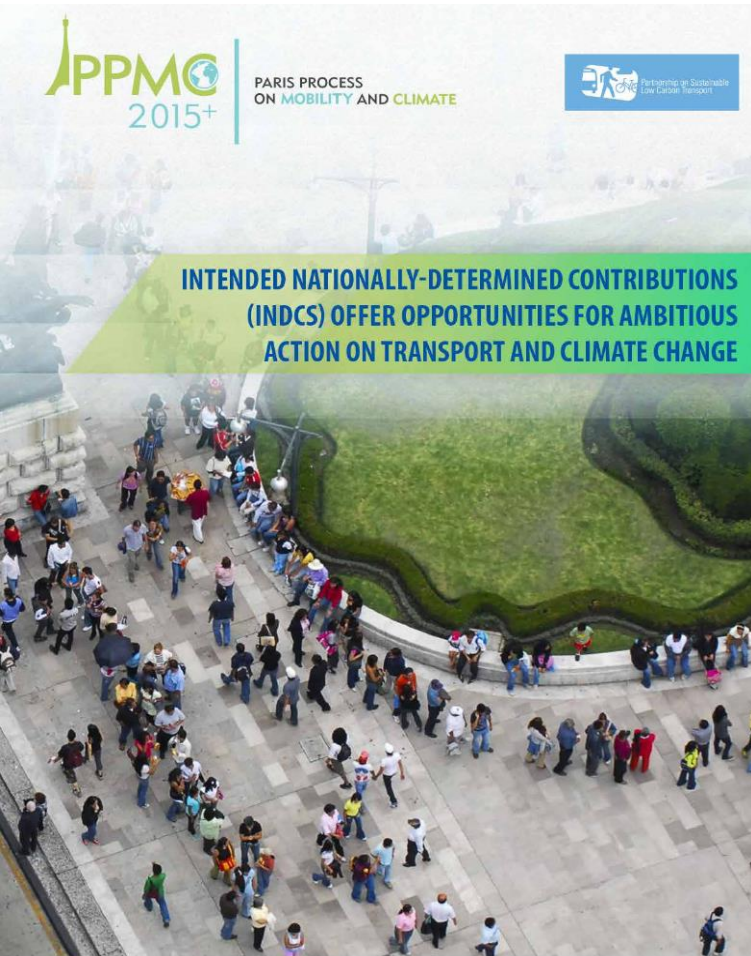
Sudhir Gota, Consultant, Partnership on
Sustainable, Low Carbon Transport (SLoCaT)



COP-22: The Implementation COP

- Nationally Determined Contributions (NDCs) still being developed and refined
 - (US Signed in April 2016)
- Focus now on developing “rules” for countries in terms of continuing to develop NDCs and score policies
 - “Modalities, Procedures and Guidelines” (MPGs)
- The major agreements have to do with a timetable over the next 4 years, getting to final strategies probably with a 2025 or 2030 target.
- COP 23 (Bonn) will attempt to arrive at more specific agreements on details of NDCs and strategies to achieve them, but it is expected that a final agreement may not be achieved before COP 24.

Transport and (I)NDCs – where do things stand?



160 (I)NDCs

75% explicitly identify transport sector as a mitigation source

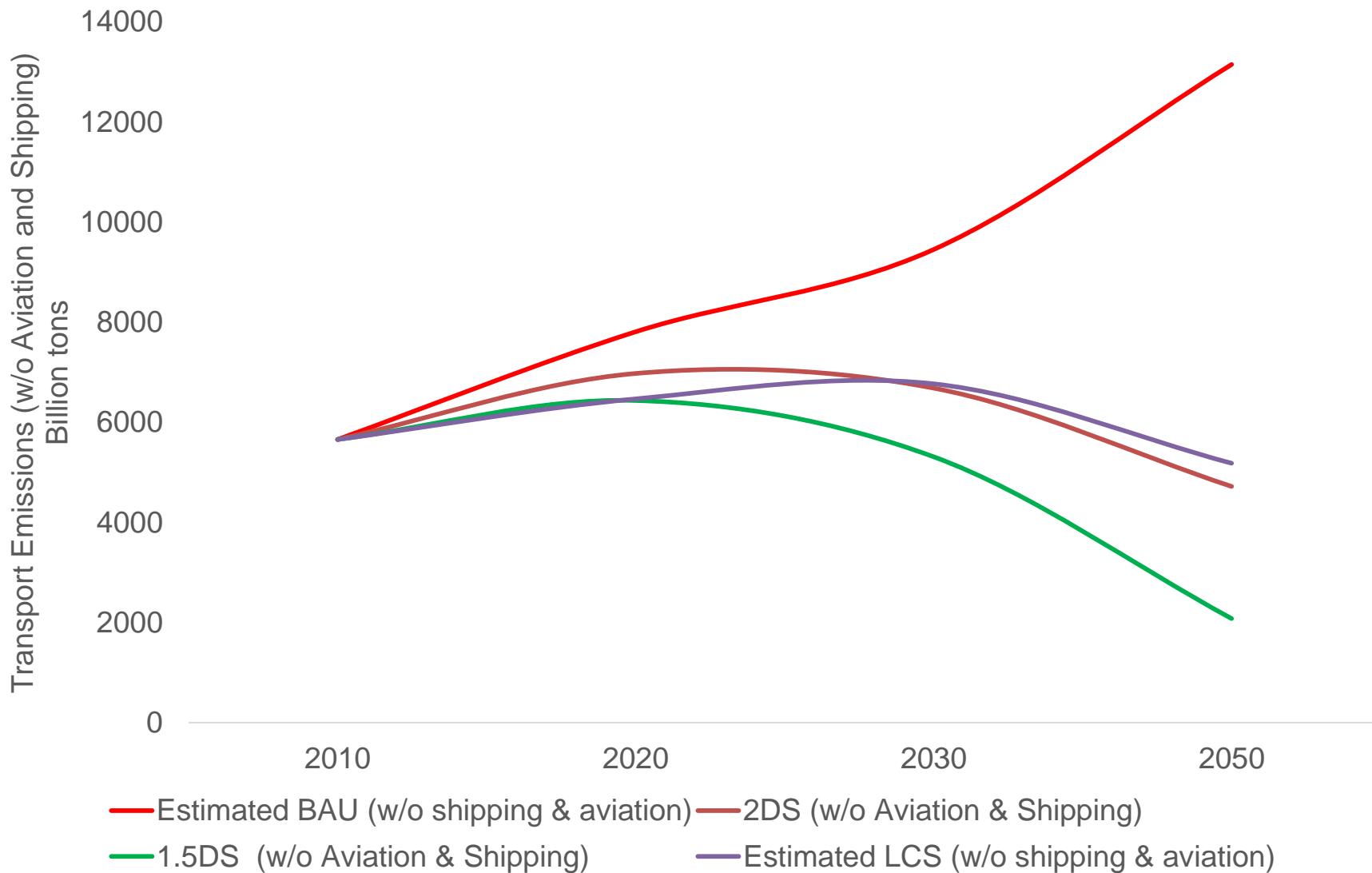
63% of NDCs propose transport specific mitigation measures

12% of NDCs include transport mitigation potential

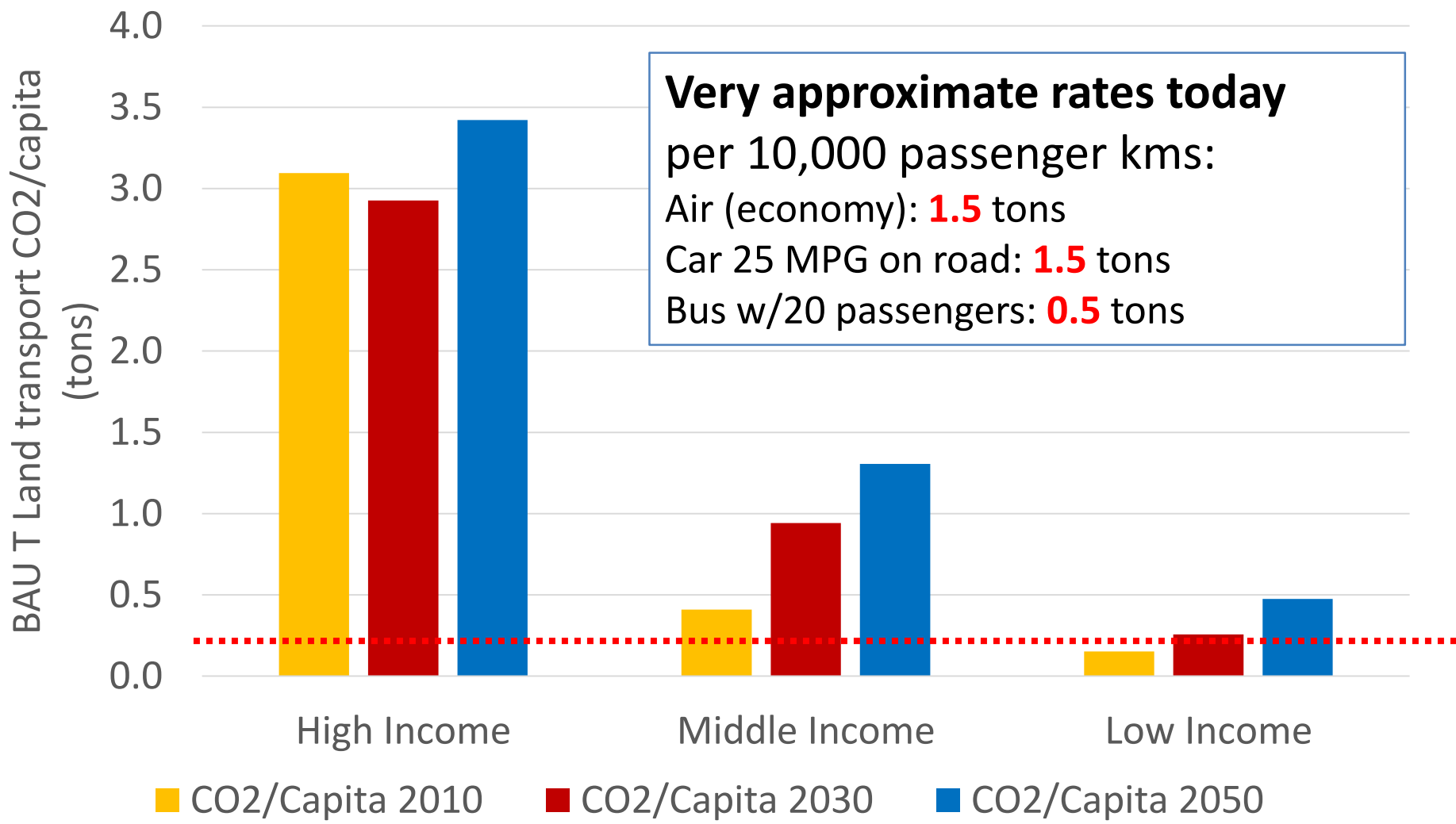
9% of NDCs include transport sector emission reduction target

Future scenarios – land transport CO₂

(based on IEA and broad scenario reviews)

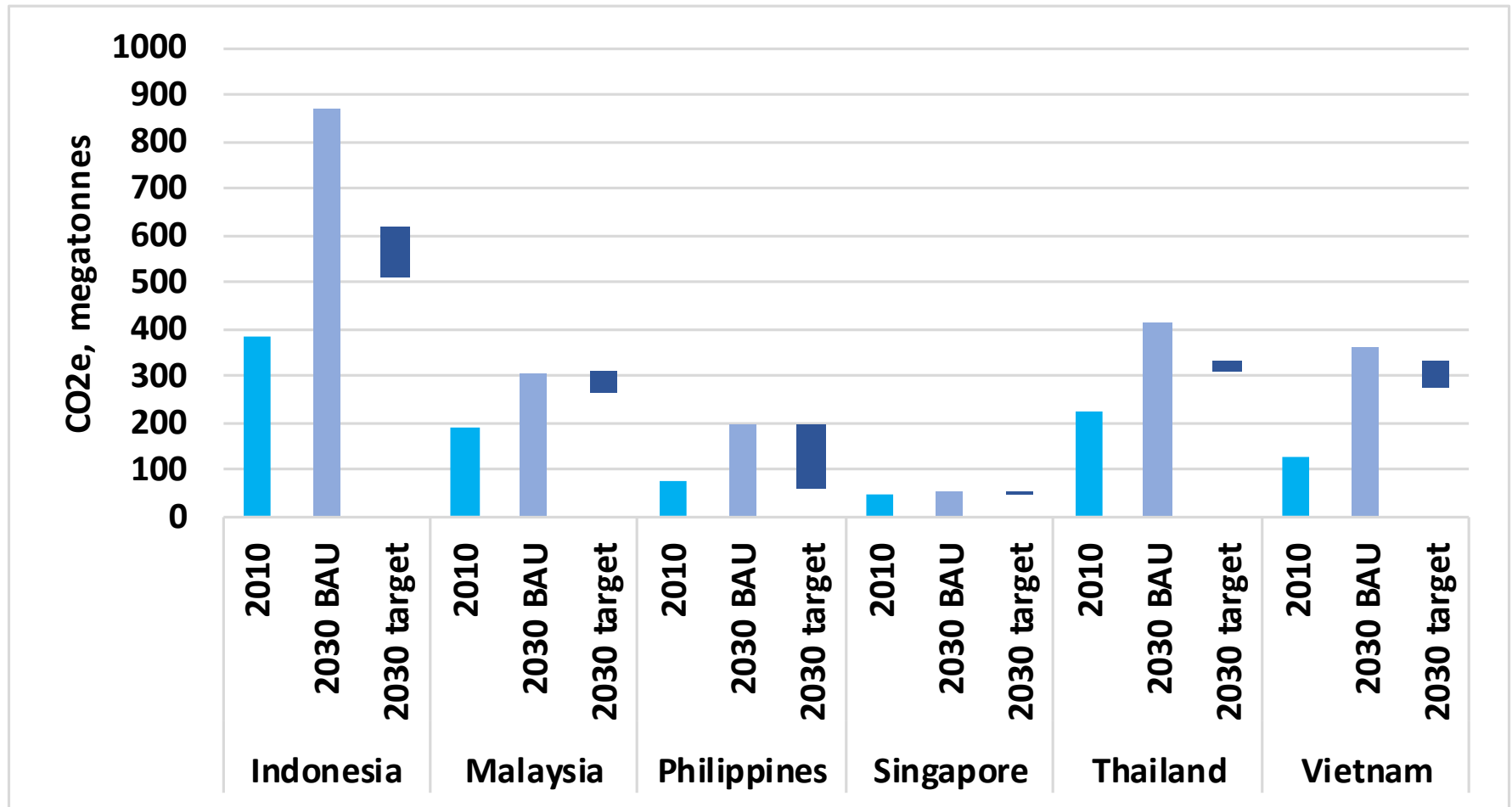


An example of achieving a 1.5 degree (2 billion ton) world (0.25 tons/cap)

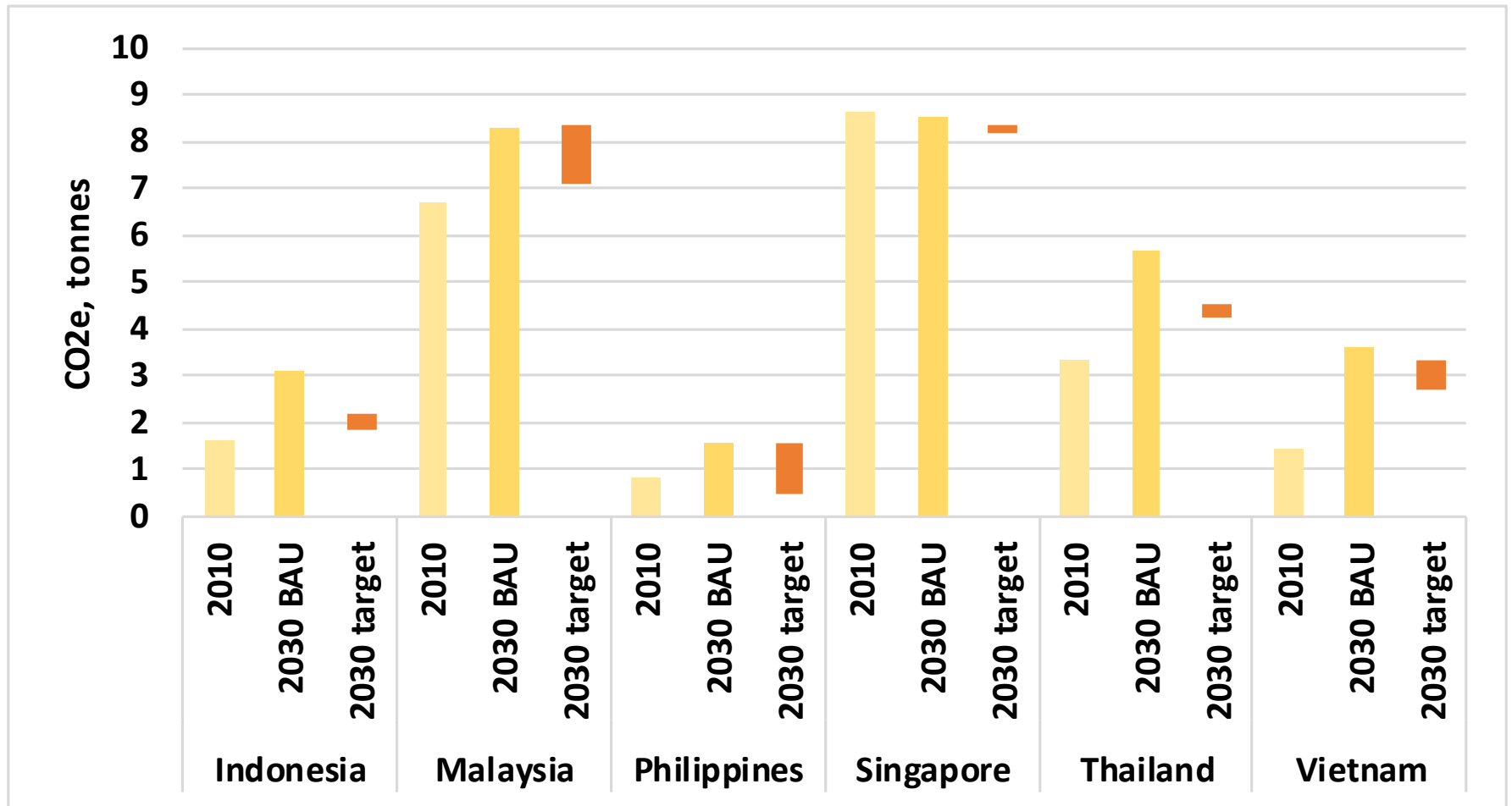


Example NDC comparison: ASEAN

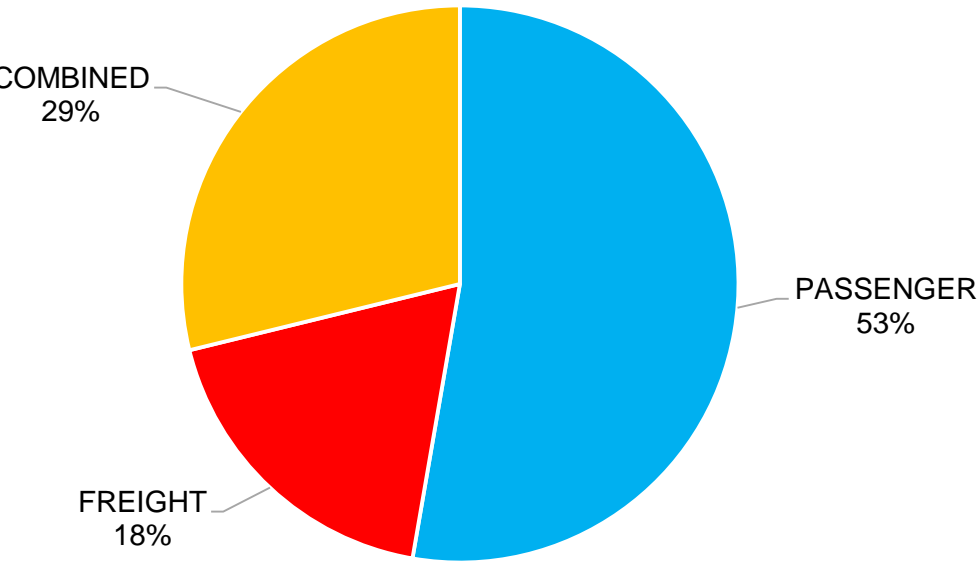
(analysis by Fulton/Arioli)



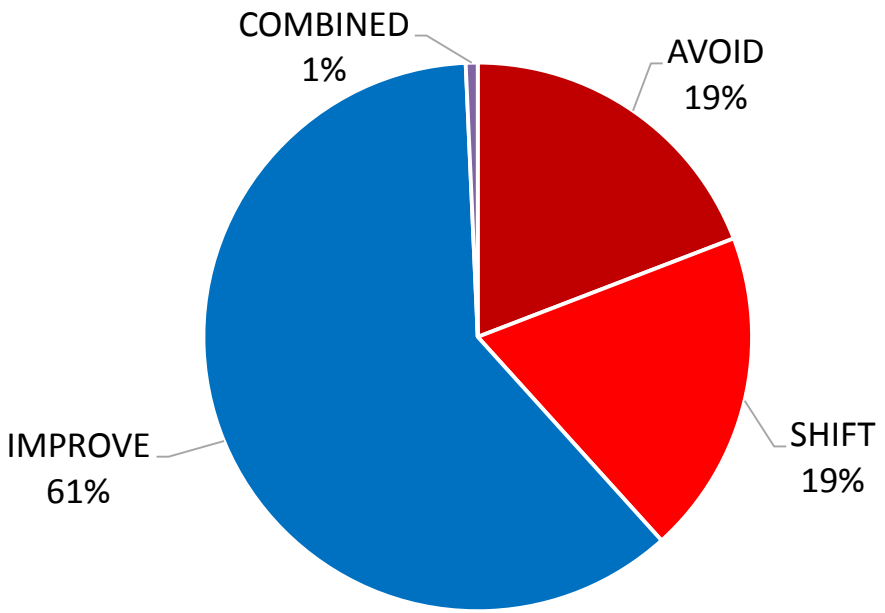
ASEAN NDC per-capita comparison



Transport Mitigation Measures in Modelling Studies



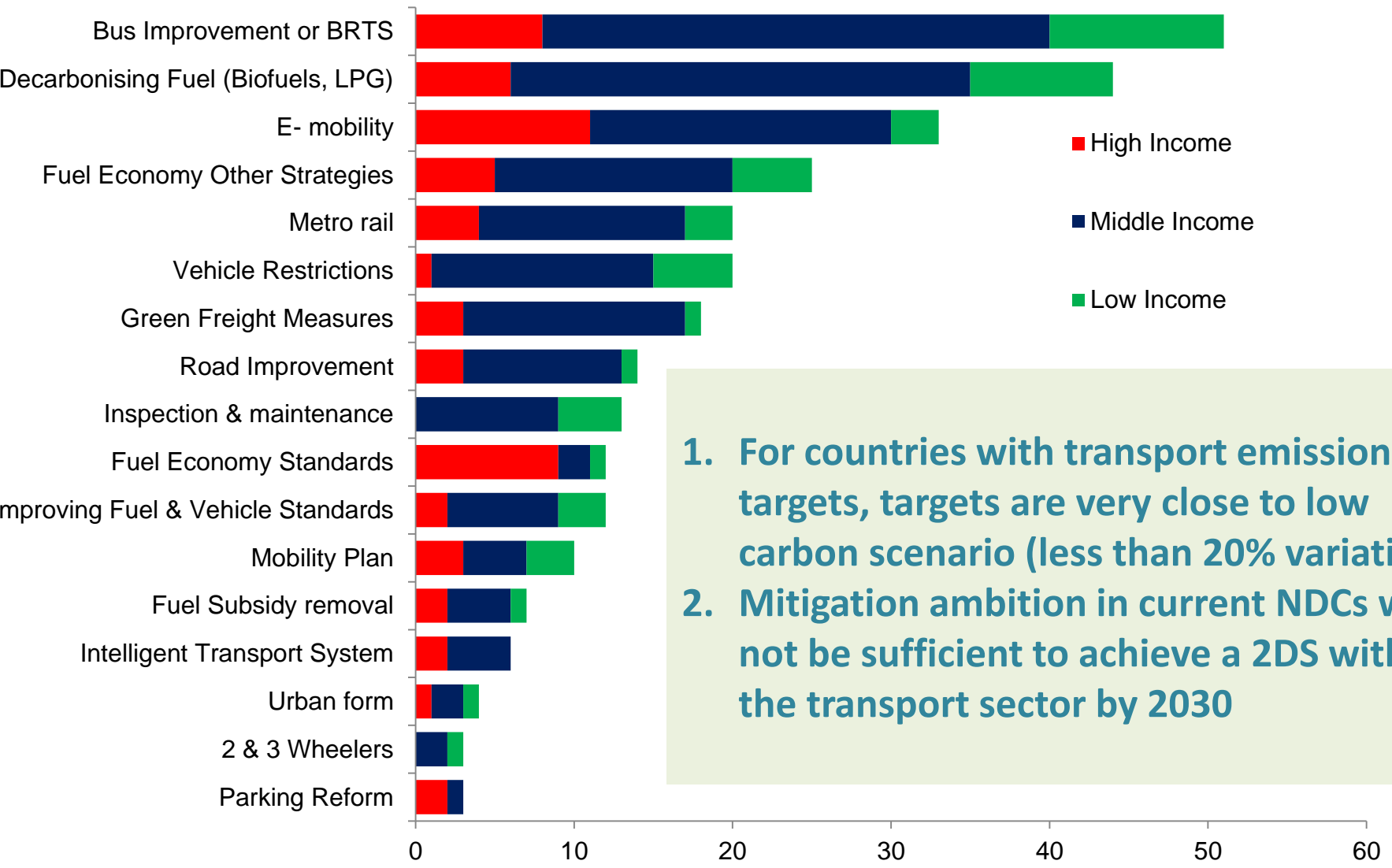
■ PASSENGER ■ FREIGHT ■ COMBINED



■ AVOID ■ SHIFT ■ IMPROVE ■ COMBINED

- 1. 450 BAU and Low Carbon Studies
- 2. 60 Countries only
- 3. 550+ Mitigation Measures
- 4. In terms of Impact, Avoid and Shift “can” give comparable mitigation impact as Improve strategies

Transport and (I)NDCs

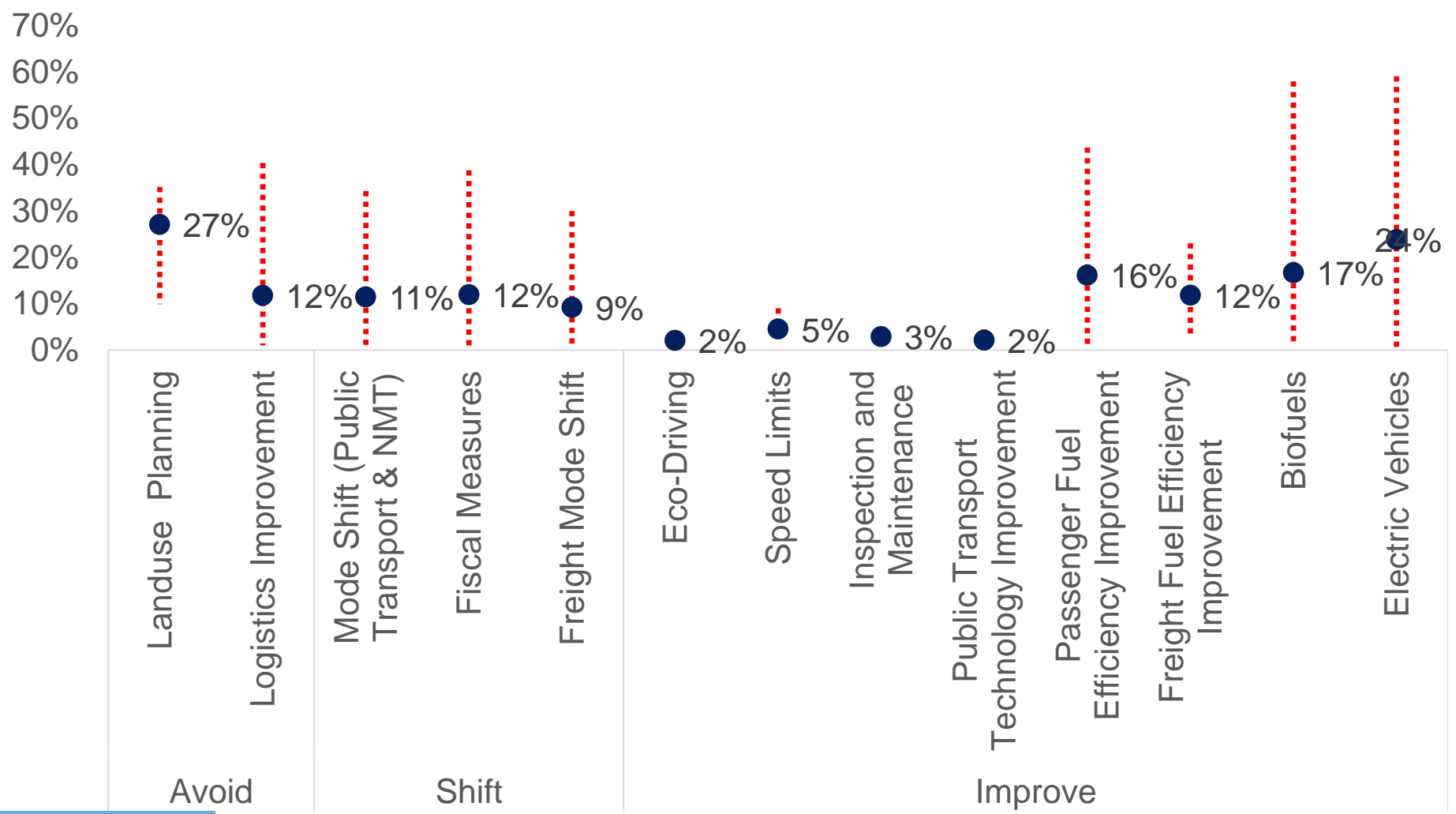


1. For countries with transport emission targets, targets are very close to low carbon scenario (less than 20% variation)

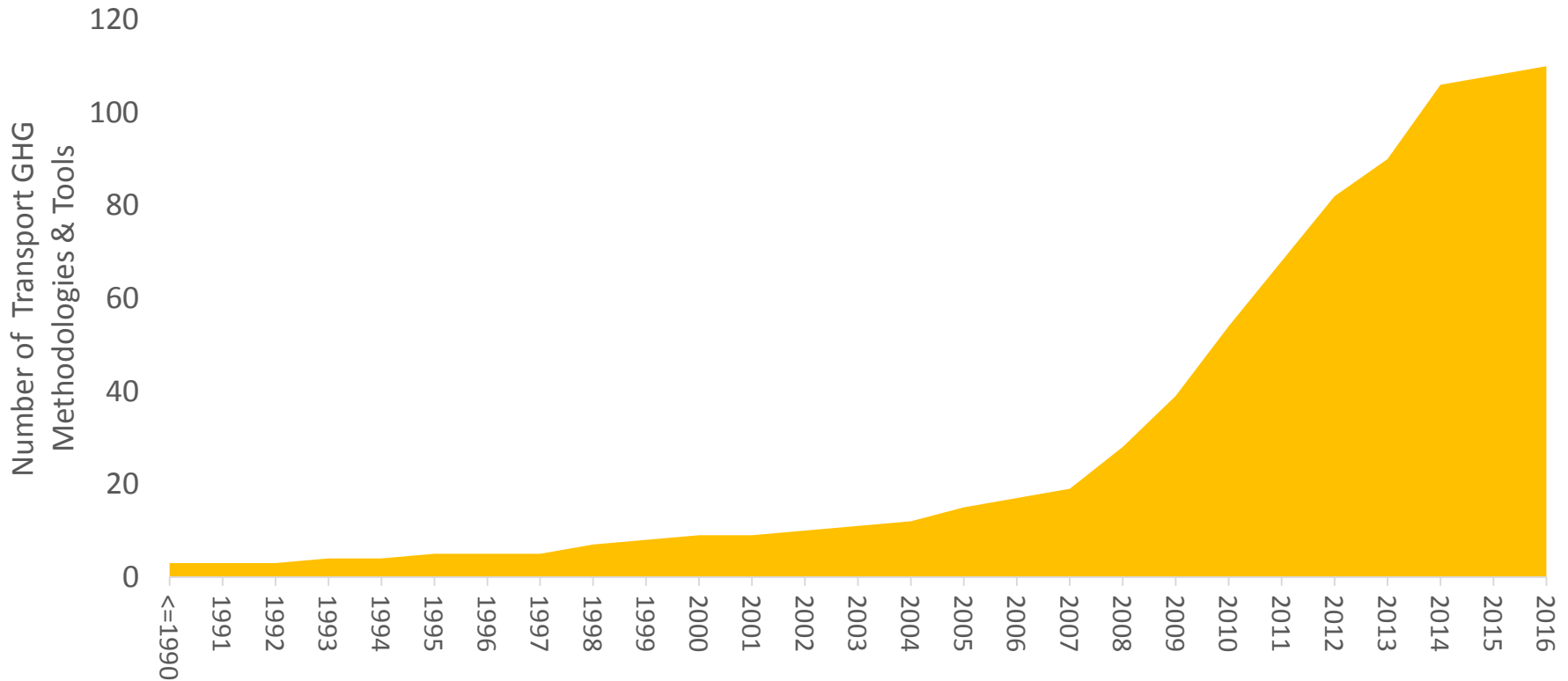
2. Mitigation ambition in current NDCs will not be sufficient to achieve a 2DS within the transport sector by 2030

Land Transport Mitigation Measures Impact

Mitigation (Reduction % from Transport BAU @ 2050)



Transport Low Carbon Scenarios in Modelling Studies



Key Points,

1. Mitigation tools available, but not “effectively” utilised
2. Mitigation measures in NDCs and low emission scenarios are not “balanced” (ASI/Modes)
3. “Avoid and Shift” can give comparable mitigation impact as “Improve” + “Higher” co-benefits
4. High emission gap in NDCs

Summary (and possibly forgotten) points

1. 2 degrees calls for something like a 50% reduction in CO2 emissions by 2050 v. 1990
2. 1.5 degrees is far more radical: Zero net emissions soon after 2050 or possibly before – 0.25 tons per capita?
3. Seems we will need all of Avoid+Shift+Improve in Passenger & Freight
4. Much current focus on short- and medium-term transport actions that have the potential to yield sustainable development co-benefits
5. Key issue is developing a Macro Road Map for de-carbonizing the Transport sector
6. Next few years: Data, modelling & capacity building critical