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Advancing climate-resilient low emission development around the world

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What cities do best - Subnational integration & ideal roles for cities in climate action

9 Feb, 2016

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SOME HOUSEKEEPING ITEMS

To ask a question:

- Select the "questions" pane on your screen and type in your question.

Having trouble with the webinar:

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- A video/audio recording of this webinar and slide decks will be available

SUBNATIONAL INTEGRATION WORKING GROUP (SNI-WG)

MISSION:

To enhance capacity, capture synergies and improve and support the coordination and vertical integration of low emission development strategies among national and subnational governments.

ACTIVITIES:

- Mapping issues, activities and resources
- Capacity building, training
- Ongoing dialogue

Launched in 2013, the SNI Working Group of the LEDS GP has +100 members including governments, IGOs and NGOs

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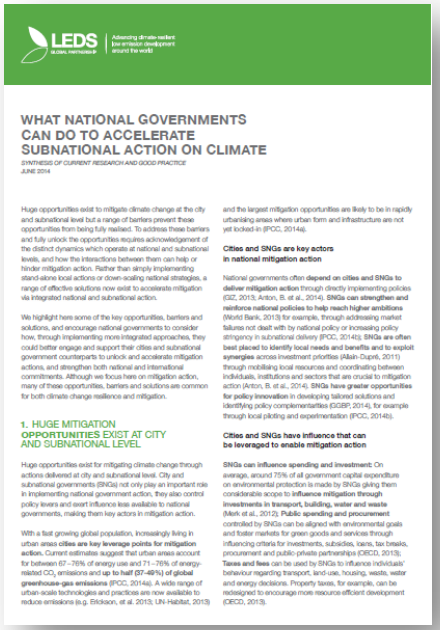
LEARNING: SNI Working Group Resources

- More info -

Synthesis of Trends and Good Practice



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WHAT NATIONAL GOVERNMENTS CAN DO TO ACCELERATE SUBNATIONAL ACTION ON CLIMATE

SYNTHESIS OF CURRENT RESEARCH AND GOOD PRACTICE
JUNE 2014

Huge opportunities exist to mitigate climate change at the city and subnational level but a range of barriers prevent these opportunities from being fully realised. To address these barriers and fully unlock the opportunities requires acknowledgement of the distinct dynamics which operate at national and subnational levels, and how the interactions between them can help or hinder mitigation action. Rather than simply implementing stand-alone local actions or down-scaling national strategies, a range of effective solutions now exist to accelerate mitigation via integrated national and subnational action.

We highlight here some of the key opportunities, barriers and solutions, and encourage national governments to consider how, through implementing more integrated approaches, they could better engage and support their cities and subnational government counterparts to unlock and accelerate mitigation actions, and strengthen both national and international commitments. Although we focus here on mitigation action, many of these opportunities, barriers and solutions are common for both climate change resilience and mitigation.

1. HUGE MITIGATION OPPORTUNITIES EXIST AT CITY AND SUBNATIONAL LEVEL

Huge opportunities exist for mitigating climate change through actions delivered at city and subnational level. City and subnational governments (SNGs) not only play an important role in implementing national government action, they also control policy levers and exert influence less available to national governments, making them key actors in mitigation action.

With a fast growing global population, increasingly living in urban areas **cities are key leverage points for mitigation action.** Current estimates suggest that urban areas account for between 67 – 76% of energy use and 71 – 76% of energy-related CO_2 emissions and **up to half (37-49%) of global greenhouse-gas emissions** (IPCC, 2014a). A wide range of urban-scale technologies and practices are now available to reduce emissions (e.g. Erickson, et al. 2013; UN-Habitat, 2013) and the largest mitigation opportunities are likely to be in rapidly urbanising areas where urban form and infrastructure are not yet locked-in (IPCC, 2014a).

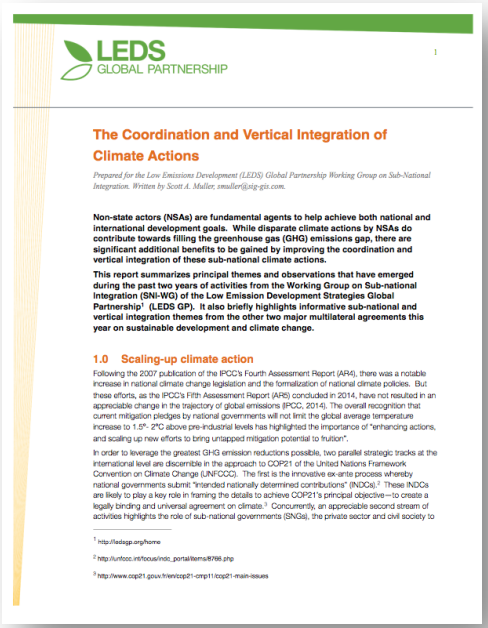
Cities and SNGs are key actors in national mitigation action

National governments often **depend on cities and SNGs to deliver mitigation action** through directly implementing policies (GIZ, 2013; Anton, B. et al., 2014). **SNGs can strengthen and reinforce national policies to help reach higher ambitions** (World Bank, 2013) for example, through addressing market failures not dealt with by national policy or increasing policy stringency in subnational delivery (IPCC, 2014b). **SNGs are often best placed to identify local needs and benefits and to exploit synergies** across investment priorities (Alain-Dupré, 2011) through mobilising local resources and coordinating between individuals, institutions and sectors that are crucial to mitigation action (Anton, B. et al., 2014). **SNGs have greater opportunities for policy innovation** in developing tailored solutions and identifying policy complementarities (OECD, 2014), for example through local piloting and experimentation (IPCC, 2014b).

Cities and SNGs have influence that can be leveraged to enable mitigation action

SNGs can influence spending and investment: On average, around 75% of all government capital expenditure on environmental protection is made by SNGs giving them considerable scope to **influence mitigation through investments in transport, building, water and waste** (Merk et al., 2012). **Public spending and procurement** controlled by SNGs can be aligned with environmental goals and foster markets for green goods and services through influencing criteria for investments, subsidies, loans, tax breaks, procurement and public-private partnerships (OECD, 2013). **Taxes and fees** can be used by SNGs to influence individuals' behaviour regarding transport, land-use, housing, waste, water and energy decisions. Property taxes, for example, can be redesigned to encourage more resource-efficient development (OECD, 2013).

White Papers - WG Lessons Learned



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The Coordination and Vertical Integration of Climate Actions

Prepared for the Low Emissions Development (LEDS) Global Partnership Working Group on Sub-National Integration. Written by Scott A. Muller, smuller@sig-gis.com.

Non-state actors (NSAs) are fundamental agents to help achieve both national and international development goals. While disparate climate actions by NSAs do contribute towards filling the greenhouse gas (GHG) emissions gap, there are significant additional benefits to be gained by improving the coordination and vertical integration of these sub-national climate actions.

This report summarizes principal themes and observations that have emerged during the past two years of activities from the Working Group on Sub-national Integration (SNI-WG) of the Low Emission Development Strategies Global Partnership[1] (LEDS GP). It also briefly highlights informative sub-national and vertical integration themes from the other two major multilateral agreements this year on sustainable development and climate change.

1.0 Scaling-up climate action

Following the 2007 publication of the IPCC's Fourth Assessment Report (AR4), there was a notable increase in national climate change legislation and the formalization of national climate policies. But these efforts, as the IPCC's Fifth Assessment Report (AR5) concluded in 2014, have not resulted in an appreciable change in the trajectory of global emissions (IPCC, 2014). The overall recognition that current mitigation pledges by national governments will not limit the global average temperature increase to 1.5°, 2°C above pre-industrial levels has highlighted the importance of "enhancing actions, and scaling up new efforts to bring untapped mitigation potential to fruition".

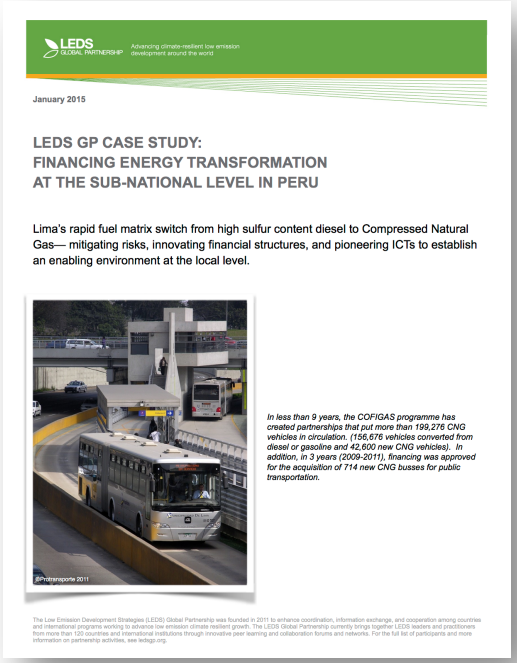
In order to leverage the greatest GHG emission reductions possible, two parallel strategic tracks at the international level are discernible in the approach to COP21 of the United Nations Framework Convention on Climate Change (UNFCCC). The first is the innovative ex-ante process whereby national governments submit "intended nationally determined contributions" (INDCs).[2] These INDCs are likely to play a key role in framing the details to achieve COP21's principal objective—to create a legally binding and universal agreement on climate.[3] Concurrently, an appreciable second stream of activities highlights the role of sub-national governments (SNGs), the private sector and civil society to

[1] http://ledsgp.org/home

[2] http://unfccc.int/focus/indc_portal/items/8766.php

[3] http://www.cop21.gouv.fr/en/cop21-cmp11/cop21-main-issues

Case Studies



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January 2015

LEDS GP CASE STUDY:
FINANCING ENERGY TRANSFORMATION
AT THE SUB-NATIONAL LEVEL IN PERU

Lima's rapid fuel matrix switch from high sulfur content diesel to Compressed Natural Gas— mitigating risks, innovating financial structures, and pioneering ICTs to establish an enabling environment at the local level.

In less than 9 years, the COFIGAS programme has created partnerships that put more than 199,276 CNG vehicles in circulation. (156,676 vehicles converted from diesel or gasoline and 42,600 new CNG vehicles). In addition, in 3 years (2009-2011), financing was approved for the acquisition of 714 new CNG busses for public transportation.

The Low Emission Development Strategies (LEDS) Global Partnership was founded in 2011 to enhance coordination, information exchange, and cooperation among countries and international programs working to advance low emission climate resilient growth. The LEDS Global Partnership currently brings together LEDS leaders and practitioners from more than 120 countries and international institutions through innovative peer learning and collaboration forums and networks. For the full list of participants and more information on partnership activities, see ledsgp.org.

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2016 Flagship Activity: Regional Assessments at the Country Level on the Coordination and Vertical Integration of Climate Actions

- Document innovative and cutting edge subnational LEDS policies and measures across the LEDS LAC and AfL Platforms
- Prepare comprehensive inventory of climate policies and actions linked to multi-level governance.
- Categorize and unpack common challenges
- Identify model programmes and good practices for coordination and vertical integration of climate actions.
- Outline recommendations to national and sub-national governments for future initiatives to improve coordinated and vertically integrated climate policies and actions that accelerate LEDS implementation.

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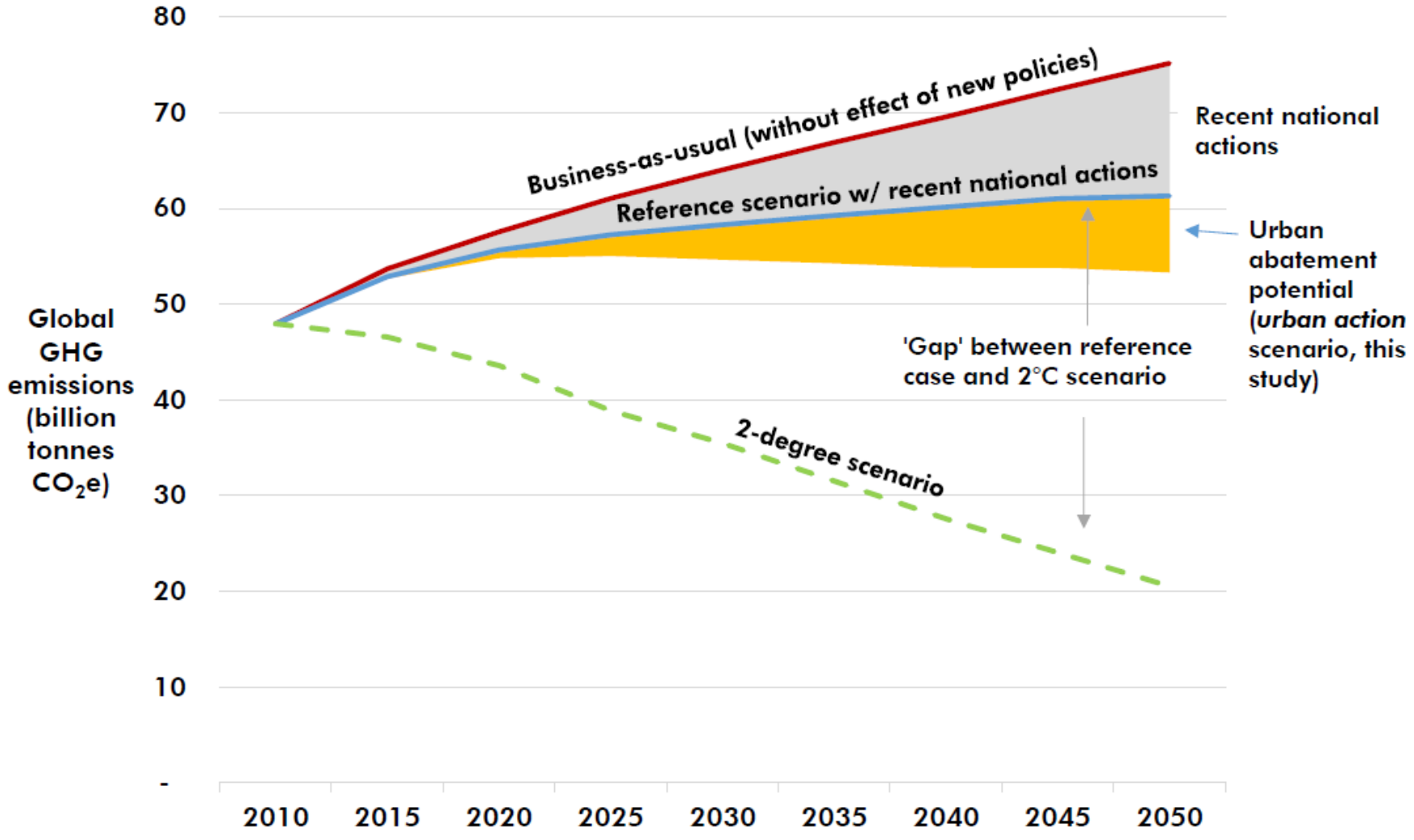
What cities do best: Subnational integration and ideal roles for cities in climate action

Peter Erickson and Derik Broekhoff,
Senior scientists, SEI-US

LEDS Global Partnership, 9 February, 2016

SEI STOCKHOLM ENVIRONMENT INSTITUTE

Cities have substantial potential



Outline of presentation

1. **Framing the question**
   Alternate ways to look at the role of urban action on GHG emissions
2. **By the numbers**
   What technologies and practices have the greatest abatement potential (Gt CO_2e) in urban areas, and where?
3. **How to maximize the role of cities?**
   What is the best role for city governments? For national governments?

1. Two alternate framings…

1. Cities as leaders, innovators, and exemplars ("lighthouses")

   OR

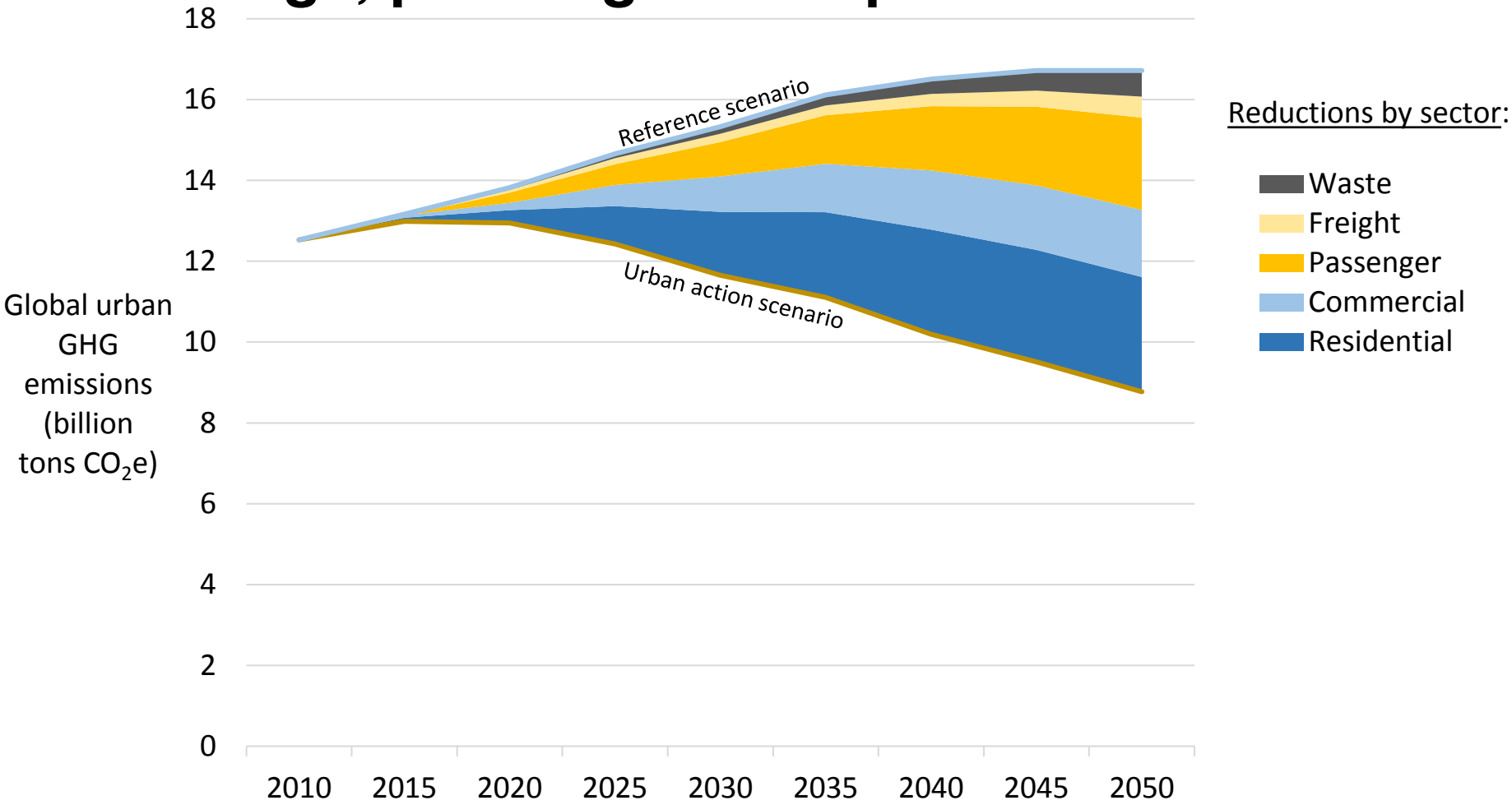
2. Cities as essential partners, implementers, and administrators ("workhorses")

- *Both are important roles that can complement each other*
- *Both could benefit from national support*

Our focus: maximizing ambition of global GHG abatement, i.e….

- What is “maximum” GHG abatement potential?
- What is “best” way to achieve that?
- In short: what is the role of cities in an efficient global pathway to 2 (or 1.5) degrees?…
  - …and what actions are needed at each level of government to get there?

2. Urban abatement potential concentrated in… buildings, passenger transport



Source: Erickson, Peter, and Kevin Tempest. "Advancing Climate Ambition: How City-Scale Actions Can Contribute to Global Climate Goals." Seattle, WA, US: Stockholm Environment Institute, September 2014. Funded by Bloomberg Philanthropies.

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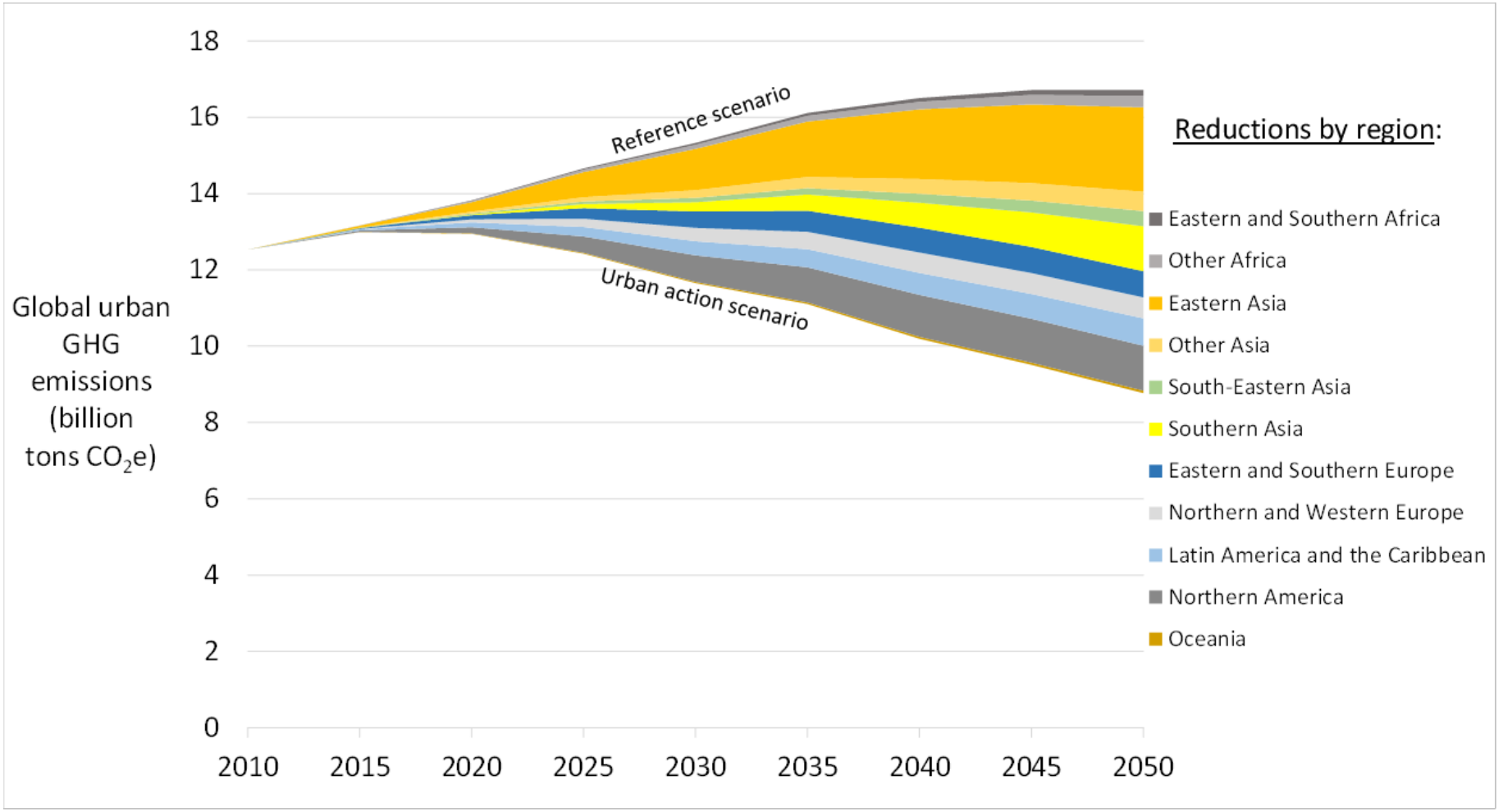
Urban abatement potential concentrated in… Asia, North America, Europe



Country-by-country / regional breakdowns are indicative only and have not been vetted with in-country analysis. For this reason, please do not cite or quote.

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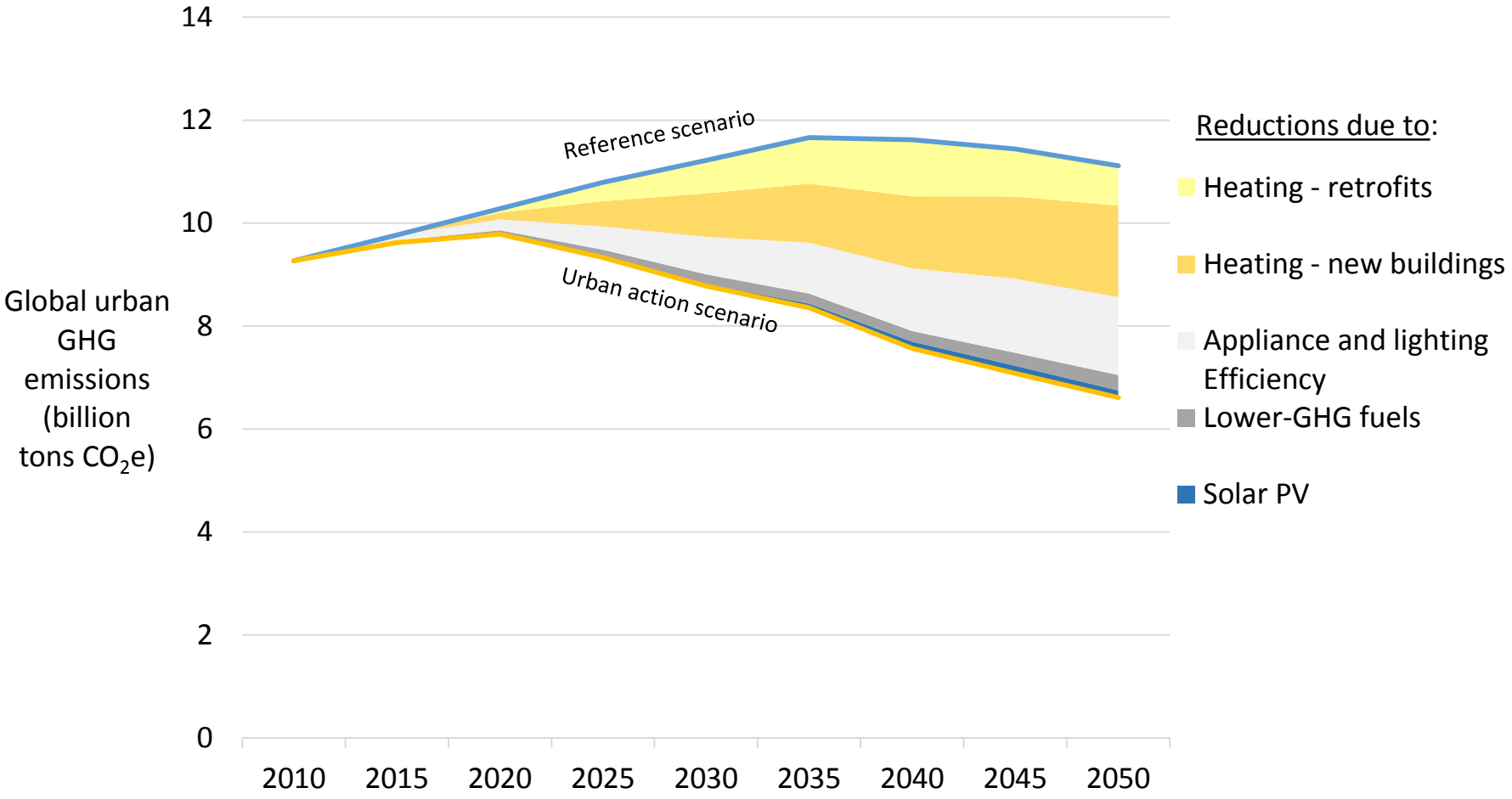
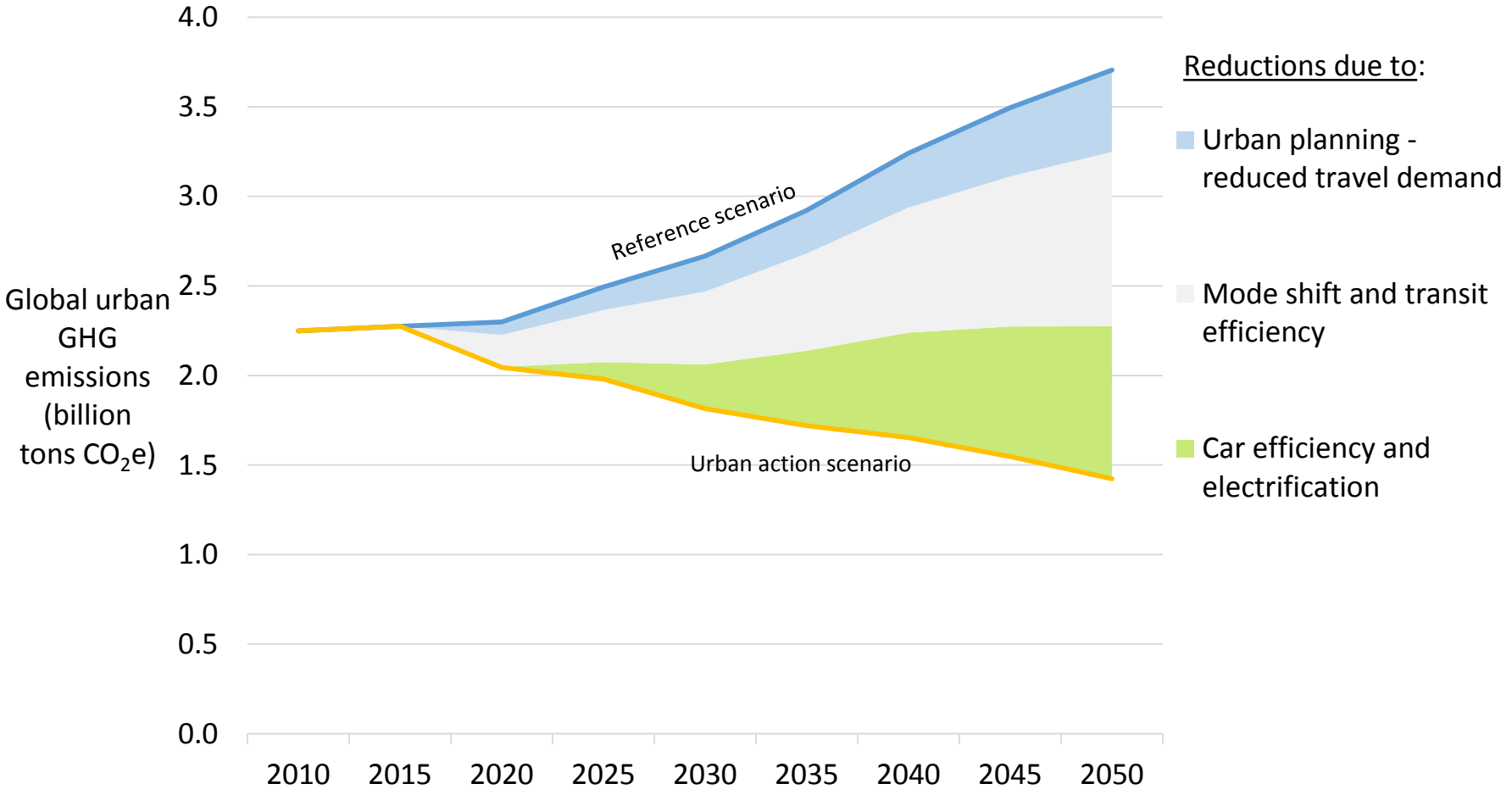
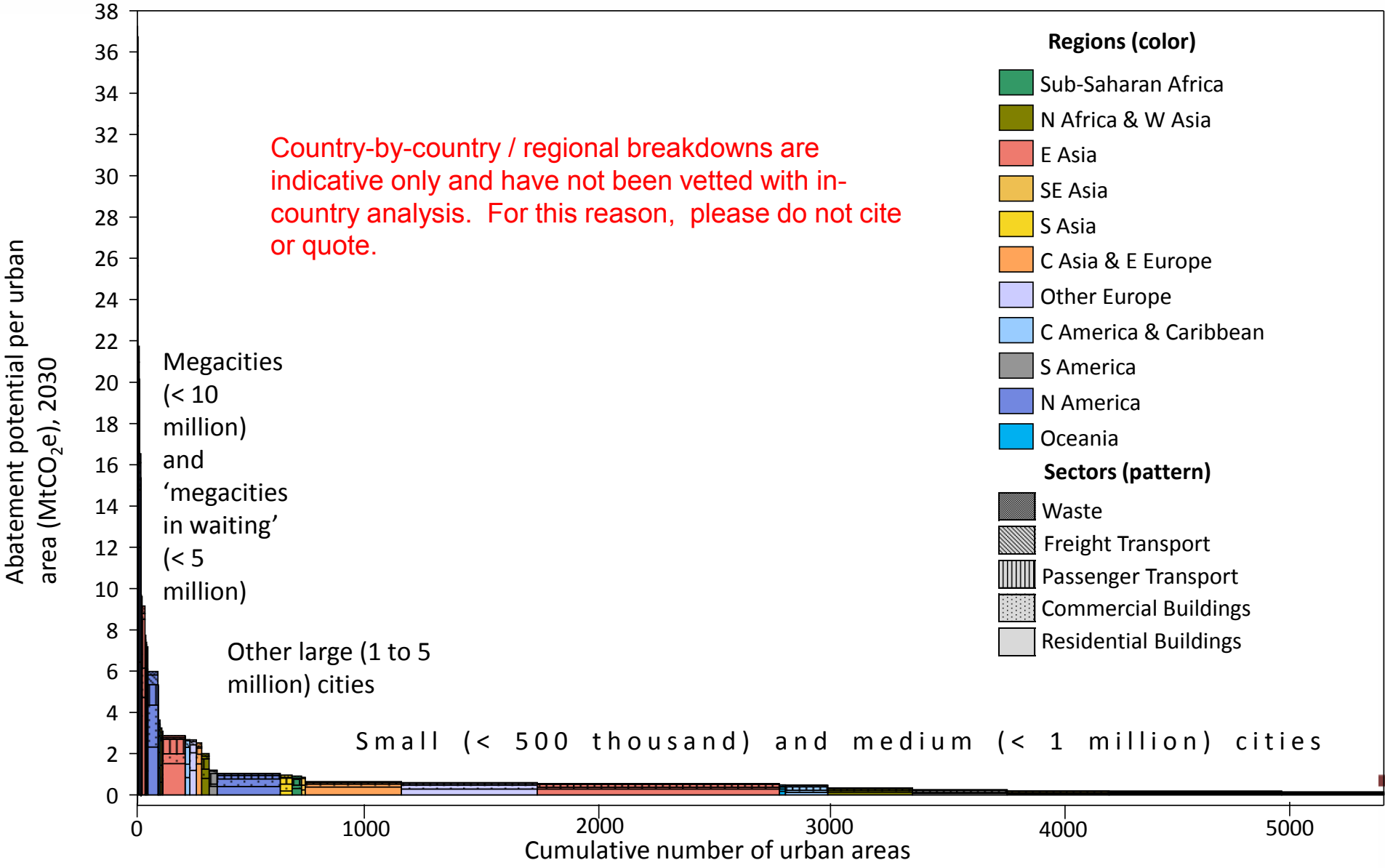
In buildings, heating dominates..



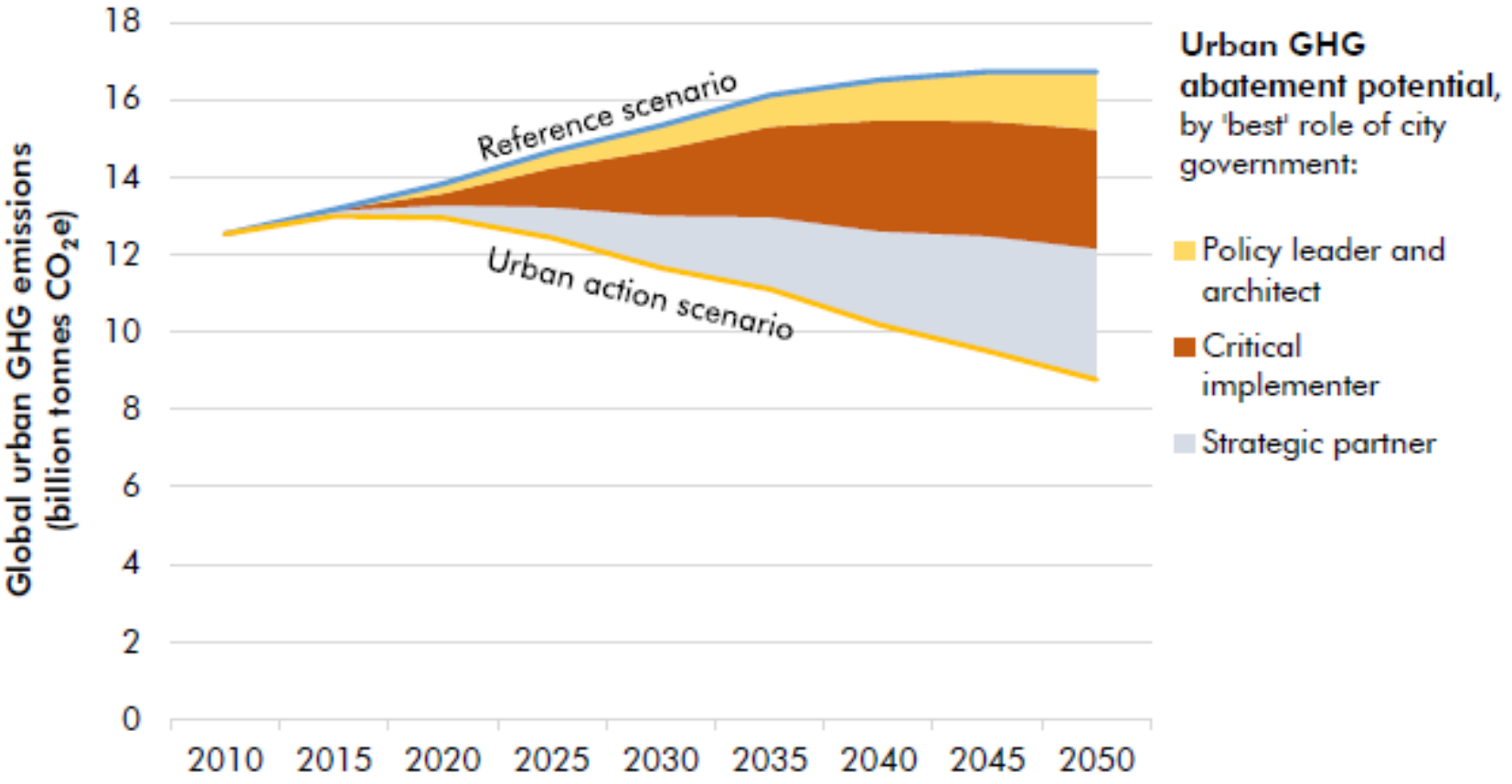
In passenger transport,… urban form and transit dominate…



But… abatement potential is diffuse: half in highest-emitting ~660 areas, half in lowest 5,000



3. What is the most appropriate role for city governments in realizing this potential?



Source: Broekhoff, D., P. Erickson, and C. Lee, 2015. *What cities do best: Piecing together an efficient global climate governance.* Stockholm Environment Institute, November 2015. Funded by Bloomberg Philanthropies.

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When is city or national involvement most appropriate?

City government involvement in climate policy is appropriate where success depends on…	National or state involvement in climate policy is appropriate where success depends on…
• Existing local government capacities • Access to local data and information • Mobilization of local resources • Responsiveness and tailoring to local needs and circumstances • Communication and engagement with local stakeholders • Adaptability to changing (local) conditions • Integration with other local policy objectives • Targeted mitigation measures (contained within city boundaries) with low leakage risks	• Achieving economies of scale • Economy-wide market transformation effects • Coordinating actions across multiple jurisdictions • Avoiding in-country leakage of emissions • Avoiding free-riding or "race to the bottom" behaviour among subnational jurisdictions

“Best” roles for cities

- ***Policy architects and leaders***
  - Urban spatial planning
  - Public transit
- ***Critical implementers***
  - Building code implementation and enforcement
- ***Strategic partners***
  - EE information and outreach
  - EV infrastructure deployment
  - Distributed energy resource zoning/permitting

National & state government roles

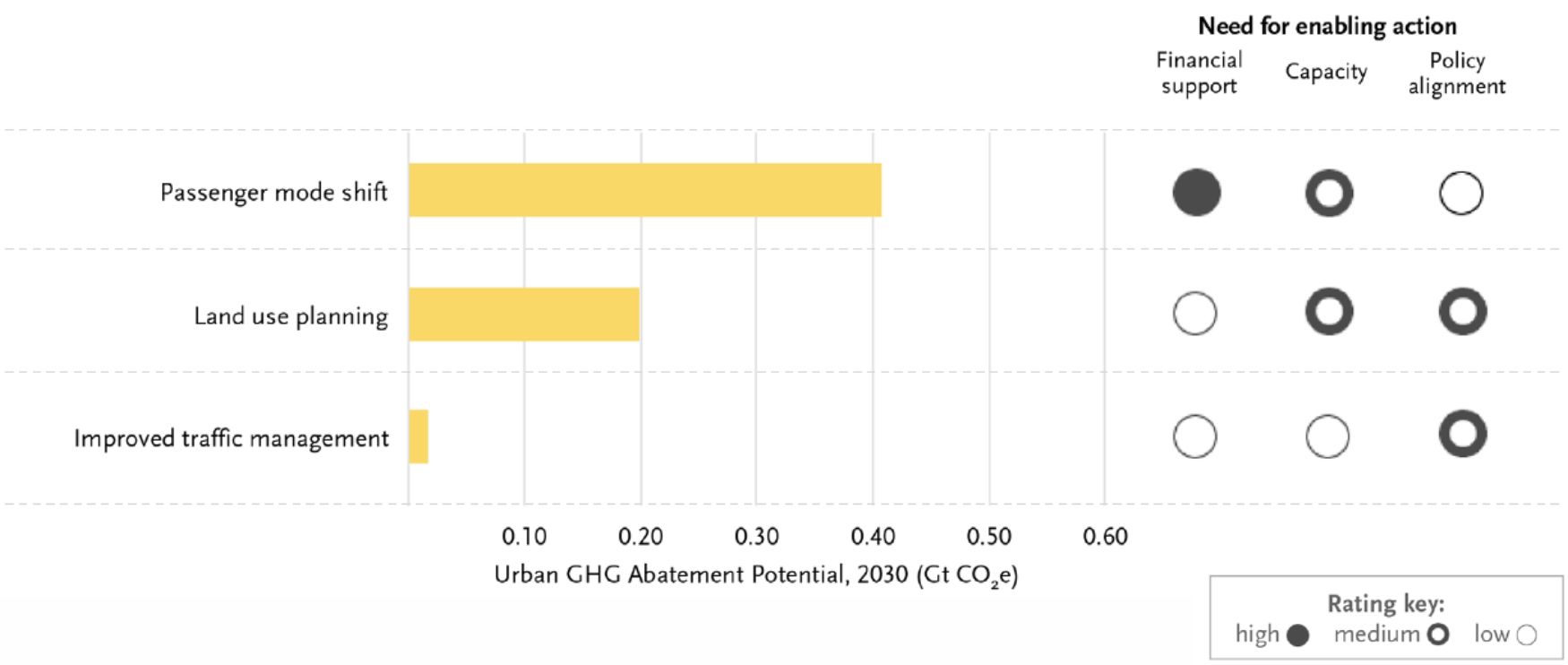
- ***Lead***
  - Efficiency standards (buildings, appliances, vehicles)
  - Distributed energy policies (e.g., rooftop solar)
- ***Implement***
  - Vehicle & appliance efficiency standards
- ***Coordinate***
  - Multi-jurisdiction transportation planning
- ***Enable***
  - Enhance local capacities & authority

Key enabling actions

- ***Provide, or improve access to, local government financing***
  - transportation infrastructure
- ***Strengthen local government capacities & governance structures***
  - building code enforcement
- ***Align policies and eliminate conflicts***
  - enable local autonomy (e.g., for congestion charges)

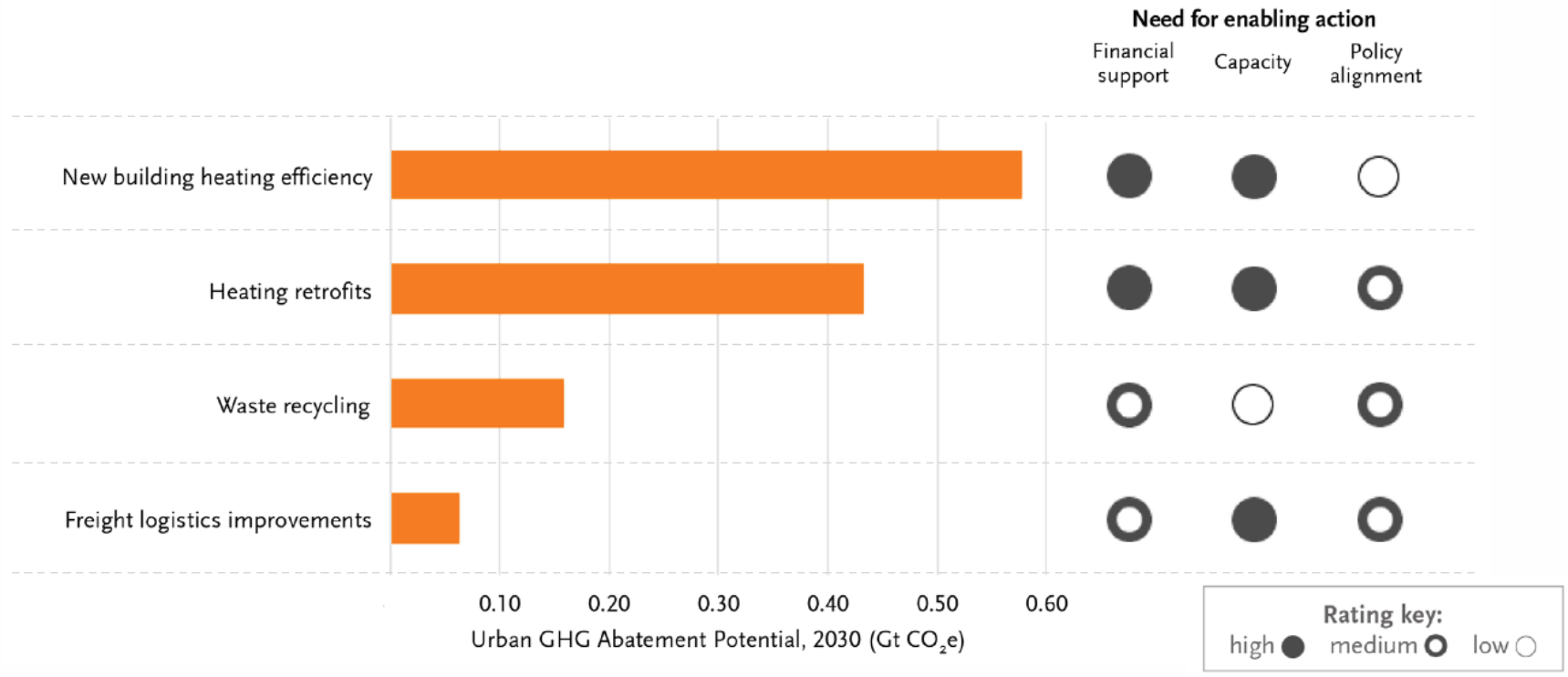
Cities as policy leaders

- Approximately 20% of urban action mitigation potential…



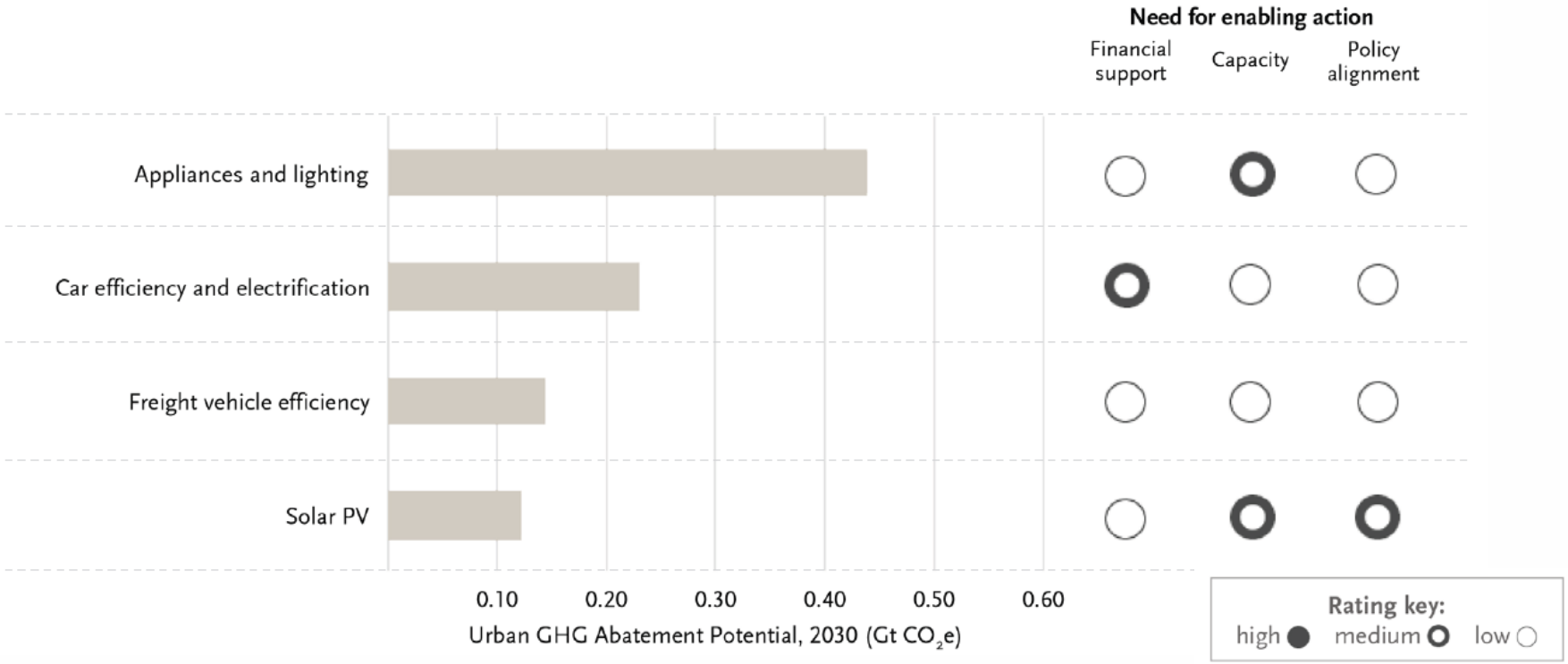
Cities as critical implementers

- Approximately 40% of urban action mitigation potential…



Cities as strategic partners

- The remaining 40% of urban action mitigation potential…



Key messages

1. Under an aggressive, global program of action, cities could make up about 15% of the emissions “gap”
2. Cities contribute about a third of future “carbon lock-in” annually, through inefficient buildings and sprawling urban forms
3. Engagement and coordinated action from national governments could help cities achieve reductions more quickly, fully, and cost-effectively, and increase the chances of realizing full abatement potential

Discussion topics

- The “lighthouse” vision –
  - “Cities are centers of innovation – this is where climate change will be solved” - NY deputy mayor
- The “workhorse” vision –
  - Abatement potential is widely dispersed
  - Many cities face pressing finance and capacity needs
  - National coordination could be highly beneficial
  - Cities should focus on “what cities do best” – local responsiveness, implementation, strategic partnering

Discussion topics

- What is the right strategic balance between these visions? Between national and city-level engagement?
- How do we work towards more vertically integrated policies to achieve deep GHG reductions?

Thank you

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