

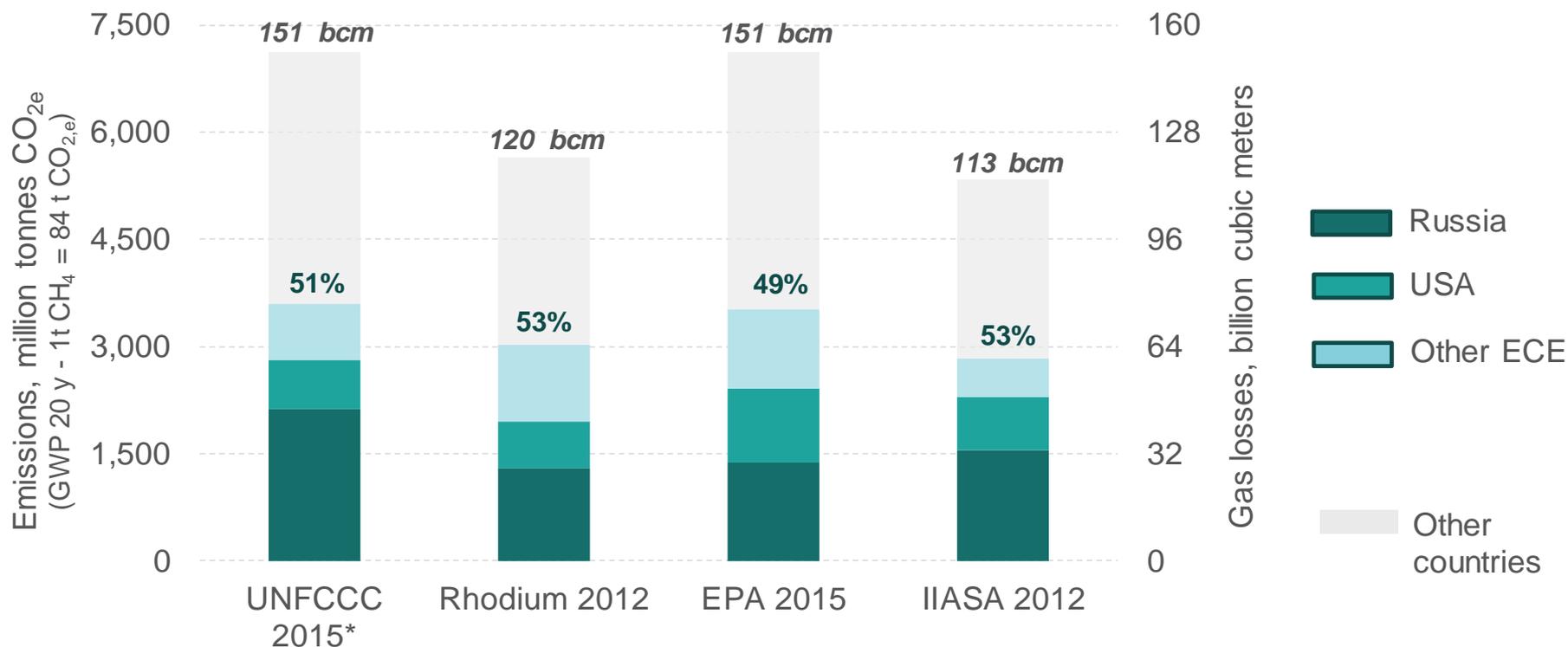
Methane Management in Extractive Industries (Upstream Oil and Gas / Downstream Gas)

-Joint UNECE/GMI Project

Torleif Haugland, Carbon Limits
Toronto, 17th April 2018

ECE region accounts for half of global oil and gas methane emissions

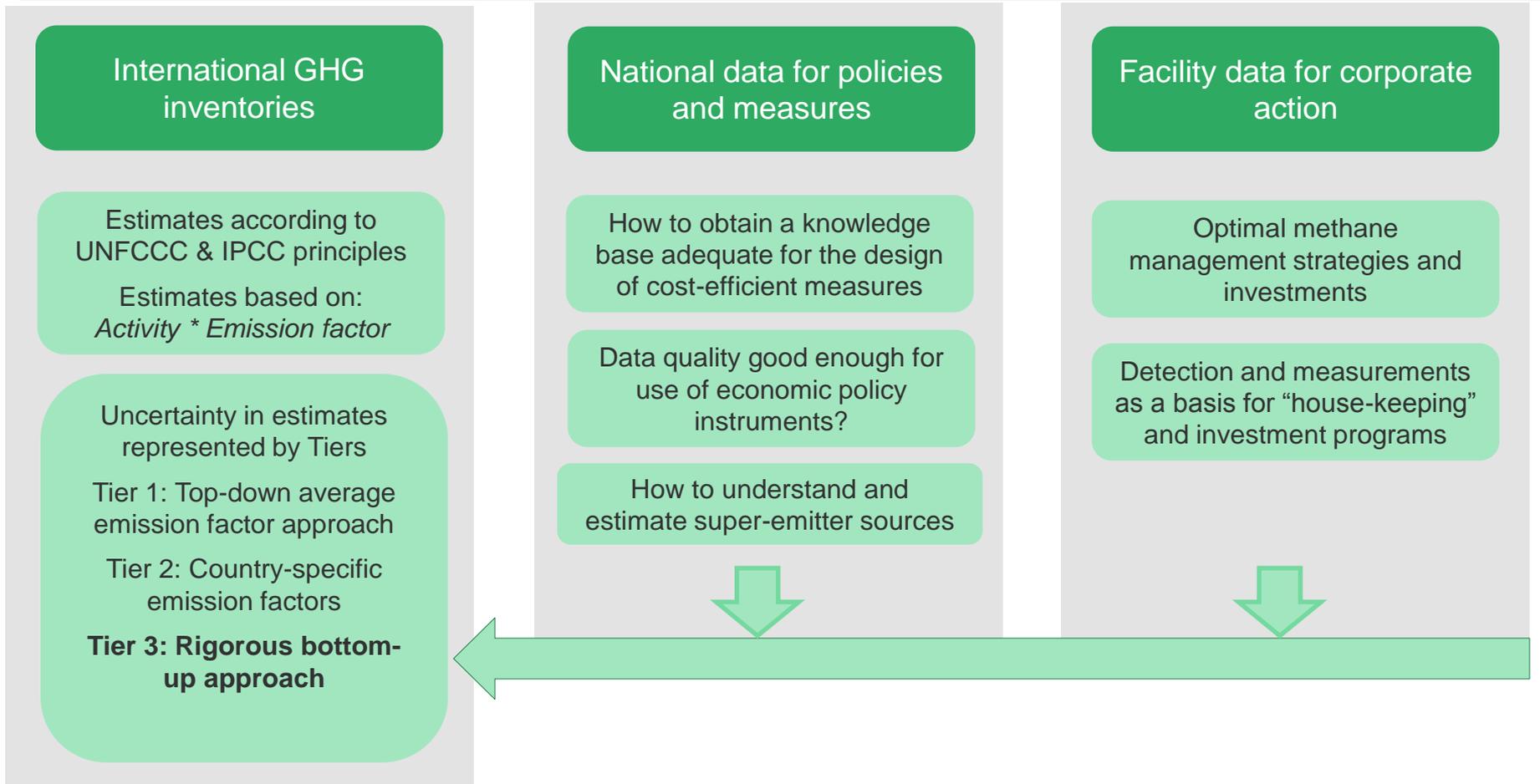
...country specific estimates differ greatly by data source



* Data for 2015 for Annex I countries and latest report for non-Annex I countries. US EPA estimate is used for total global methane emissions from the oil and gas sector.

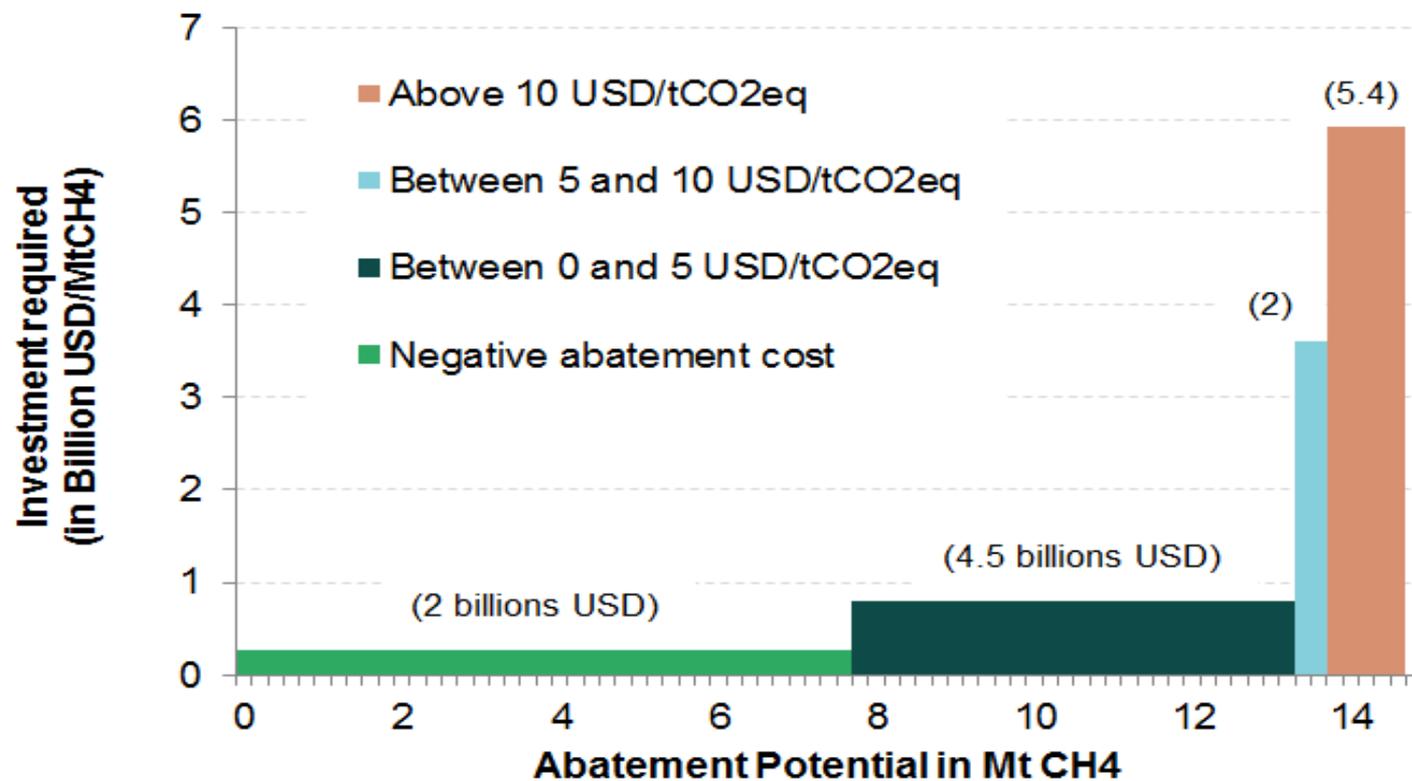
MRV at three levels – serving different purposes

... but for the same broader objective



Low-hanging fruits

Abatement costs and Investment requirement in the “EBRD Region”



Summary of the gaps

Emission estimates and MRV practices

Large discrepancies in emission estimates by country and by oil & gas supply chain segment

Large share of estimates still based on Tier 1:

- 75% upstream
- 40% downstream

Much valuable site specific data is “lost” and not being used for mitigation and/or statistical purposes

Knowledge base inadequate for design and implementation of effective and cost efficient policies and measures

Mitigation

Lack of awareness of negative cost options

Societal vs company costs – carbon pricing needed to spur mitigation

New approaches can help in spurring profitable emission reduction opportunities