

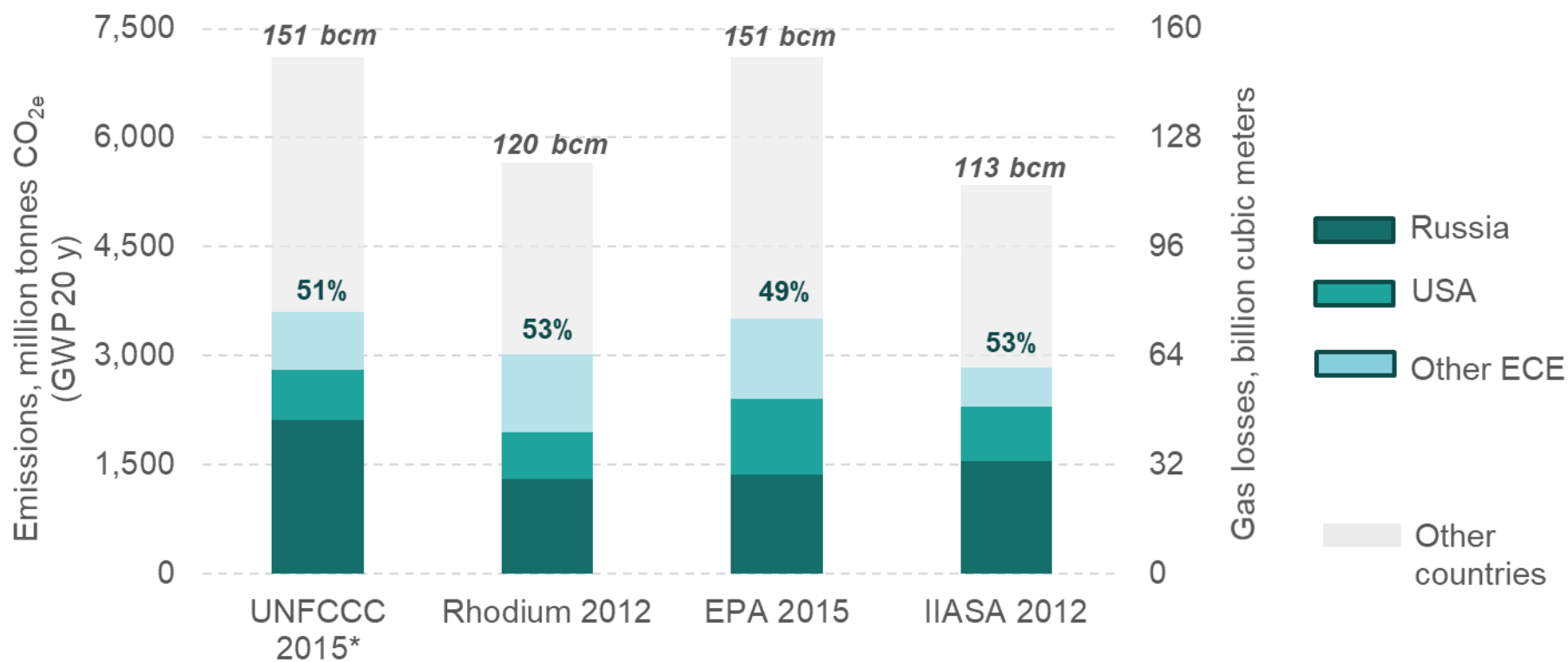
Methane Management in Extractive Industries (Upstream Oil and Gas / Downstream Gas)

-Joint UNECE/GMI Project

Torleif Haugland, Carbon Limits
Geneva, March 2018

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

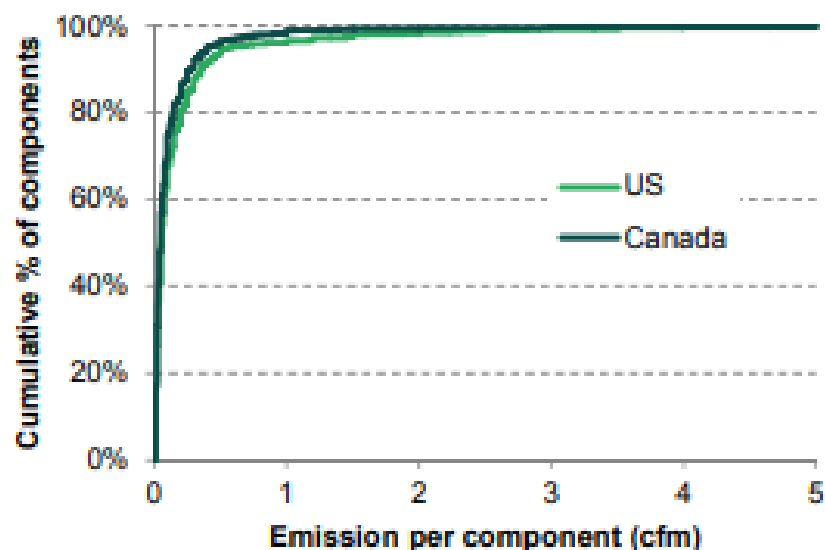
...country specific estimated differs greatly by data source



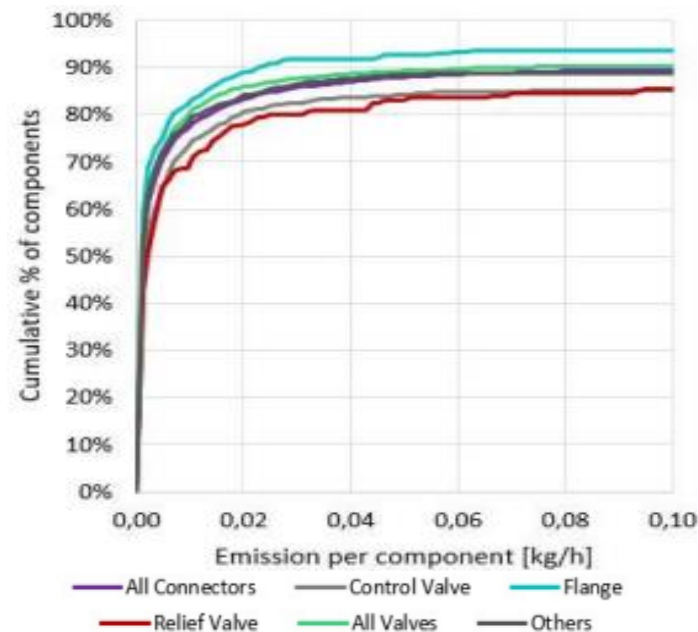
* Data for 2015 for Annex I countries and latest reports for non-Annex I countries. US EPA estimate is used for total global methane emissions from the oil and gas sector.

A small share of emission points represents a large share of the emissions. And they are generally not well accounted for in the overall methane emission reporting

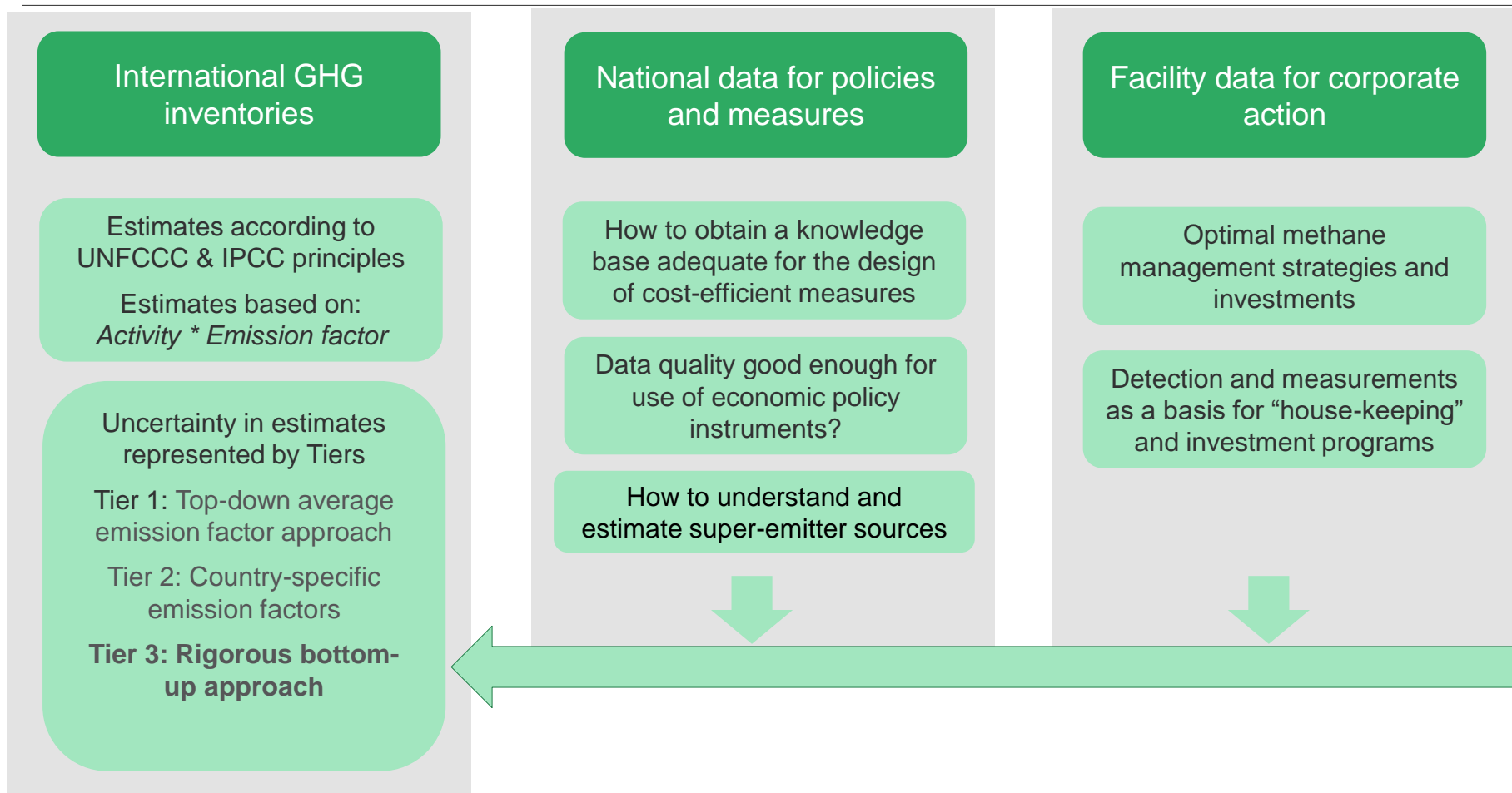
Example from US and Canada: 5% of the emitting components represents about 50% of the emissions
(based on a sample of 60,000 measurements)



Example from Europe: 11% of the emitting components is responsible for most of the emissions
(based on a sample of 800 000 data points)

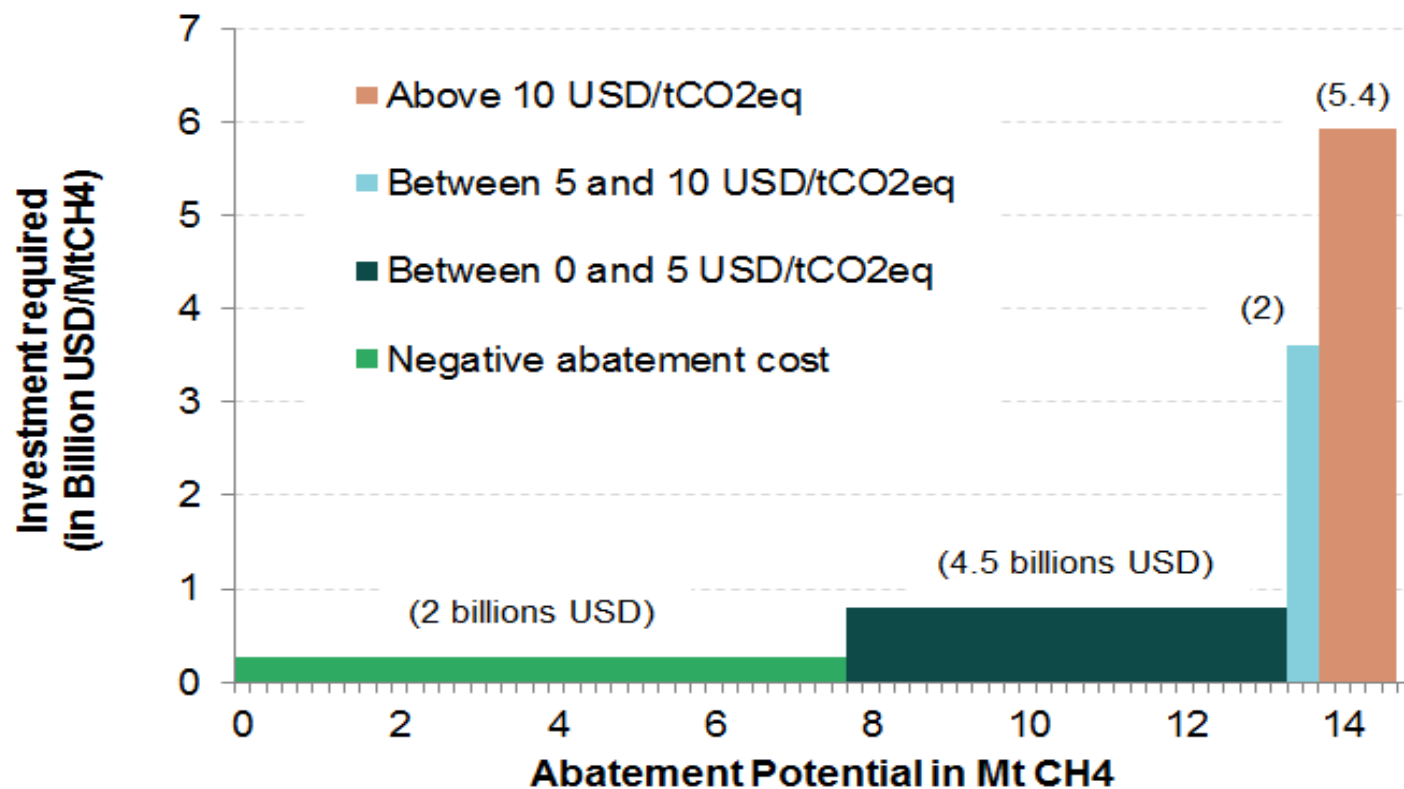


MRV at three levels – serving different purposes ... but for the same broader objective



Low-hanging fruit

Abatement costs and Investment requirement in the “EBRD Region”



Summary of the gaps

Emissions 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

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

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

Knowledge base inadequate in order to design and implement effective and cost efficient policies and measures