



# Brazilian Cities in Multilevel Governance of Climate Change

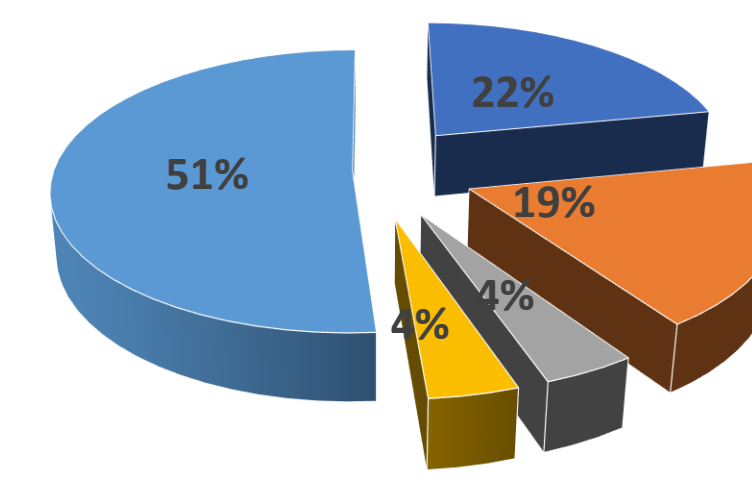
Laura Silvia Valente de Macedo  
[laurasvmacedo@gmail.com](mailto:laurasvmacedo@gmail.com)

## Multilevel (?) Climate Governance in Brazil

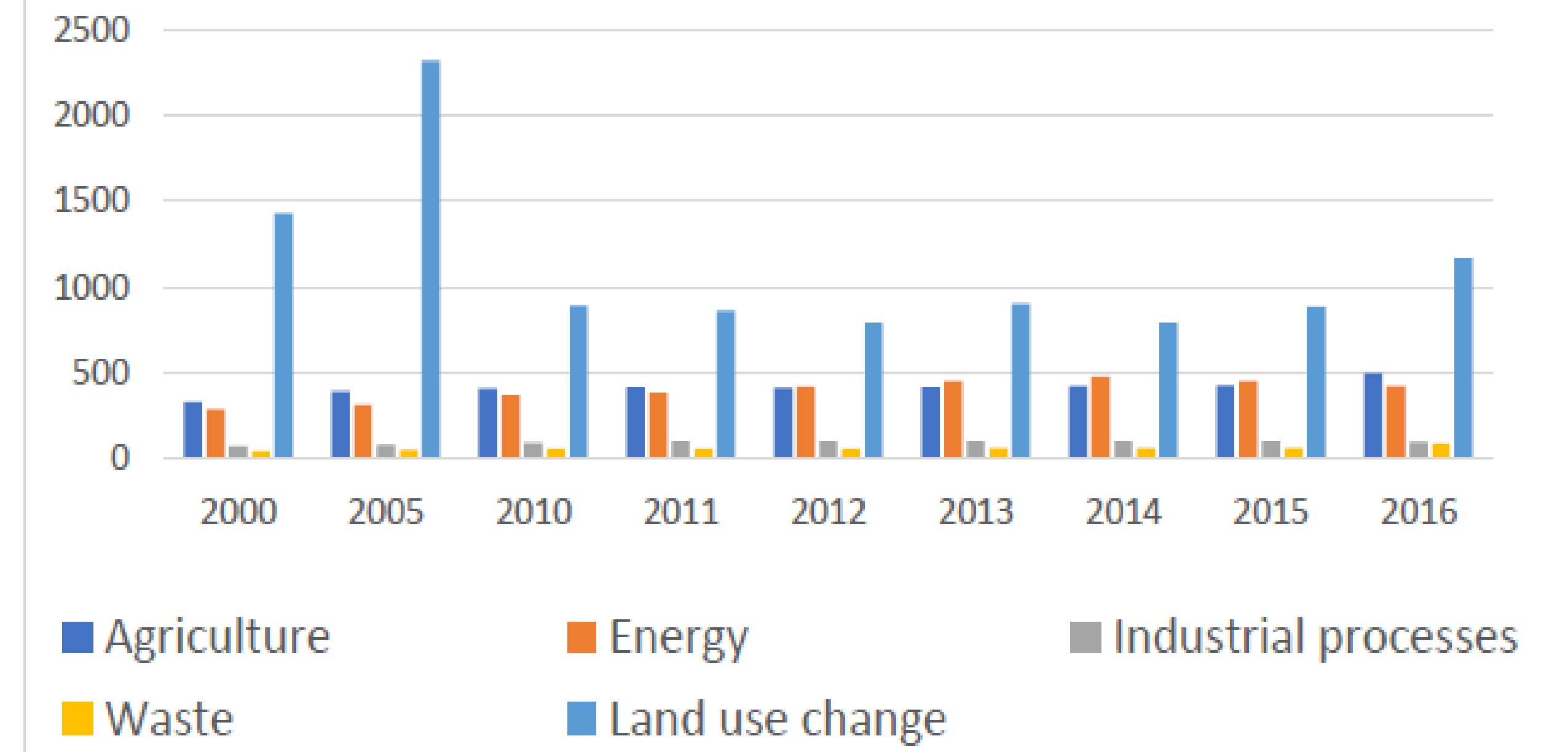
### Context

- > 200 mi inhabitants, 84% in cities (2016)
- 9<sup>th</sup> Economy 2017 - GDP recovering (major recession 2014-2017)
- Emissions from LULUCF: 73% of total - 7<sup>th</sup> largest emitter 2016
- Energy : 19% of total – Scenario for Pre-salt emissions?
- Federation – 3 equal powers Federal, State, Municipal
- NDC - absolute GHG emissions reduction goals of 37% by 2025 and 43% by 2030, relative to 2005 levels
- Pledge: 45% renewables (including hydroelectric power) in energy grid,
- End illegal deforestation & restore 12 mi hectares of tropical forest in 15 years
- Climate governance in Brazil
- 1988 Constitution + Climate Law (2009) + 12 sectorial plans: focus on LULUCF
- Synergies with national (urban) policies: eg Sanitation (2007); Waste (2010); Urban Mobility (2012)

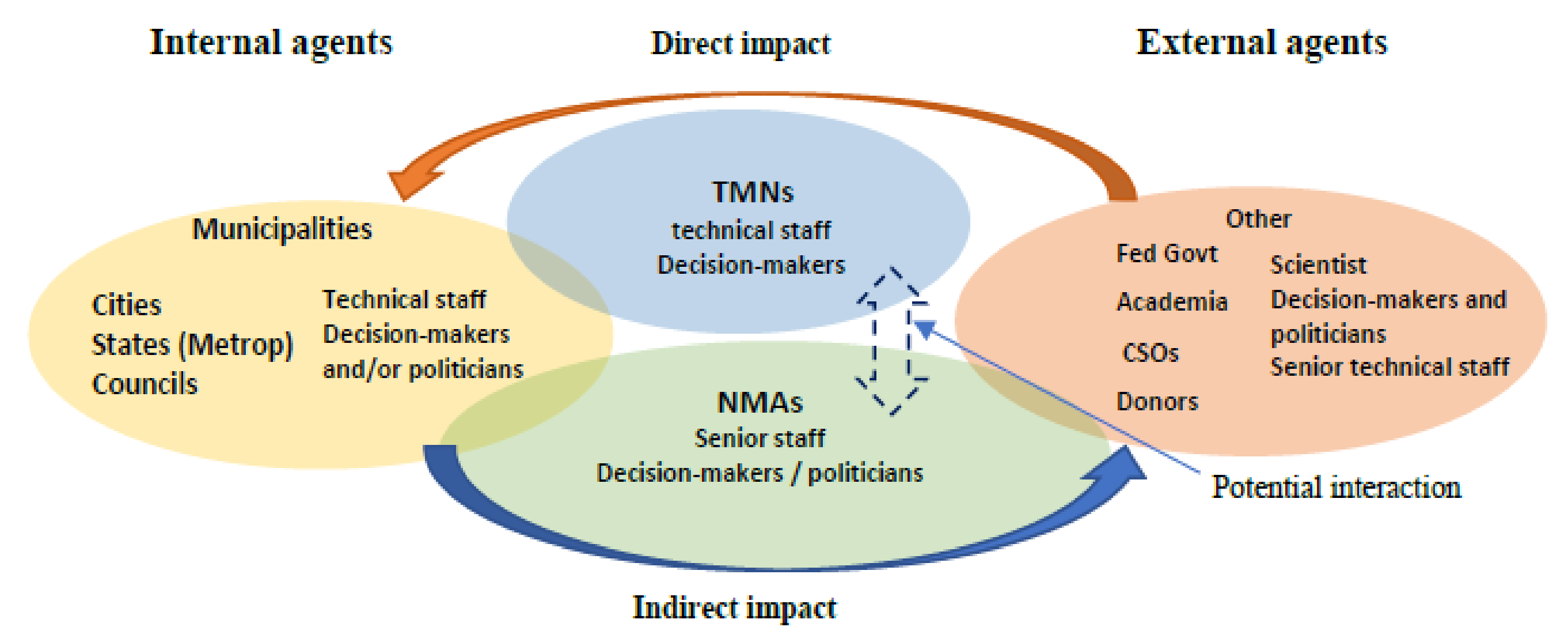
Brazil's GHG emissions share per sector (%) in 2016



Brazil's GHG emissions (MtCO2e) 2005 - 2016



Roles and interactions



## Local climate action

Brazilian association municipal environmental departments (Anamma) Survey

By April 2017

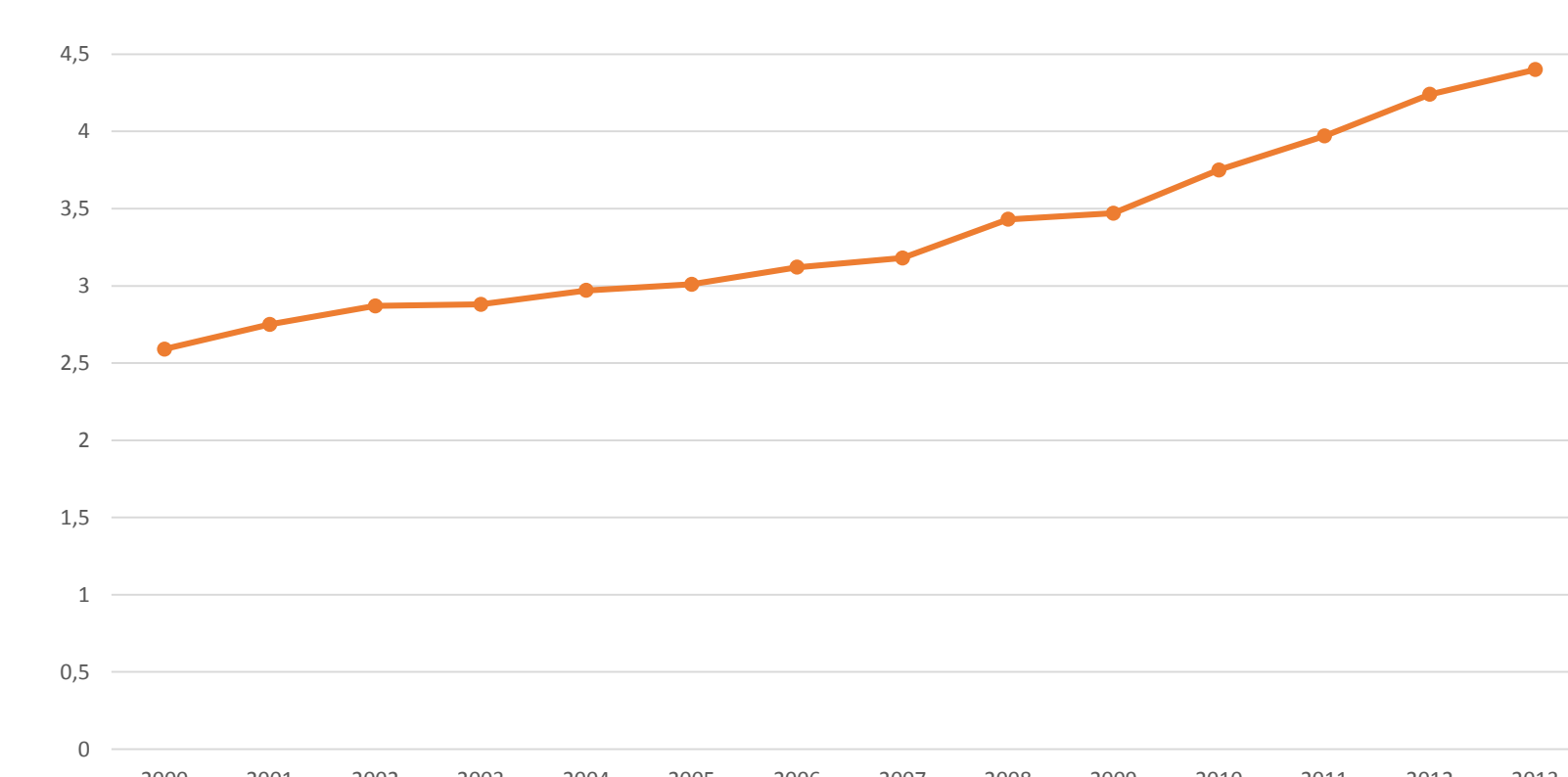
- 433 respondent municipalities (7.8% of total 5,570)
- 240 (55%) have some climate change activities: 10 capital cities + 1 metropolis + 1 medium + 2 large cities – CoM / ICLEI members
- 11 capital cities - GHG emission inventories + climate related policies are ICLEI members (estimated population of 33,326,765 inhabitants in 2016)
- 137 cities – waste management
- 128 reduce deforestation
- 156 improve urban mobility
- 44 incentivise renewable energies and/or energy efficiency
- 89 outreach and awareness building

## CoM Brazilian cities and network membership in 2017

CoM signatories	Transnational municipal networks						National Municipal Associations					
	ICLEI	C40	UCLG	METRO POLIS	100 RC	Merco ciudades	FNP	CNM*	ANA MMA	CB27	PCS	FONARI
Global membership	1183	90	240 K	138	100	326	658	4736	NA	27	165	41
Brazilian capital cities												
Belo Horizonte, MG												
São Paulo, SP												
Aracaju, Brasília, Curitiba, Fortaleza, Goiânia, Manaus, Natal, Porto Alegre, Recife, Rio de Janeiro, Salvador												
TOTAL 13	12	2	11	4	2	11	12	13	13	12	9	12
Other cities 21	19	2	12	8	2	13	1	21	16	-	5	7
Municipalities 34	31	4	23	12	4	24	13	34	29	12	14	19

## Benchmarks

### Belo Horizonte's GHG emissions, 2000 – 2013 (tCO2e)



### São Paulo's GHG emissions (GgCO2e) 2003-2011

