GLOBAL RESEARCH ALLIANCE
ON AGRICULTURAL GREENHOUSE GASES

Brazilian 3rd National Inventory

Alexandre Berndt
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Process:

- UNFCCC “hires” Ministry of Science and Technology;
- MST “hires” 5 Institutions:
  - Waste management;
  - Industrial processes;
  - Energy;
  - LULUCF;
  - Agriculture;
- Project budget mainly on scholarships;

MCTI- National Inventories and Estimative:

(MCT, 2006)

(MCT, 2010)

(MCTI, 2013)

(MCTI, 2014)

(MCTI, 2016)

Brazilian emissions

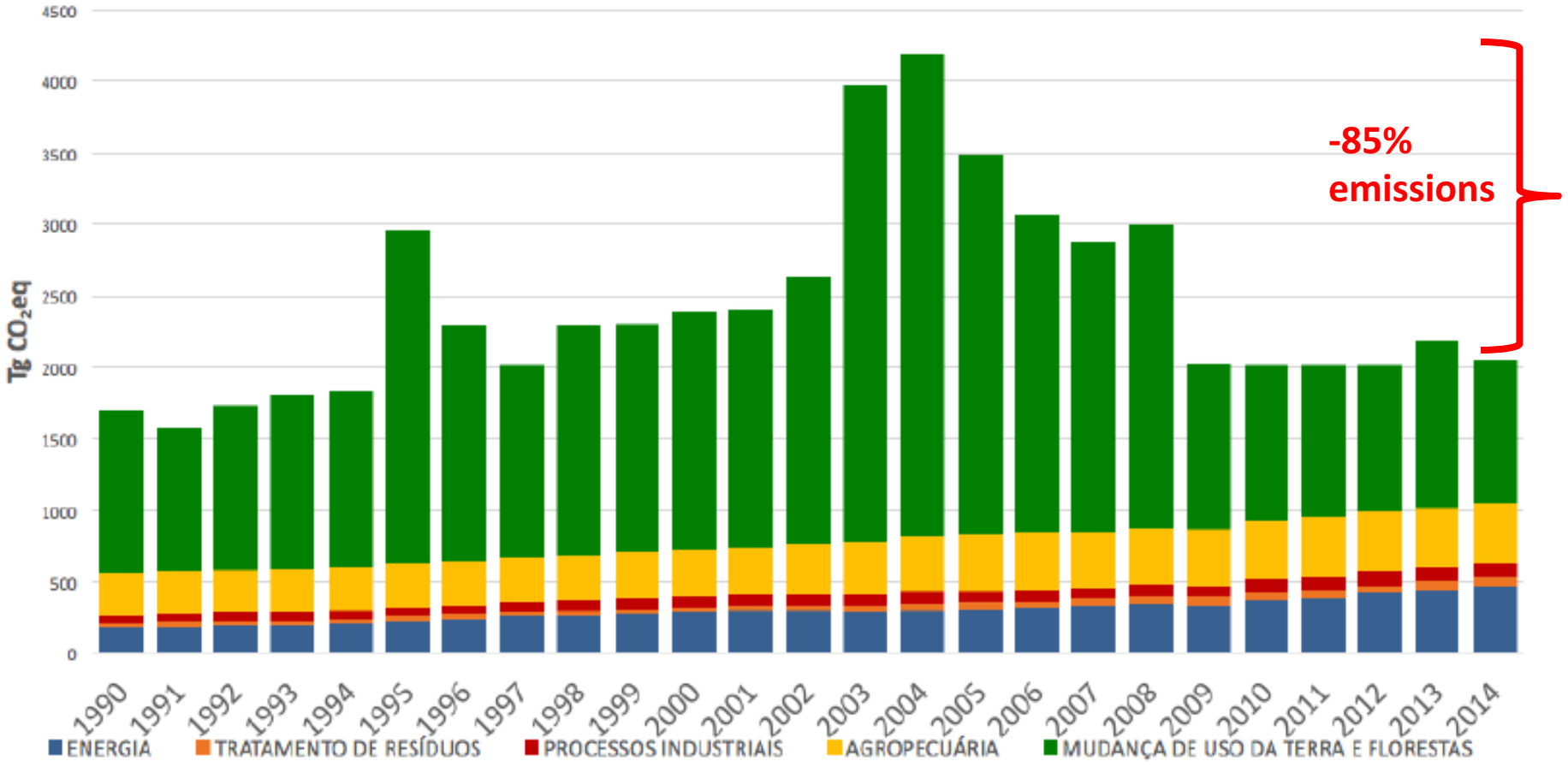
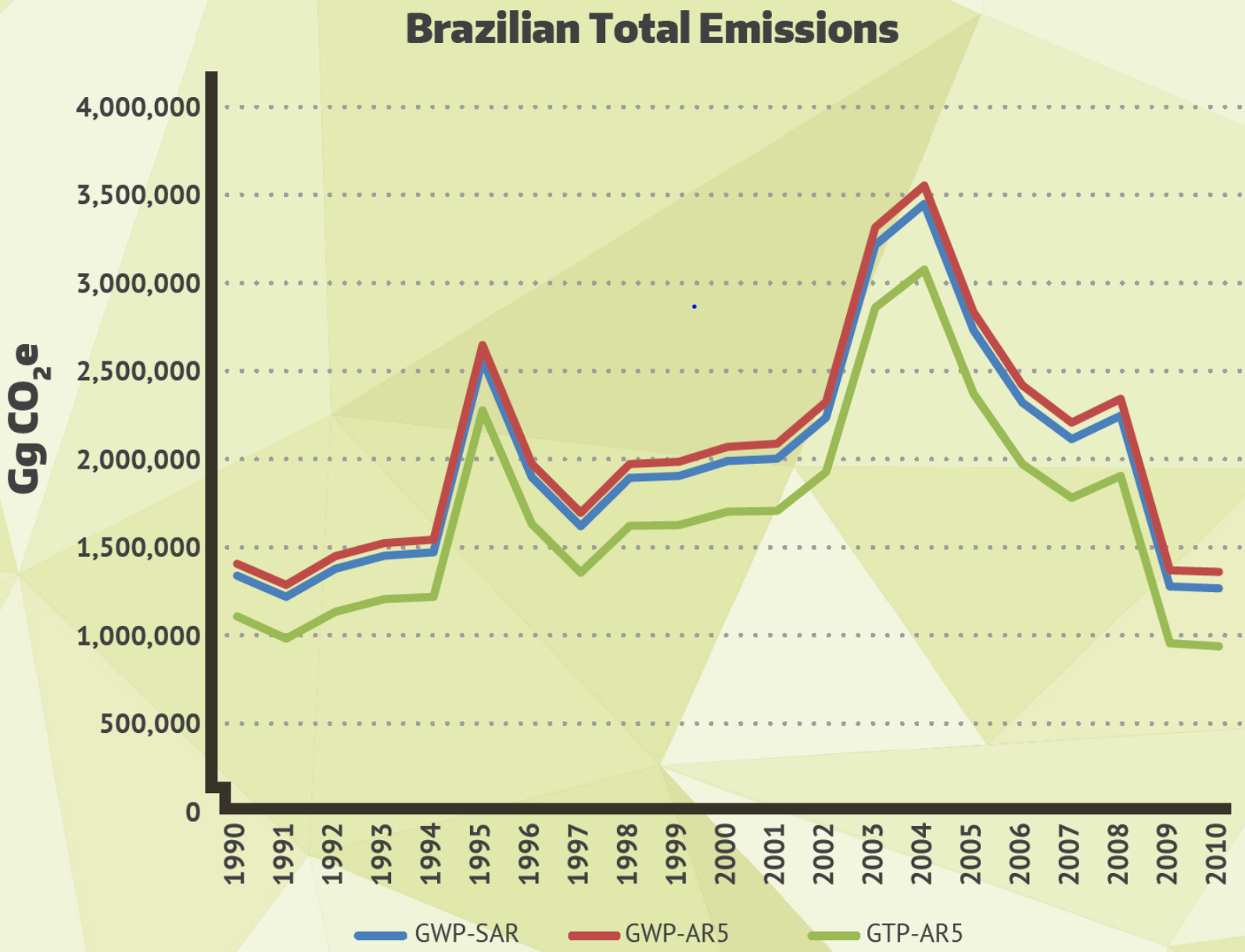


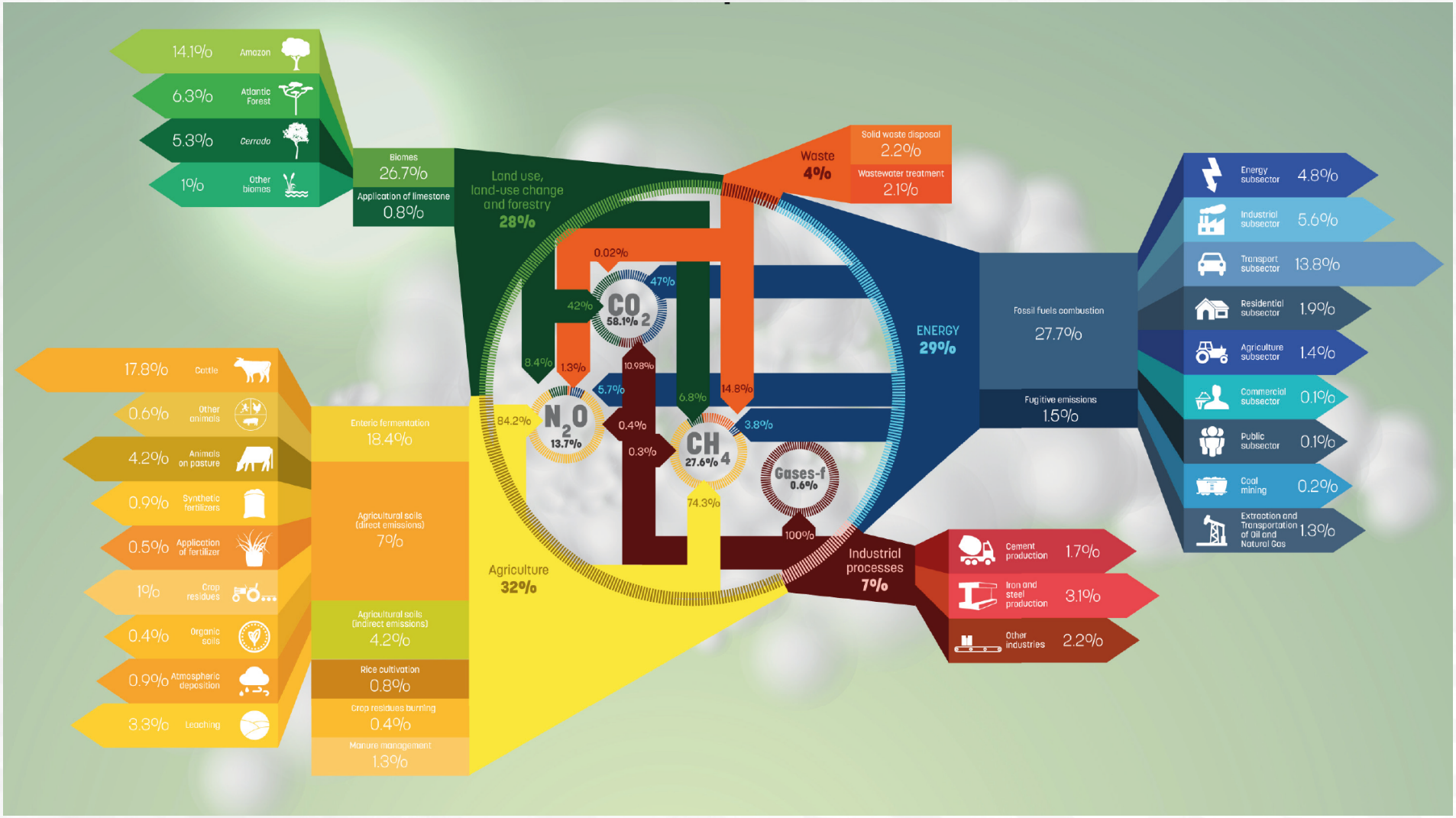
Figura II – Emissões brutas de gases de efeito estufa no Brasil, por setor, de 1990 a 2014 (Tg = milhões de toneladas).

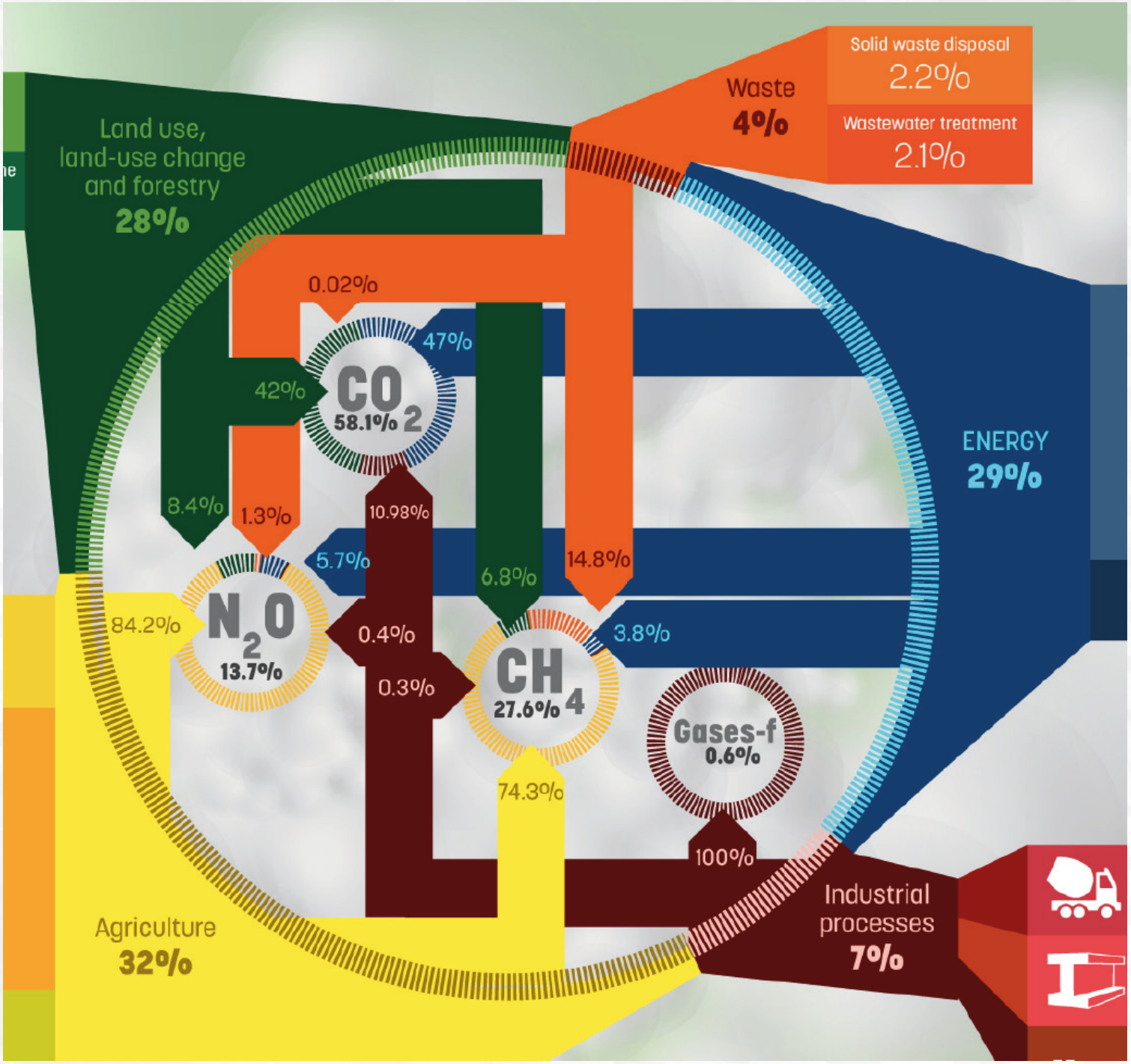
Fonte: MCTIC, 2016

FIGURE I

Evolution of CO_2e emissions by different metrics, 1990 to 2010




14.1% Amazon
6.3% Atlantic Forest
5.3% Cerrado
1% Other biomes
Biomes 26.7%
Application of limestone 0.8%
Land use, land-use change and forestry 28%
Waste 4%
Solid waste disposal 2.2%
Wastewater treatment 2.1%
0.02%
47%
42%
CO2 58.1%
8.4%
1.3%
10.98%
5.7%
6.8%
14.8%
84.2%
N2O 13.7%
0.4%
0.3%
CH4 27.6%
3.8%
Gases-f 0.6%
74.3%
100%
ENERGY 29%
Fossil fuels combustion 27.7%
Fugitive emissions 1.5%
Energy subsector 4.8%
Industrial subsector 5.6%
Transport subsector 13.8%
Residential subsector 1.9%
Agriculture subsector 1.4%
Commercial subsector 0.1%
Public subsector 0.1%
Coal mining 0.2%
Extraction and Transportation of Oil and Natural Gas 1.3%
17.8% Cattle
0.6% Other animals
4.2% Animals on pasture
0.9% Synthetic fertilizers
0.5% Application of fertilizer
1% Crop residues
0.4% Organic soils
0.9% Atmospheric deposition
3.3% Leaching
Enteric fermentation 18.4%
Agricultural soils (direct emissions) 7%
Agricultural soils (indirect emissions) 4.2%
Rice cultivation 0.8%
Crop residues burning 0.4%
Manure management 1.3%
Agriculture 32%
Industrial processes 7%
Cement production 1.7%
Iron and steel production 3.1%
Other industries 2.2%


Land use, land-use change and forestry
28%
Waste
4%
Solid waste disposal
2.2%
Wastewater treatment
2.1%
ENERGY
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0.02%
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CO2
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5.7%
6.8%
14.8%
84.2%
N2O
13.7%
0.4%
0.3%
CH4
27.6%
3.8%
Gases-f
0.6%
74.3%
100%
Agriculture
32%
Industrial processes
7%

Process option:

- Use detailed census data of 2006;
- Typification of the Brazilian Cattle-raising Municipalities;
- Tier 2 and/or local EF;
- This will cover 87% of the beef cattle population;

- Doubts?
- How to recalculate previous years?
- Will UNFCCC accept it?
- How much of the NDCs is covered?

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Embrapa

Tipificação de Municípios Pro
de Bovinos no Brasil

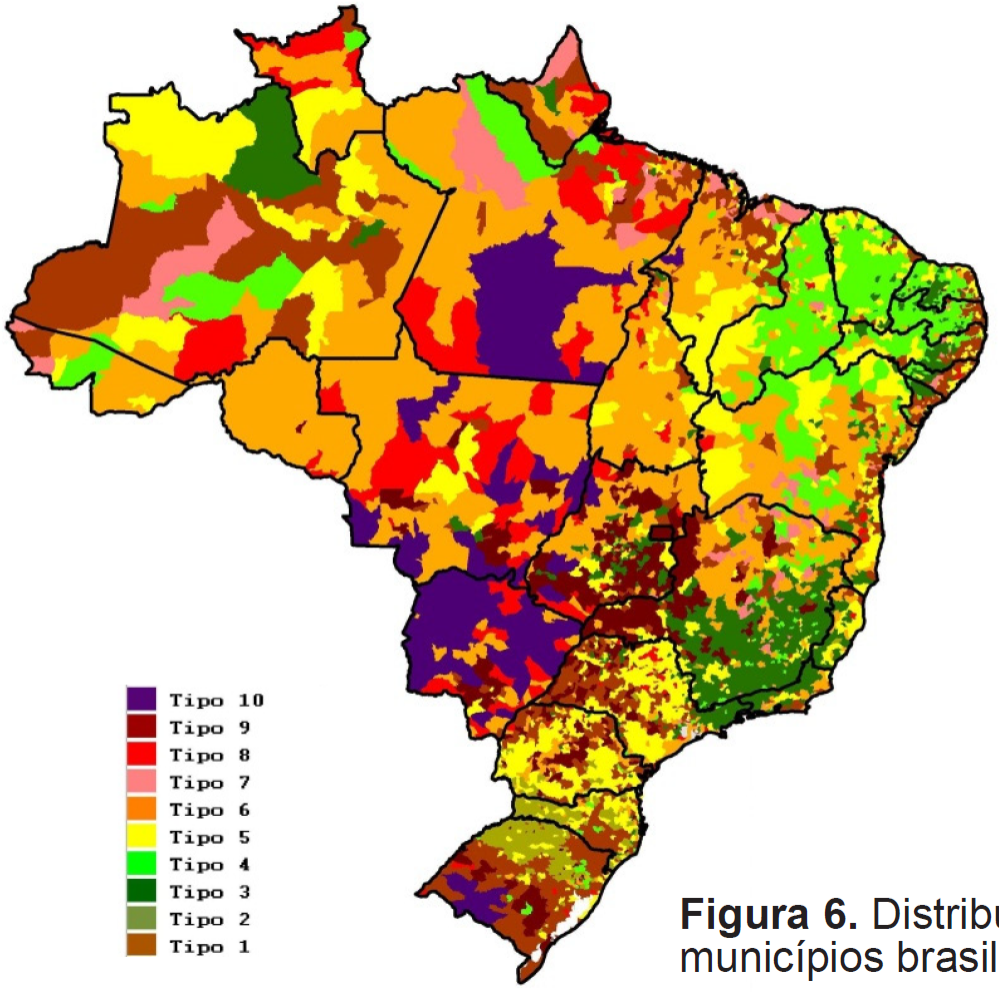

Figura 6. Distribuição
municípios brasileiros

Embrapa 40

Emission factors:
IPCC Tier 2 + Local EF
PECUS Network
II SIGEE – 506 pg

Gap: Correlated activity data

GRA:

- Share experiences in LA countries;
- Focus on NDCs related to livestock;
- Harmonize National Communications;
- Sensibility to capture mitigation strategies?

Embrapa

MINISTÉRIO DA AGRICULTURA, PECUÁRIA E ABASTECIMENTO

BRASIL GOVERNO FEDERAL