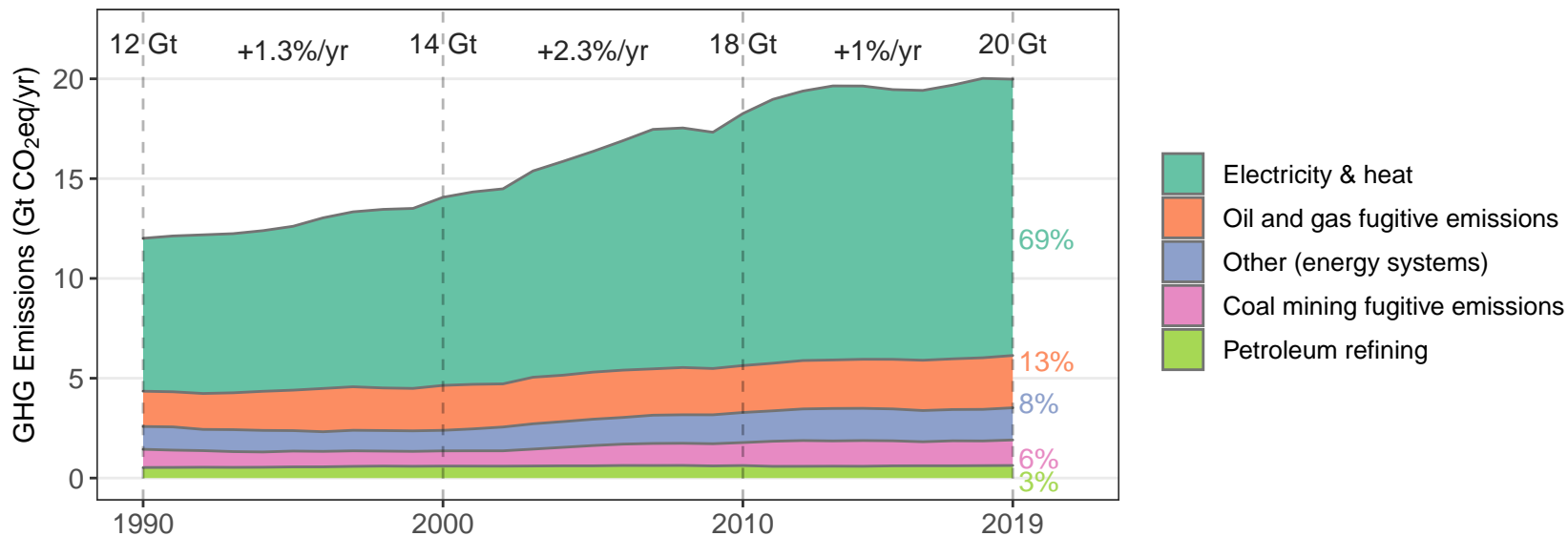
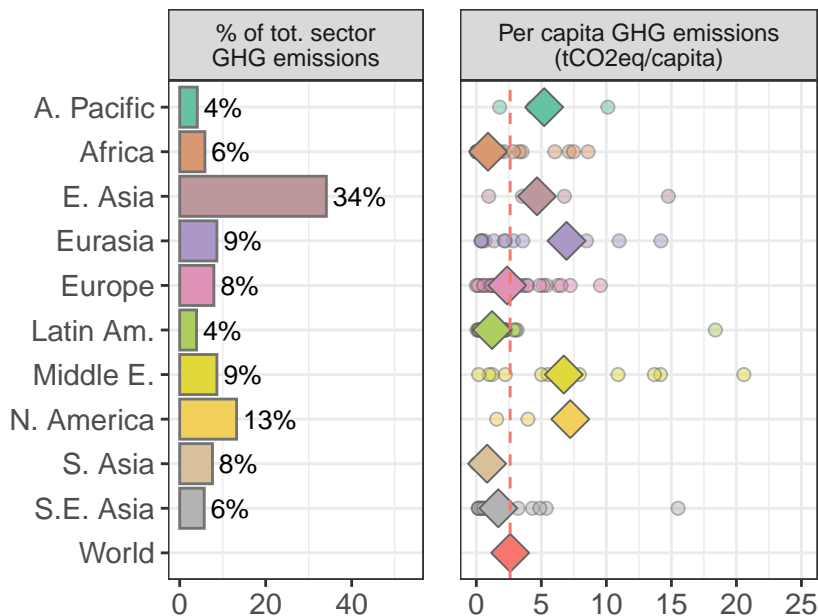


a. Energy systems global GHG emission trends by subsectors



b. Emissions by region in 2019  
(all GHGs)



c. Avg. annual change in kaya factors 2010–2019  
(CO<sub>2</sub> only)

| CO <sub>2</sub> | Carbon intensity | Energy intensity | Energy cons. | GDP/pop | Pop   |
|-----------------|------------------|------------------|--------------|---------|-------|
| -0.3%           | +1.9%            | -3.5%            | -2.2%        | +1.2%   | +0.1% |
| +1.5%           | -0.6%            | -1.1%            | +2.1%        | +0.8%   | +2.4% |
| +3.9%           | -0.4%            | -2.1%            | +4.3%        | +6.1%   | +0.5% |
| -0.7%           | -0.8%            | -2%              | +0%          | +1.6%   | +0.5% |
| -3.2%           | -1.5%            | -3.5%            | -1.6%        | +1.5%   | +0.3% |
| +0.2%           | -0%              | -1.1%            | +0.2%        | +0.3%   | +1.1% |
| +3.1%           | +0%              | +0.6%            | +3.1%        | +0.2%   | +2.3% |
| -2.9%           | -2.4%            | -2.6%            | -0.4%        | +1.5%   | +0.7% |
| +4.6%           | +0.8%            | -2.3%            | +3.8%        | +4.9%   | +1.2% |
| +5.8%           | +1.8%            | -1%              | +3.9%        | +3.8%   | +1.1% |
| +1.2%           | -0.2%            | -1.9%            | +1.4%        | +2.3%   | +1.2% |

-- World average

● Growing (> +1%/yr)

● Stable (~0%/yr)

● Declining (< -1%/yr)