Appendix C-5

Update on the Brazilian Module of the SGM

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Structure of the Presentation

I - The Calibration Process: reference scenario

I.1 - GNP Growth

I.1.1 - Periods

a) 1990 - 2000: actual data
b) 2000 - 2020: official projections (source: IBGE)

I.1.2 - SGM Mainly Driving Forces (assumptions)

a) Population growth
b) Labor productivity growth

I.2 - Power Generation Sub-sectors Market Share

I.2.1 - Period: 1990 - 2020

I.2.2 - Source: Schaeffer and Szklo (2000)

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Structure of the Presentation

II - SGM Mainly Results

II.1 - Carbon Emissions

II.2 - Abatement Curves

III - Structural Changes due to Carbon Taxes

III.1 - On the Energy Sector : substitution of sources

a) Primary Energy
b) Power Generation Sub-sectors

III.2 - On the Economy as a whole

a) Energy Investments (usually not taken very well into account in bottom-up models, but very important variable to economic growth)
b) Macroeconomic Costs

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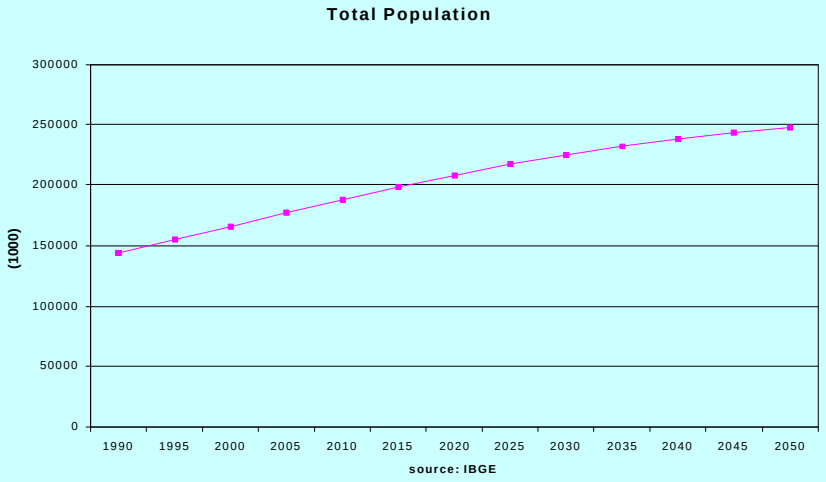
GDP driving forces: Population growth



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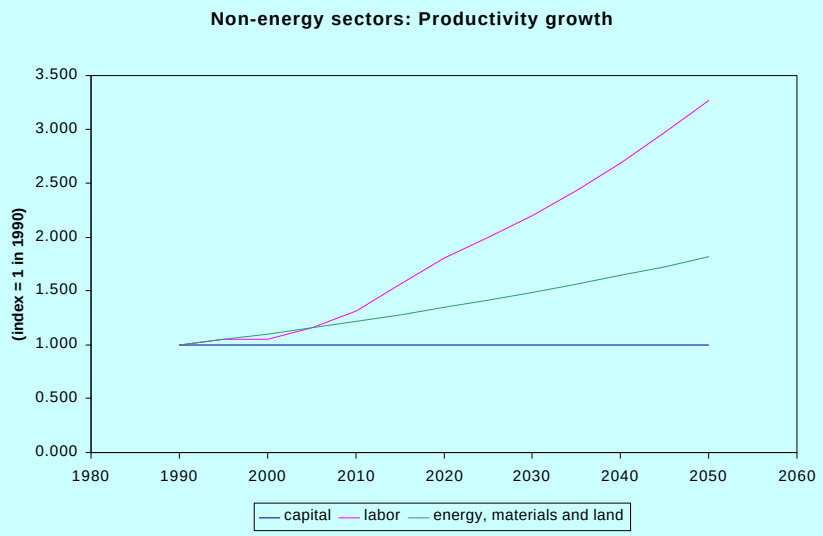
GDP driving forces: Productivity growth



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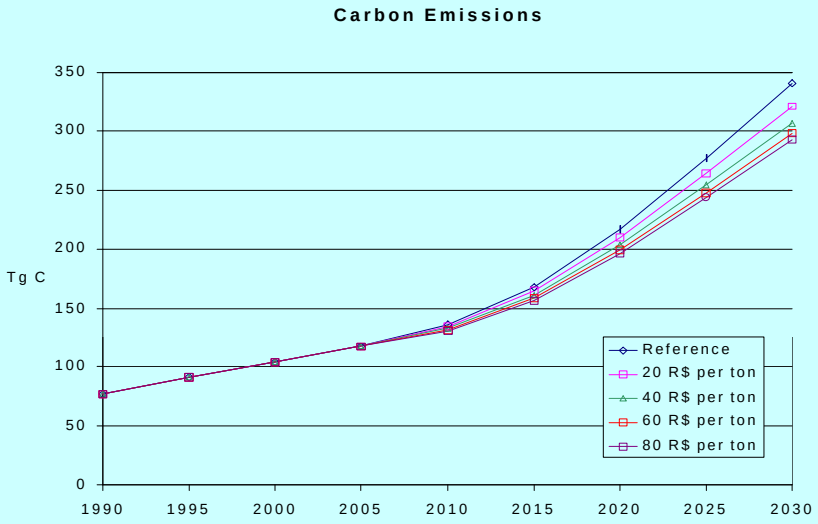
SGM Mainly Results: Carbon Emissions



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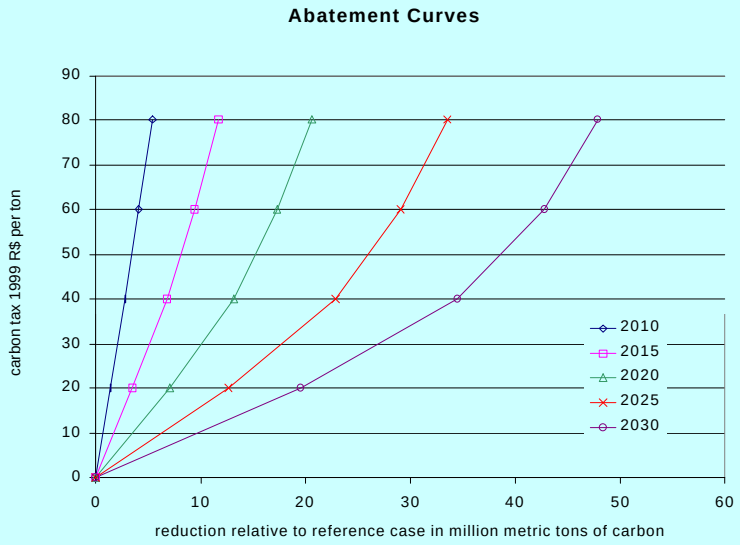
SGM Mainly Results: Abatement Curves



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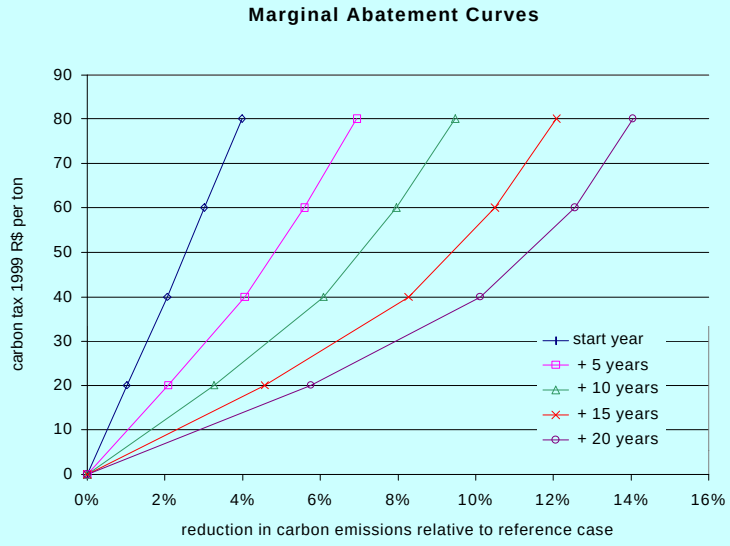
SGM Mainly Results: Marginal Abatement Curves



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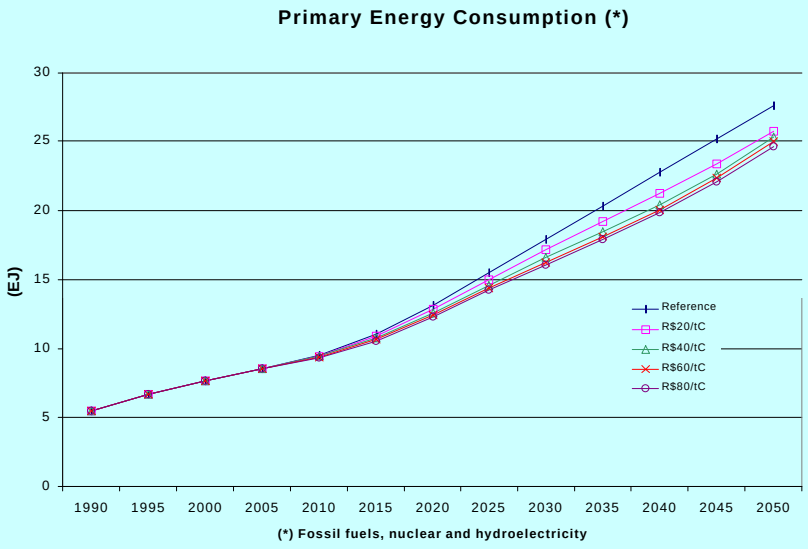
Changes on the Energy Sector: Primary Energy



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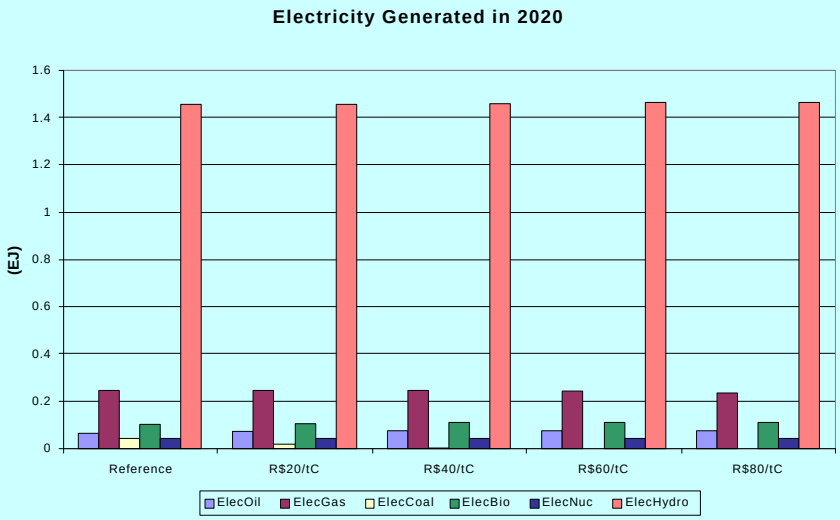
Changes on the Energy Sector: Power Generation



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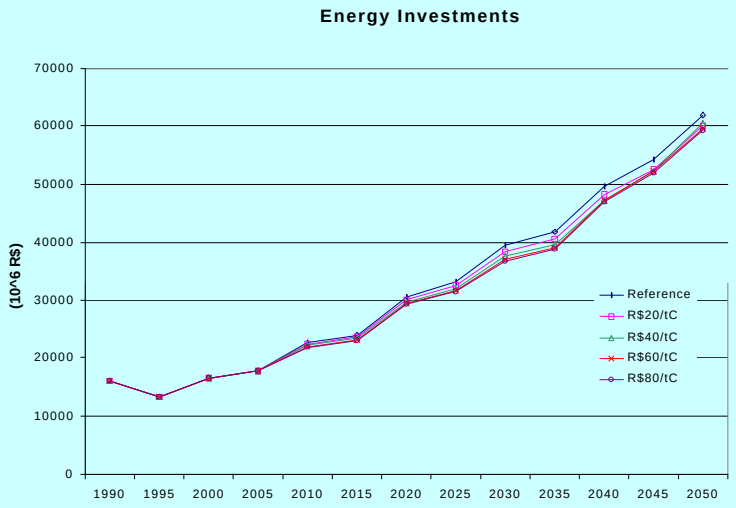
Changes on the Economy: Energy Investments



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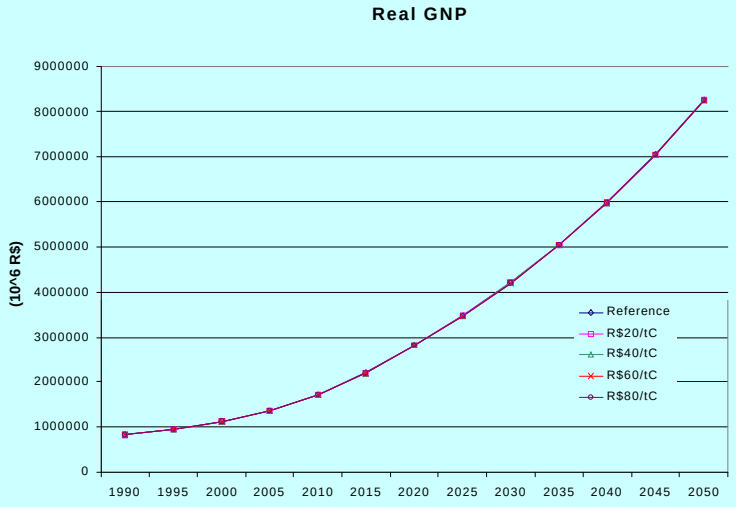
Changes on the Economy: Real GNP growth



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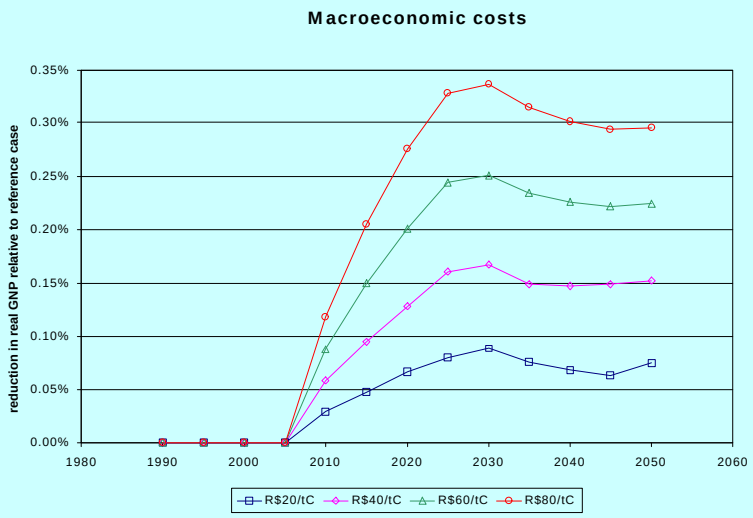
Changes on the Economy: Macroeconomic costs



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