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Linking electricity consumption of home appliances and standard of living:  
A comparison between Brazilian and French households

Carolina Grottera<sup>a,\*</sup>, Carine Barbier<sup>b</sup>, Alessandro Sanches-Pereira<sup>c,d</sup>, Mariana Weiss de Abreu<sup>a</sup>,  
Christiane Uchôa<sup>a</sup>, Luís Gustavo Tudeschini<sup>c</sup>, Jean-Michel Cayla<sup>f</sup>, Franck Nadaud<sup>b</sup>,  
Amaro Olimpio Pereira Jr<sup>a</sup>, Claude Cohen<sup>e</sup>, Suani Teixeira Coelho<sup>c</sup>

<sup>a</sup> Energy Planning Program, Post-Graduate School of Engineering (COPPE), Federal University of Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil

<sup>b</sup> Centre International de Recherche sur l'Environnement et le Développement (CIRED), UMR 8568, Nogent-Sur-Marne, France

<sup>c</sup> Research Group on Bioenergy, Institute of Energy and Environment, University of São Paulo (USP), São Paulo, Brazil

<sup>d</sup> Department of Energy Technology, KTH Royal Institute of Technology, Stockholm, Sweden

<sup>e</sup> NIMAS/CEDE/UFF – Interdisciplinary Group of Studies on Environment and Society / Center of Studies on Development and Inequalities / Federal Fluminense University, Brazil

<sup>f</sup> Research & Development Division, Electricité de France (EDF), France

**ABSTRACT**

Solutions based exclusively on technology are unlikely to fully deliver a transition towards a low-carbon society. Shifts in consumption patterns and lifestyles associated with technological solutions are essential to achieve safe GHG concentration levels. Considering households' consumption patterns, residential electricity consumption represents a major issue, as it is closely related to lifestyle choices and living standards. In this context, this paper discusses how specific electricity requirements may vary across different deciles of living standard in Brazil and France. The present evaluation is based on specific electricity consumption and its corresponding carbon dioxide emissions for different home appliances used for food conservation, lighting, daily chores (e.g. cloth washing), as well as information and leisure. Results ratify, on the one hand, the significant income gap existing between French and Brazilian households. On the other hand, they show that differences regarding specific electricity requirements in the two countries are lower than intuitively expected. Hence, they evidence a converging trend in electricity requirements between the two countries, especially among higher income deciles.

**Keywords:** Residential electricity; Consumption patterns; Home appliances; Brazil; France