

David Foord

---

## Leisure Jobs: Recreating Family and Social Life in Canadian Electric Utility Marketing, 1920–1970

This article contributes to scholarship on business history and gender in twentieth-century energy transitions. It examines Canadian electric power utility marketing plans and materials, newspaper and magazine accounts, and oral history interview records. Utilities initially sought to sell power as capital and labor rationality, mirroring industrial ideals of producing more with fewer resources. As those labor savings were realized, they increasingly sold power as a means to perform new organizational and emotional jobs of creating a more intimate, happier, and child-centered family life. In doing so, they redefined social life, from family-as-labor unit to family-as-leisure unit, while also redefining leisure-as-labor for women. Women in utility marketing materials, as observed in subsequent time-use studies, eventually saw fewer hours of housework and family care, although offset by increasing leisure jobs. Mobilizing social groups to advance an electrification agenda, utilities sold this new labor as an extension of energy service work in homes, public spaces, and leisure facilities.

**Keywords:** business history, electrification, gender

I am thankful for the helpful comments, questions, and suggestions for changes on drafts of the manuscript from colleagues at the University of New Brunswick, anonymous reviewers, and Walter Friedman, David Shorten, and Lila Stromer from *Business History Review*. Ms. Alex Dandridge assisted in preparing the tables and copy editing the paper. I benefited from comments and questions on this research from presentation of drafts of this paper at the 3rd International Conference on Energy Research and Social Science 2022 (Science Talks); the 83rd Annual Meeting of the Academy of Management; the Atlantic Schools of Business Conference 2023; and the Canadian Science and Technology Historical Association's Biennial Conference 2023. I am appreciative of the assistance from staff at Libraries and Archives Canada; provincial archives in Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, Québec, Saskatchewan; and civic archives in Edmonton, Ottawa, and Toronto; and the Hydro-Québec Archives.

*Business History Review* 98 (Summer 2024): 447–483. doi:[10.1017/S0007680524000333](https://doi.org/10.1017/S0007680524000333)  
© 2024 The President and Fellows of Harvard College. ISSN 0007-6805; 2044-768X (Web).

Following Thomas Hughes's *Networks of Power*, the focus of many historical studies of Western electrification has been on the development of large technical systems and the interaction between system builders and regions.<sup>1</sup> In US-based corporate liberalism accounts, electrification history has been characterized by creation of publicly regulated/owned entities to solve complex problems of industrial capitalism through reliance on professional managers and engineers.<sup>2</sup> In Canada, the preeminent political economy study is H. V. Nelles's *The Politics of Development*, presenting the Ontario provincial government's establishment of Ontario Hydro to exploit state-owned property rights to develop power for the province, and in turn reducing "the state—despite an expansion of its activities—to a client of the business community."<sup>3</sup> Political economy approaches have been influential in studies of system development among "provincial hydros" and in Saskatchewan and the Maritimes. In Saskatchewan, the provincial government took ownership of private utilities in 1949 to build a province-wide power system.<sup>4</sup> Likewise, Canadian Maritime region cases start with early failures to develop centrally generated electrical power and then, in the case of New Brunswick, mid-twentieth-century reorganization of the provincial utility to provide it with the autonomy to develop provincial hydroelectric resources and deliver power for industry and export.<sup>5</sup> In this latter historiography, domestic

<sup>1</sup>Thomas Parker Hughes, *Networks of Power: Electrification in Western Society, 1880–1930* (Baltimore, 1993). Exceptions include historiography that studies the roles of users, such as David Nye and national governments. David E. Nye, *Consuming Power: A Social History of American Energies* (Cambridge, MA, 1999). On the latter topic, Matthew Evenden examined the World War II expansion of Canadian federal government control over development of large hydroelectric systems. Matthew Evenden, *Allied Power: Mobilizing Hydro-Electricity During Canada's Second World War* (Toronto, 2015).

<sup>2</sup>Leonard DeGraaf, "Corporate Liberalism and Electric Power System Planning in the 1920s," *Business History Review* 64, no. 1 (Spring 1990): 1–31.

<sup>3</sup>Nelles noted in his introduction to the second edition that women are not evident in its pages. Henry Vivian Nelles, *The Politics of Development: Forests, Mines, and Hydro-Electric Power in Ontario, 1849–1941* (Montreal, 2005), xix.

<sup>4</sup>Alexander Netherton, "The Political Economy of Canadian Hydro-Electricity: Between Old 'Provincial Hydros' and Neoliberal Regional Energy Regimes," *Canadian Political Science Review* 1, no. 1 (2007): 107–124; Clinton O. White, *Power for a Province: A History of Saskatchewan Power* (Regina, Saskatchewan, 1976).

<sup>5</sup>Christopher S. Beach, "Electrification and Underdevelopment in New Brunswick: The Grand Falls Project, 1896–1930," *Acadiensis* 23, no. 1 (1993): 60–85; Peter J. Wylie, "When Markets Fail: Electrification and Maritime Industrial Decline in the 1920s," *Acadiensis* 17, no. 1 (1987): 74–96; R. A. Young, "Planning for Power: The New Brunswick Electric Power Commission in the 1950s," *Acadiensis* 12, no. 1 (1982): 73–99; James L. Kenny and Andrew Secord, "Public Power for Industry: A Re-Examination of the New Brunswick Case, 1940–1960," *Acadiensis* 30, no. 2 (2001): 84–108; Andrew G. Secord, "NB Power 1967–72: Constructing the Export Dream," *Journal of New Brunswick Studies/Revue d'études sur le Nouveau-Brunswick* 10 (2018): 3–20.

power users feature only as the recipient of a public relations strategy designed to silence critics of “progress and modernity.”<sup>6</sup> Business history methodologies have been applied in studies of entrepreneurial development of hydroelectricity in Quebec and Ontario hydro cases.<sup>7</sup> Likewise, British Columbia Electric Railway was studied as a case on the advantages of a foreign-controlled firm in a young and rapidly developing economy.<sup>8</sup>

Gender has been a missing element in these histories. Building on Ruth Schwartz Cowan’s insights that the transformation of homes with electric power created more work for mothers as they used their appliances to achieve new standards of cleanliness and devote more time to child care, recent scholarship has integrated “women’s energy work more firmly into the larger cultural, political, and economic complexities and narratives of the nineteenth and twentieth centuries.”<sup>9</sup> Instead of reducing women’s domestic lives to a separate sphere that was non-productive and in need of emancipation to realize equality with men, women are portrayed as food, light, and heat providers and physical and emotional care workers, with influence in energy decisions, especially after World War II.<sup>10</sup> Their work has been shown to support households and communities through “such activities as cooking, gardening, scavenging, piece work, laundry, borrowing, sharing, and of course the caring and social reproductive work for which women continued to be primarily responsible.”<sup>11</sup> Moreover, this work has explored the agency of women in industrialized countries and their increased culpability in the climate crisis.<sup>12</sup>

<sup>6</sup>James L. Kenny and Andrew G. Secord, “Engineering Modernity: Hydroelectric Development in New Brunswick, 1945–1970,” *Acadiensis* 39, no. 1 (2010): 3–26.

<sup>7</sup>John H. Dales, *Hydroelectricity and Industrial Development: Québec 1898–1940* (Cambridge, MA, 1957); Neil, B. Freeman, *The Politics of Power: Ontario Hydro and Its Government, 1906–1995* (Toronto, 1996); Keith R. Fleming, *Power at Cost: Ontario Hydro and Rural Electrification, 1911–1958* (Montreal, 1991).

<sup>8</sup>Patricia E. Roy, “Direct Management from Abroad: The Formative Years of the British Columbia Electric Railway,” *Business History Review* 47, no. 2 (Summer 1973): 239–259.

<sup>9</sup>Ruth Schwartz Cowan, *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave* (New York, 1983). See also Ruth Schwartz Cowan, “The ‘Industrial Revolution’ in the Home: Household Technology and Social Change in the 20th Century,” *Technology and Culture* 17, No. 1 (1976): 1–23; Abigail Harrison Moore and Ruth Wells Sandwell, “Introduction,” in *In a New Light: Histories of Women and Energy*, ed. Abigail Harrison Moore and Ruth Wells Sandwell (Montreal, 2021), 3–15.

<sup>10</sup>Katherine Jellison, *Entitled to Power: Farm Women and Technology, 1913–1963* (Chapel Hill, 1993), 170.

<sup>11</sup>Ruth Wells Sandwell, “Changing the Plot: Including Women in Energy History (and Explaining Why They Were Missing),” in *In a New Light: Histories of Women and Energy*, ed. Abigail Harrison Moore and Ruth Wells Sandwell, 16–45.

<sup>12</sup>Vanessa Taylor, “Anthropocene Women: Energy, Agency, and the Home in Twentieth-Century Britain,” in *In a New Light: Histories of Women and Energy*, ed. Abigail Harrison Moore and Ruth Wells Sandwell, 174–191.

The new energy historiography integrates gender within a narrative of how a novel form of capitalism arose in Western sociotechnical transitions from feudal to industrial power regimes.<sup>13</sup> Generalized features of this industrial capitalism included interventionist governments that played a major role along with private organizations in large-scale, capital-intensive resource and energy sector development projects.<sup>14</sup> State-regulated monopolies promoted centralized power generation and a gospel of consumption.<sup>15</sup> Euro-North American household economies were urbanized. Men became wage-earners and identified as “the primary economic support of the household,” with “productive work” removed from the household.<sup>16</sup> As this work was removed, the fiction was created that the household was a home, not an economic unit, separated from work as a refuge from the culture of industry and commerce.<sup>17</sup>

In this article, I build on this new energy historiography to integrate business history and gender approaches to study how utilities and their collaborators shaped domestic energy use and work. I focus on the work of “agents of diffusion,” who stand between producers and users, and seek to educate and persuade potential energy users.<sup>18</sup> Previous work on this topic has examined the construction of gendered, racial, and class identities during the early twentieth-century sale of domestic electric appliances in the US.<sup>19</sup> In Graeme Goodday’s study of early British electrification and the instrumental role of advertising, advertising mattered because it had to persuade women to change their core values and priorities.<sup>20</sup> Dorotea Gucciardo has revealed the social implications of electrification in Canada in studying utility “advertising effort on enlisting Canadians as consumers.”<sup>21</sup>

<sup>13</sup>Ruth Wells Sandwell, “An Introduction to Canada’s Energy History,” in *Powering Up Canada: The History of Power, Fuel, and Energy from 1600*, Vol. 6, ed. Ruth Wells Sandwell (Montreal, 2016), 3–36, 14.

<sup>14</sup>Nelles, *Politics of Development*.

<sup>15</sup>Harold L. Platt, *The Electric City: Energy and the Growth of the Chicago Area, 1880–1930* (Chicago, 1991).

<sup>16</sup>Sandwell, “Changing the Plot,” 16–45.

<sup>17</sup>Stevi Jackson, “Towards a Historical Sociology of Housework: A Materialist Feminist Analysis,” *Women’s Studies International Forum* 15, no. 2 (1992): 153–172.

<sup>18</sup>Martina Hessler, “Educating Men How to Develop Technology: The Role of Professional Housewives on the Diffusion of Electrical Domestic Appliances in the Interwar-Period in Germany,” *Icon* (2001): 95–105.

<sup>19</sup>Stephanie Smith-Divita, *Electrical Men: The Electrical League of Cleveland, 1909–1949 and Selling Power* (Cleveland, 2000).

<sup>20</sup>Graeme Goodday, “Rethinking the Agency of Women in Energy Management: Early British Debates on Electrification,” in *RCC Perspectives: Transformations in Environment and Society*, ed. Abigail Harrison Moore and Ruth Wells Sandwell (Munich, 2020): 17–22.

<sup>21</sup>Dorotea Gucciardo, “The Powered Generation: Canadians, Electricity, and Everyday Life,” (Ph.D. diss., The University of Western Ontario, 2011), 140.

Within this research topic, I examine utility diffusion of a new domestic work culture. The goal is to address what Jane Whittle has called “the most serious gap in our knowledge” about “the nature of housework and care work and how this work changed over time.”<sup>22</sup> Others have identified similar gaps, including the differences from country to country and culture to culture in Western capitalism.<sup>23</sup> Writing about gender in Canadian energy history, R. W. Sandwell asked for more histories of turning points in energy production and consumption, including people’s bodies and homes.<sup>24</sup> In addressing this gap, I am responding to Jane Whittle’s simple question: What is work? She identified three meanings of work: as the opposite of leisure, known in preindustrial societies; as labor that earns income, commonly used now; and as unpaid domestic work, including housework and family care, commonly ignored or considered non-work at present, including by economic historians.<sup>25</sup> Her interest stems from the point that there is “no logical reason for excluding unpaid housework and care work from our conception of work or the economy.”<sup>23</sup> In addition to studying housework and care work, I seek to expand Whittle’s analysis to a fourth kind of work, called leisure jobs.

Leisure jobs provide a useful concept in understanding why women gained more leisure time in the twentieth century (up to 37 hours per week) but remain as busy as ever, even with decreases in women’s housework, family care, and shopping time (savings of 12 to 19 hours per week in cited studies).<sup>26</sup> Its use is in explaining why many Western

<sup>22</sup> Jane Whittle, “A Critique of Approaches to ‘Domestic Work’: Women, Work and the Pre-Industrial Economy,” *Past & Present* 243, no. 1 (2019): 35–70, 70. Sandwell seconded the idea in “Changing the Plot.”

<sup>23</sup> Christine Zmroczek, “Dirty Linen: Women, Class, and Washing Machines, 1920s–1960s,” *Women’s Studies International Forum* 15, no. 2 (1992): 173–185, 182.

<sup>24</sup> Ruth Wells Sandwell, “Reflections, Questions, And Tentative Conclusions,” in *Powering Up Canada: The History of Power, Fuel, and Energy from 1600*, Vol. 6, ed. Ruth Wells Sandwell (Montreal, 2016), 353–356.

<sup>25</sup> Whittle, “A Critique of Approaches.”

<sup>26</sup> Mark Aguiar and Erik Hurst, “Measuring Trends in Leisure: The Allocation of Time Over Five Decades,” *Quarterly Journal of Economics* 122, no. 3 (2007): 969–1006. Other Canadian data confirms this figure for men (decreasing from 39.5 hours in 1981), but with a lower figure for women, from about 35.5 hours in 1981 to just over 31 hours in 1992. See Jiri Zuzanek, Theo Beckers, and Pascale Peters, “The ‘Harried Leisure Class’ Revisited: Dutch and Canadian Trends in the Use of Time From the 1970s to the 1990s,” *Leisure Studies* 17, no. 1 (1998): 1–19. According to Zuzanek and Smale, leisure time increased to about 37 hours per week in 1993 for both men and women. Of these hours, social leisure made up for most of the time, at 97–114 minutes per day, followed by watching television at about 90 minutes. Jiri Zuzanek and Bryan J. A. Smale, “More Work-Less Leisure? Changing Allocations of time in Canada, 1981–1992,” *Loisir et societe/Society and Leisure* 20, no. 1 (1997): 73–105, 84. Leisure in this literature includes playing with children, visiting, and talking with family, but not childcare, cooking, or housework. Valerie A. Ramey and Neville Francis, “A Century of Work and Leisure,” *American Economic Journal: Macroeconomics* 1, no. 2 (2009): 189–224, 193. See also on this point, Suzanne M. Bianchi, Liana C. Sayer, Melissa A. Milkie, and John P. Robinson, “Housework:

women report being time starved, even though clothes dryers “saved time and made doing the laundry less physically arduous,” and not all of the saved time was used in “better” homemaking and family care.<sup>27</sup> In this context, a leisure job is any work done in leisure. It is characterized by a “pattern of skill and ideological spillover of work.”<sup>28</sup> In the context of twentieth-century electrification, it includes the new jobs that utilities and appliance manufacturers marketed for their domestic users, such as hosting, gift buying, and attending amateur arts and sports events. In this way, leisure jobs are an extension of business operations and service work in homes, public spaces, and leisure facilities. They both “legitimate the work ethic by allowing workers to exercise it . . . [and] leisure by filling some part of nonwork time with productive activity.”<sup>29</sup> This leisure work also includes the accompanying emotional labor in managing and displaying the expected emotions.<sup>30</sup>

The research questions are: How did the authors of Canadian utility marketing plans and materials conceptualize their domestic users, and what values and jobs were marketed by them from 1920 to 1970, beyond giving homemakers more time to run the house and more money to

---

Who Did, Does or Will Do It, and How Much Does It Matter?” *Social Forces* 91, no. 1 (2012): 55–63. In the US, which has more comprehensive studies than Canada on the topic, time devoted to housework (not including family care and shopping) by American married women on farms and in small towns fell from a mean of 31.5 hours per week in the 1920s to 19.5 hours per week in 1975 and to 12.5 hours per week by the 2000s. Jonathan Gershuny and Teresa Harms, “Housework Now Takes Much Less Time: 85 Years of US Rural Women’s Time Use,” *Social Forces* (2016): 1–22. Housework, family care, and shopping decreased for US wives from 53 hours in 1924–28 to 41 hours in 1975–76. Glen Cain, “Women and Work: Trends in Time Spend in Housework,” in Institute for Research on Poverty Discussion Paper 747-84, University of Wisconsin-Madison (April 1984), accessed 6 June. 2024, <https://www.irp.wisc.edu/publications/dps/pdfs/dp74784.pdf>. Cain also draws on data from Joann Vanek, “Household Technology and Social Status: Rising Living Standards and Status and Residence Differences in Housework,” *Technology and Culture* 19, no. 3 (1978): 361–375. Ramey and Francis claim an even larger decrease in housework, family care, and shopping by women of all ages (from 50 hours per week in 1900 to 31 in 2005 for women between the ages of 25 and 54). See Ramey and Francis, “A Century of Work and Leisure,” 204. See also Paul Gomme and Emanuela Cardia, “Household Technology; Childcare; Women Labor Force Participation; Home Production,” in *Meeting Papers*, no. 1000, Society for Economic Dynamics, 2010, accessed 6. Jun. 2024, <https://ideas.repec.org/p/red/sed010/1000.html>.

<sup>27</sup>Timo Anttila, Tomi Oinas, and Jouko Nätti, “Predictors of Time Famine among Finnish Employees—Work, Family or Leisure?” *International Journal of Time Use Research* 6, no. 1 (2009): 73–91; Joy Parr, *Domestic Goods: The Material, the Moral and the Economic in the Postwar Years* (Toronto, 1999), 262–265; Deirdre Beddoe, *Back to Home and Duty: Women between the Wars, 1918–1939* (Thunder Bay, 1989).

<sup>28</sup>Steven M. Gelber, *Hobbies: Leisure and the Culture of Work in America* (New York, 1999), 20.

<sup>29</sup>Gelber, *Hobbies*, 19.

<sup>30</sup>Alicia A. Grandey, “Emotional Regulation in the Workplace: A New Way to Conceptualize Emotional Labor,” *Journal of Occupational Health Psychology* 5, no. 1 (2000): 95–110; Blake E. Ashforth and Ronald H. Humphrey, “Emotional Labor in Service Roles: The Influence of Identity” *Academy of Management Review* 18, no. 1 (1993): 88–115.



shop? Was it left to customers to imagine how they would use the time and financial dividends, or did utilities show them how to live better electrically? If utilities played this role, what did it mean to live better electrically, and what does it reveal about changing perceptions of family and social life in the mid-twentieth century?<sup>31</sup> To investigate, I reviewed primary materials from Statistics Canada and its predecessor agency; Library and Archives Canada; provincial archives in Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia; civic archives in Edmonton, Toronto and Ottawa; and the Hydro-Québec archive in Montreal.

To contribute to these questions, I use concepts from marketing to identify the values and jobs in utility materials.<sup>32</sup> By marketing, I mean the conduct of primary and secondary research to understand customers, conceptualize value propositions, and determine revenue models and pricing, as well as to advertise, sell, and distribute ideas, goods, and services.<sup>33</sup> As a discipline, marketing neither mirrors society nor creates customer values and demands, but offers materials for the interpretation of the ideals of modern life.<sup>34</sup> It does this by showing how firms and the authors of marketing materials perceived the needs of social groups and presented products and meanings as solutions for their customers.<sup>35</sup> It visualizes the selling of national, cultural, gendered, and other meanings of identity in the context of humdrum electric devices like toasters and sewing machines.<sup>36</sup>

<sup>31</sup> Andrew M. Shanken, "Better Living: Toward a Cultural History of a Business Slogan," *Enterprise & Society* 7, no. 3 (2006): 485–519.

<sup>32</sup> M. Bower and R. A. Garda, "The Role of Marketing in Management," in *Handbook of Modern Marketing*, ed. Victor P. Buell (New York, 1986), 1–3; Clayton M. Christensen, Scott Cook, and Taddy Hall, "Marketing Malpractice: The Cause and the Cure," *Harvard Business Review* 83, no. 12 (2005): 4–13; Mark W. Johnson, Clayton M. Christensen, and Henning Kagermann, "Reinventing Your Business Model," *Harvard Business Review* 86, no. 12 (2008): 57–68; Adrian Payne, Pennie Frow, and Andreas Eggert, "The Customer Value Proposition: Evolution, Development, and Application in Marketing," *Journal of the Academy of Marketing Science* 45, no. 4 (2017): 467–489.

<sup>33</sup> Juliann Sivulka, *Soap, Sex, and Cigarettes: A Cultural History of American Advertising* (Boston, 2011), 16.

<sup>34</sup> R. Ashley Lyman, "Advertising and Sales Promotion in Electricity," *Journal of Regulatory Economics* 6, no. 1 (1994): 41–58; Roland Marchand, *Advertising the American Dream: Making Way for Modernity, 1920–1940* (Oakland, 1985), 164–205; Sivulka, *Soap, Sex, and Cigarettes*, xiii.

<sup>35</sup> Trevor J. Pinch and Wiebe E. Bijker, "The Social Construction of Facts and Artefacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other," *Social Studies of Science* 14, no. 3 (1984): 399–441; Daniel Robinson, "Marketing Gum, Making Meanings: Wrigley in North America, 1890–1930," *Enterprise & Society* 5, no. 1 (2004): 4–44.

<sup>36</sup> Marina Emmanouil, "Naturalising Electricity in Greek Advertising: Transitions between Past and Present in Identity Crafting, 1954–62," *Blucher Design Proceedings* 1, no. 5 (2014): 359–364; Simon Partner, "Brightening Country Lives: Selling Electrical Goods in the Japanese Countryside, 1950–1970" *Enterprise & Society* 1, no. 4 (2000): 762–784; A. Paula,

A value proposition is a business's proposal to its customers of the benefits arising from use of a product or service.<sup>37</sup> Among electric power utilities, it includes not just reduction of customer perceived pains (e.g., muscle pain from washing and wringing out the laundry without powered machines) but also the jobs, gains, or outcomes wanted from use of the product.<sup>38</sup> As used by Christensen and colleagues, the jobs-to-be-done are broadly defined to mean any job that arises in customers' lives, whether in labor or leisure.<sup>39</sup> These can include saving time and money, e.g. replacing kerosene lamps with electric lighting and wood with electric heaters, as well as spending time and money, e.g. decorating with electric lights for Christmas.<sup>40</sup> The jobs-to-be-done concept was well expressed in a 1919 trade article on the value of an electrical pot with its lower cost than cooking with coal, increased speed in heating up the pan, and convenience of cooking at the serving table "after coming in from a drive or in the evening when company drops in."<sup>41</sup>

I also use the social tableaux framework to analyze the ads as ideals of modern life. A social tableaux is an ad "in which personas are depicted in such a way as to suggest their relationship to each other or to a larger social structure."<sup>42</sup> It has been applied in the examination of ads from the early twentieth century to the present.<sup>43</sup> In David Nye's study of electrification in the US, the social tableaux of the 1930s were designed

---

"Marketing the Hearth: Ornamental Embroidery and the Building of the Multinational Singer Sewing Machine Company," *Enterprise & Society* 15, no. 3 (2014): 442–471.

<sup>37</sup>Robert B. Woodruff, "Customer Value: The Next Source for Competitive Advantage," *Journal of the Academy of Marketing Science* 25, no. 2 (1997): 139–153.

<sup>38</sup>Lee Adler, "Relating the Product Line to Market Needs and Wants," in *Handbook of Modern Marketing*, ed. Victor P. Buell and Carl Heyel (New York, 1970), 3–16; Alexander Osterwalder and Yves Pigneur, *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*, Vol. 1 (Hoboken, 2010); Alexander Osterwalder, Yves Pigneur, Gregory Bernarda, and Alan Smith, *Value Proposition Design: How to Create Products and Services Customers Want*, Vol. 2 (Hoboken, 2015).

<sup>39</sup>Christensen, Cook, and Hall, "Marketing Malpractice," 5.

<sup>40</sup>Leonard L. Berry, Lewis P. Carbone, and Stephan H. Haeckel, "Managing the Total Customer Experience," *MIT Sloan Management Review* 43, no. 3 (2002): 85–89; Jon Kolko, "Design Thinking Comes of Age," *Harvard Business Review* (Sep. 2015): 66–71; Timo Rintamäki, Hannu Kuusela, and Lasse Mitronen, "Identifying Competitive Customer Value Propositions in Retailing," *Managing Service Quality: An International Journal* (2007): 621–634. Value propositions can embody much more than these values, including symbolic, psychological, situational, and so on. See Adler "Relating the Product Line to Market Needs and Wants," 3–5, for discussion of the question, what is the customer really buying?

<sup>41</sup>"Cook by Wire with a Canadian Beauty Electric Grill," *Marketing and Business Management* 8, no. 1 (1919): 24.

<sup>42</sup>Marchand, *Advertising the American Dream*, 165.

<sup>43</sup>Elsbeth H. Brown, "Rationalizing Consumption: Lejaren á Hiller and the Origins of American Advertising Photography, 1913–1924," *Enterprise & Society* 1, no. 4 (2000): 715–738; Edward Timke, "Key Concepts in Advertising: Social Tableaux," *Advertising & Society Quarterly* 21, no. 4 (2020).



by “largely male, upper-class advertising executives . . . to appeal to the middle-class consumer.”<sup>44</sup> In this article, I apply the concept to the more homespun ads from Canadian utilities.

In the subsequent section, I review what values were marketed in advertising electric power. Next, I present data on the sale of electricity to domestic customers in Canada, showing 1950 to 1990 as the growth period for total sales, customers, and electricity use per household. The following three sections evidence the utility role in the family and social transition from 1920 to 1970. In the conclusion, I articulate the contribution of the article. While utilities and their partners in electrification initially sought to grow customer segments by selling power as rationality and household savings, utilities subsequently opened their marketing to social movements and groups that expanded their marketing to show customers, primarily women, how power may be used to do the new organizational and emotional leisure jobs expected of them.<sup>45</sup> The primary job was to transition from family-as-labor unit to realize ideals of a leisured, intimate, happy, and child-centered family and social life that made use of women’s increasing time and money.

### What Values Were Marketed in Advertising and Electric Power Histories?

In the literature on the North American history of marketing, electric power features as another service in hard- and soft-sell campaigns, whether as part of a totalizing system of consciousness control or merely providing power for mechanical servants.<sup>46</sup> In the former narrative, the reduction in hours of factory labor meant not more free time but rather more time with the growing demand-side of capitalism: responding to the desires and demands created by advertisers for modernizing

<sup>44</sup>David Nye, *Electrifying America: Social Meaning of a New Technology, 1880–1940* (Cambridge, MA, 1990), 278.

<sup>45</sup>John Stratton, *Of Women and Advertising* (Toronto, 1984), 10. The commonly held thesis among Canadian advertisers was that women dominated the consumer economy. For the US, see Daniel Delis Hill, *Advertising to the American Woman, 1900–1999* (Columbus, 2002).

<sup>46</sup>Brian Bowers, “Advertising Electric Light,” *Proceedings of the IEEE* 89, no. 1 (2001): 116–118; Stephen R. Fox, *The Mirror Makers: A History of American Advertising and Its Creators* (Champaign, 1984); Pamela W. Laird, *Advertising Progress: American Business and the Rise of Consumer Marketing* (Baltimore, 1998); Jackson Lears, *Fables of Abundance: A Cultural History of Advertising in America* (New York, 1995); Mark Tadajewski and D. G. Brian Jones, “Historical Research in Marketing Theory and Practice: A Review Essay,” *Journal of Marketing Management* 30, no. 11–12 (2014): 1239–1291; Daniel Pope, *The Making of Modern Advertising* (New York, 1983). For an alternative view of utility advertising as political ideology see Quentin J. Schultze, “Advertising and Public Utilities 1900–1917,” *Journal of Advertising* 10, no. 4 (1981): 41–48.

industries.<sup>47</sup> Consumption in this literature became a way of life through the influence of marketing.<sup>48</sup> The contrary view—of power as mechanical servants—saw marketing as more often in the dark about customers’ problems and needs and unable to practice “precision microsurgery on the public consciousness.”<sup>49</sup> James Williams’s study of early twentieth-century marketing of electric domestic technologies provides a particularly revealing look at how for men it meant conquering household efficiency and for women, household choices.<sup>50</sup> By the early 1930s, advertisers realized they could not raise public tastes and so increasingly focused instead on understanding customers, primarily women, and developing ads that addressed their perceived desires.<sup>51</sup> After the war, advertising increasingly moved from products to the images associated with it, with an emphasis on traditional family values.<sup>52</sup> This trend was accelerated during the 1960’s creative revolution, with its change from delivering product information to creating popular culture.<sup>53</sup>

As with the marketing history literature, in energy histories there is a focus on commercial consciousness-shaping as well as labor-saving messages.<sup>54</sup> The marketing of domestic power in the US saw a transformation of the customer’s meaning of electricity, from late nineteenth century as an impractical technology of mysterious science to early twentieth century as an indispensable tool for progress and modern living.<sup>55</sup> In the UK, the transformation during this period was

<sup>47</sup>Stuart Ewen, *Captains of Consciousness: Advertising and the Social Roots of the Consumer Culture* (New York, 1976).

<sup>48</sup>Stuart Ewen and Elizabeth Ewen, *Channels of Desire: Mass Images and the Shaping of American Consciousness* (New York, 1984).

<sup>49</sup>Michael Schudson, *Advertising, the Uneasy Persuasion: Its Dubious Impact on American Society* (New York, 1984), xiii.

<sup>50</sup>James C. Williams, “Getting Housewives the Electric Message: Gender and Energy Marketing in the Early Twentieth Century,” in *His and Hers: Gender, Consumption, and Technology*, ed. Roger Horowitz and Arwen Mohun (Charlottesville, 1998), 109.

<sup>51</sup>Hill, *Advertising to the American Woman*, 7–12; Marchand, *Advertising the American Dream*, 72–87, 115–116; Nye, *Electrifying America*, 278.

<sup>52</sup>Silvulka, *Cultural History of American Advertising*, 213–235.

<sup>53</sup>Cynthia B. Meyers, “Advertisers and American Broadcasting: From Institutional Sponsorship to the Creative Revolution,” *Business History Review* 95, no. 3 (Autumn 2021): 447–481.

<sup>54</sup>Christopher Jones, “The Carbon-Consuming Home: Residential Markets and Energy Transitions,” *Enterprise & Society* 12, no. 4 (2011): 790–823; Nye, *Electrifying America*; Ronald C. Tobey, *Technology as Freedom: The New Deal and the Electrical Modernization of the American Home* (Oakland, 1997). Michael Kay and Graeme Gooday use similar stages for early electrification in Britain, from experimental (late 1870s to late 1880s) to fashionable (1890s) to normalized phases (1900 to 1930s). Michael Kay and Graeme Gooday, “From Hydroelectricity to the National Grid: Harewood House and the History of Electrification in Britain, 1900–1940,” *History of Retailing and Consumption* 4, no. 1 (2018): 43–63.

<sup>55</sup>Mark H. Rose, *Cities of Light and Heat: Domesticating Gas and Electricity in Urban America* (University Park, 1995), 65. This change was illustrated in 1920s utility

from electricity as “an insidious stranger with uncertain credentials who brought hazard and discomfort into the very heart of the home” to a “benign and well understood servant.”<sup>56</sup> During World War I, General Electric and power utilities changed their focus from upper-class households as consumers of appliances-as-status-symbols to instilling an “electrical consciousness” in middle-class housewives to achieve freedom from drudgery.<sup>57</sup> The focus was on electricity as a means for cleanliness, comfort, and convenience.<sup>58</sup> This approach increased in the 1920s as utility salesmen went door-to-door to sell the freedom-from-drudgery message and the new middle-class ideal of the woman who does her own washing.<sup>59</sup> Consistent with nineteenth-century utopian ideas of technological progress, escalating energy use was presented as a primary source of change to produce plenty and eliminate human labor.<sup>60</sup>

Similar to Britain, broad household power adoption in Canada was later than in the US and more abrupt after World War II (especially among rural consumers).<sup>61</sup> In Canada, there was also more regional differences, with lighting, not heat or power, leading the transition.<sup>62</sup> In

---

personifications of power. To educate the public on the need for electric power system financing and expansion, the National Electric Light Association published six booklets in 1920 and 1921 under the titles “The Genie of the Button” or “Kilo Watt.” The transition from electricity-as-mystery to electricity-as-servant was illustrated six years later with the creation of Reddy Kilowatt. See Sandy Isenstadt, “At the Flip of a Switch,” *Places Journal* (2018), accessed 6 Jun, 2024, <https://doi.org/10.22269/18091>; Kirsten Moana Thompson, “Live Electrically with Reddy Kilowatt, Your Electrical Servant,” in *Animation and Advertising*, ed. M. Cook and K. Thomson (Cham, 2019), 124–144.

<sup>56</sup>Graeme Gooday has called for further research into this promotional work to domesticate electricity, including alternatives to domestication that examine the reconceptualization of domestic life. See Graeme Gooday, *Domesticating Electricity: Technology, Uncertainty and Gender, 1880–1914* (London, 2008), 37, 221.

<sup>57</sup>Nye, *Consuming Power*, 166–171. In the US, there was also friction between electric utilities and retailers over marketing and sales of appliances, in particular low utility pricing of products to build load, eventually resolved as utilities largely left appliance sales to retailers and focused instead on the marketing of electricity. See Morris H. Toppila, “Trends in Promotion and Advertising Techniques of Household Electrical Appliances by the Electric Utility Industry” (Ph.D. diss., University of North Dakota, 1964).

<sup>58</sup>Rose, *Cities of Light and Heat*, 151–161; Platt, *The Electric City*, 254.

<sup>59</sup>Christopher F. Jones, *Routes of Power: Energy and Modern America* (Cambridge, MA, 2014), 221–222; Christina Hardymont, *From Mangle to Microwave: The Mechanisation of Household Work* (Cambridge, UK, 1988).

<sup>60</sup>Dolores Greenberg, “Energy, Power, and Perceptions of Social Change in the Early Nineteenth Century,” *American Historical Review* 95, no. 3 (1990): 693–714.

<sup>61</sup>Zmroczek, “Dirty Linen,” 178–179. See also Malcolm F. Heslip, “A Study of Management’s Procedure in Marketing Electric Service 1882–1939,” (Ph.D. diss., University of Southern California, 1940); M. S. Seelman, “Organizing the Sale of Electricity,” *The Electrical Review* 59, no. 1 (1906): 411–414. The selling of electricity was largely neglected by US utilities until the twentieth century, given their focus on selling electric lights and motors in the nineteenth century.

<sup>62</sup>Marilyn Barber, “Help for Farm Homes: The Campaign to End Housework Drudgery in Rural Saskatchewan in the 1920s,” *Scientia Canadensis: Canadian Journal of the History of*

provinces with water power resources, large hydroelectric infrastructures were built in advance of demand.<sup>63</sup> These generation sources first met the needs of industry, its consumption dwarfing that of residential consumers.<sup>64</sup> Marketing sought to build domestic load, following American advertising thought and practice, albeit with differences.<sup>65</sup> In Canada, most household access to power did not begin until the 1920s and 1930s.<sup>66</sup> When advertising campaigns were developed for Canadian women in the first decades of the twentieth century, accounts show industry and public agencies inventing consumers as part of a strategy to sell off-peak power to reduce overall generation and transmission costs.<sup>67</sup> Contemporaneously, new domestic science educators in Canadian elementary and high schools introduced students to electric stoves, standardized methods, and authoritative cookbooks.<sup>68</sup> These programs both shaped and were shaped by utility home economic programs that sought to promote values of scientific rationalism and efficiency in the electric home and grow demand as excess capacity increased.<sup>69</sup> It was a long-term project to build trust in power companies and erode the sense that electricity was a danger to home and

---

*Science, Technology and Medicine/Scientia Canadensis: revue canadienne d'histoire des sciences, des techniques et de la médecine* 9, no. 1 (1985): 3–26; Joy Parr, "Introduction: Modern Kitchen, Good Home, Strong Nation," *Technology and Culture* 43, no. 4 (2002): 657–667; Ruth W. Sandwell, "The Coal-Oil Lamp," *Agricultural History* 92, no. 2 (2018): 190–209, 196–197; Ruth W. Sandwell, "Heating and Cooking in Rural Canada: Home Energy in Transition, 1850–1940," *History of Retailing and Consumption* 4, no. 1 (2018): 64–80; Ruth W. Sandwell, "The Emergence of Modern Lighting in Canada: A Preliminary Reconnaissance," *The Extractive Industries and Society: An International Journal* 3, no. 3 (2016): 850–863.

<sup>63</sup>Bruce Stadfeld, *Electric Space: Social and Natural Transformations in British Columbia's Hydro-Electricity Industry to World War II* (Ph.D. diss., University of Manitoba, 2002), 14.

<sup>64</sup>Peter Sinclair, *Energy in Canada* (Oxford, 2010).

<sup>65</sup>Russell Johnston, Russell Todd Johnston, and Russell E. Johnston Jr., *Selling Themselves: The Emergence of Canadian Advertising* (Toronto, 2001), 14.

<sup>66</sup>Emily Gann, "Ironing Out the Wrinkles: Technological and Aesthetic Change in Domestic Irons, 1880–1920," *Scientia Canadensis: Canadian Journal of the History of Science, Technology and Medicine/Scientia Canadensis: revue canadienne d'histoire des sciences, des techniques et de la médecine* 36, no. 1 (2013): 63–78.

<sup>67</sup>Ruth W. Sandwell, "Pedagogies of the Unimpressed: Re-Educating Ontario Women for the Modern Energy Regime, 1900–1940," *Ontario History* 107, no. 1 (2015): 36–59.

<sup>68</sup>Marta Danylewycz, Nadia Fahmy-Eid, and Nicole Thiverge, "L'enseignement ménager et les 'Home Economics,' au Québec et en Ontario au début du 20<sup>e</sup> siècle. Une analyse compare," in *An Imperfect Past: Education and Society in Canadian History*, ed. Donald J. Wilson (British Columbia, 1985), 67–119; Barbara Riley, "Six Saucepans to One: Domestic Science vs. the Home in British Columbia 1900–1930," in *British Columbia Reconsidered: Essays on Women*, ed. Gillian Laura Creese and Veronica Jane Strong-Boag (Vancouver, 1992), 119–142.

<sup>69</sup>Dianne E. Dodd, "Delivering Electrical Technology to the Ontario Housewife, 1920–1939: An Alliance of Professional Women, Advertisers and the Electrical Industry" (Ph.D. diss., Carleton University, 1989); Matthew Evenden, *Allied Power: Mobilizing Hydro-Electricity during Canada's Second World War* (Toronto, 2015); Sandwell, "Pedagogies of the Unimpressed," 44; Parr, *Domestic Goods*, 258.

pocketbook.<sup>70</sup> This has been emphasized in the case of rural Ontario, where consumers long failed to see advantages in expensive and incomprehensible electrical appliances over, for instance, their familiar, affordable, and controllable wood stoves.<sup>71</sup> The message in utility ads to rural consumers was on the emancipation and freedom offered by low-cost electricity.<sup>72</sup> In Lionel King's history of Nova Scotia's electrification, this freedom meant time for revival of a more spiritual way of life and advancement of Christian civilization.<sup>73</sup> More generally, the impact of campaigns to promote consumption to rural consumers at cost (albeit subsidized by commercial and industrial users), eventually helped to stimulate demand.<sup>74</sup>

### Domestic Electricity Sales, Rates, and Household Spending

The stimulation of demand is seen in the exponential growth of domestic electricity sales in Canada in the twentieth century as measured in both total kilowatt hours (kWhs) and number of customers. Table 1 presents the sale of electricity in kWhs to domestic customers by Canadian province for the years 1930 to 2000. Nationally, the number of kWhs increased nearly tenfold, from just under 1.5 billion in 1930 to 14.3 billion in 1956, and then more than tenfold again to 148 billion by the year 2000. The table shows 1950 to 1990 as a period of exponential growth in total sales of kWhs. Thereafter, even though the square meter of household space per person, amount of space cooled, and number of appliances per home increased, these gains were more than offset by energy efficiency. From 1990 to 2013, energy efficiency resulted in a 24 percent decrease in household power consumption.<sup>75</sup>

<sup>70</sup> Christopher F. Jones, "The Materiality of Energy," *Canadian Journal of History* 53, no. 3 (2018): 378–394, 392.

<sup>71</sup> Sandwell, "Heating and Cooking".

<sup>72</sup> Martha Bensley Bruère, "What Is Giant Power For?" *Annals of the American Academy of Political and Social Science* 118, no. 1 (1925): 120–123.

<sup>73</sup> Lionel Bradley King, "The Electrification of Nova Scotia, 1884–1973, Technological Modernization as a Response to Regional Disparity" (Ph.D. diss., Dalhousie University, 1999), 41–42.

<sup>74</sup> Mark Sholdice, "The Ontario Experiment: Hydroelectricity, Public Ownership, and Transnational Progressivism, 1906–1939" (Ph.D. diss., University of Guelph, 2019), 94–95. On the Ontario Commission's unique efforts to promote rural electricity use, such as the creation of the "Hydro Circus" travelling display, see Julie Andres, "Power to the Remotest Hamlet: The Promotion of Rural Hydro in Ontario, 1910–1929" (MA thesis, University of Guelph, 2007).

<sup>75</sup> Natural Resources Canada, *Energy Efficiency Trends in Canada, 1990 to 2013* (Ottawa, 2016), 17.

*Table 1*  
Sale of Electricity in kWhs to Domestic Customers by Canadian Province (millions), 1930–2000

Year	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
1930	102	30	35	243	205	841	16	1	16	NA
1940	152	42	41	321	311	1,374	27	3	39	NA
1950	607	164	128	689	1,200	3,663	98	11	148	40
1960	2,102	867	646	1,455	5,001	9,318	328	30	462	169
1970	4,700	2,259	1,601	2,398	12,405	17,587	797	106	1,007	504
1980	9,260	5,097	2,976	4,190	31,021	27,412	2,316	232	1,921	1,755
1990	12,851	7,468	3,928	6,497	49,051	47,289	4,588	318	3,436	2,708
2000	16,704	8,926	4,027	6,810	53,685	45,045	5,081	391	3,756	3,103

Source: Data made available by the Canada Dominion Bureau of Statistics, Census of Industry, Part 1-Statistics, Central Electric Stations in Canada. The data for the period 1920-1998 are labeled CS57-202-1920 to CS57-202-1988. The data for the period from 1999-2000 are labeled 57-003-x2000000 to 57-003-x2007000. BC = British Columbia. AB = Alberta. SK = Saskatchewan. MB = Manitoba. QC = Quebec. ON = Ontario. NB = New Brunswick. NS = Nova Scotia. PE = Prince Edward Island. NF = Newfoundland and Labrador.

The growth in electricity is all the more remarkable given that it occurred in the context of expanding residential natural gas sales, especially in the western provinces and Ontario.<sup>76</sup> On the supply side, the TransCanada natural gas pipeline from Alberta to Ontario was commissioned in 1958. Consumer demand for relatively inexpensive natural gas (versus wood and coal) drove growth, with natural gas heating typically being the largest home energy use (kWhs basis) in these provinces.<sup>77</sup> And yet, even with this national natural gas infrastructure, low prices, and strong demand, natural gas sales were still outpaced by electricity. From 1949 to 1970, residential natural gas grew ten times, from about 615 million to 6.9 billion cubic meters, similar to the growth in electricity from 1930. But then, from 1970 to 2020, total sales of residential natural gas grew less than threefold, reaching a peak (so far) of about 19 billion cubic meters in 2018.<sup>78</sup>

<sup>76</sup> Richard, W. Unger and John Thistle, *Energy Consumption in Canada in the 19th and 20th Centuries: A Statistical Outline* (Naples, 2013), 67–74.

<sup>77</sup> Bradley Snider, “Home Heating and the Environment,” *Canadian Social Trends* (Spring, 2006). Statistics Canada—Catalogue No. 11-008, accessed 6 Jun. 2024, [www.statcan.ca/english/freepub/11-008-XIE.pdf](http://www.statcan.ca/english/freepub/11-008-XIE.pdf).

<sup>78</sup> Statistics Canada, “Natural Gas, Monthly Sales,” Table: 25-10-0033-01 (formerly CANSIM 129-0003), accessed 6 Jun. 2024, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2510003301>.



*Table 2*  
 Number of Domestic Customers by Canadian Province  
 (thousands), 1930–2000

Year	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
1930	125	57	46	72	375	563	32	4	43	NA
1940	156	68	50	81	435	720	46	5	62	NA
1950	278	134	95	144	779	1,104	96	10	125	30
1960	428	290	216	235	1,226	1,755	141	19	169	60
1970	663	420	274	270	1,728	2,197	169	27	215	105
1980	989	707	356	341	2,249	2,658	236	39	294	153
1990	1,252	906	411	424	2,975	3,750	285	46	367	190
2000	1,547	1,255	439	468	3,351	4,259	313	54	410	216

Source: See sources for Table 1.

*Table 3*  
 Average Annual Customer Service of Electricity in kWhs  
 by Canadian Province, 1930–2000

Year	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
1930	813	533	773	3,353	548	1,493	485	309	373	NA
1940	974	618	824	3,956	716	1,909	581	574	630	NA
1950	2,182	1,224	1,353	4,783	1,541	3,317	1,023	1,022	1,181	1,321
1960	4,907	2,989	2,996	6,184	4,079	5,308	2,322	1,625	2,739	2,828
1970	7,089	5,378	5,850	8,871	7,177	8,004	4,714	3,981	4,693	4,791
1980	9,361	7,205	8,347	12,287	13,795	10,312	9,828	5,976	6,541	11,493
1990	10,267	8,240	9,548	15,317	16,486	12,612	16,108	6,851	9,357	14,227
2000	10,794	7,112	9,172	14,546	16,019	10,577	16,208	7,244	9,164	14,369

Source: See sources for Table 1.

Behind the growth in residential electricity sales were rising numbers of customers and increases in consumption per household. Table 2 presents the number of electricity customers by Canadian province for 1930 to 2000. Nationally, the increase was about tenfold, from about 1.3 million in 1930 to 12.1 million in the year 2000. The effect of energy efficiency can also be seen in the lack of drop-off in growth in 1990 and 2000 (Table 2 versus Table 1).

The other factor behind the exponential growth in residential electricity sales was household service. Table 3 presents the average annual customer (or household) service of electricity in kWhs by Canadian province from 1930 to 2000. Nationally, it increased nearly

*Table 4*  
Average Revenue in ¢/kWh for Domestic and Farm Service  
by Canadian Province, 1930–2000

Year	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
1930	2.91	5.50	5.39	1.10	1.75	3.93	5.33	6.89	9.62	NA
1940	2.91	5.04	4.82	1.04	1.43	2.97	4.81	4.34	5.61	NA
1950	2.06	3.28	3.80	1.15	1.22	1.99	3.83	3.00	5.55	2.09
1960	2.11	2.22	2.91	1.16	1.34	1.45	3.23	2.76	4.49	2.30
1970	1.83	1.78	2.07	1.34	1.43	1.49	2.55	2.14	2.94	2.01
1980	3.49	3.90	3.35	3.25	3.59	2.75	4.75	5.75	8.21	4.13
1990	5.41	6.94	6.65	4.91	6.87	4.95	5.69	8.16	11.06	7.18
2000	6.09	8.86	8.58	5.86	8.99	6.13	7.83	9.64	11.15	7.44

Source: See sources for Table 1.

ten times from 1930 to 1980, peaked in 1990, and declined thereafter. Although there were significant differences among the provinces, the overall trend is similar, with the exceptions of New Brunswick, Newfoundland, and Labrador, which showed small increases after 1990.

The growth in the numbers of customers and sales of household service came with decreasing power rates, shown by province in Table 4. Rates among the public and private utilities studied consisted of a monthly fixed demand charge and variable charges calculated on kilowatt hours used and a “consumption” rate.<sup>79</sup> Table 4 presents the average revenue per kilowatt-hour revenue for domestic and farm service by Canadian province from 1930 to 2000. The four provinces with the highest average household power usage from 1930 to 1970 (see Table 3)—Manitoba, Ontario, British Columbia, and Quebec—also had the lowest power rates during this period; the exception is 1970, when British Columbia moved to fifth spot in the country for lowest average power rates. During this period, Manitoba maintained the highest domestic power usage and lowest power rates, followed by Ontario, with the second-highest domestic power usage and lowest power rates.

Although domestic service prices and corporate sales strategies varied, there was commonality in overall sales among domestic customers with similar average costs of service. For instance, in the 1920s, the publicly owned Hydro-Electric Power Commission of Ontario, with a rate design based on service to each customer class at

<sup>79</sup>Utilities using this domestic service revenue model included BC Electric; BC Electric Railway; Edmonton Power; London Hydro; Manitoba Hydro; Montreal Light, Heat & Power; NB Power; NS Power Saskatchewan; Shawinigan Water & Power; and Toronto Hydro-Electric.

*Table 5*  
 Percentage of Average Revenue per Domestic and Farm Service  
 Customer Relative to Household per Capita Income by  
 Canadian Province, 1930–2000

Year	BC	AB	SK	MB	ON	QC	NB	NS	PE	NF
1930	4%	8%	17%	9%	5%	6%	9%	8%	11%	NA
1940	5%	8%	14%	11%	5%	6%	10%	7%	15%	NA
1950	4%	4%	6%	5%	3%	4%	5%	4%	10%	5%
1960	6%	4%	6%	5%	4%	4%	6%	6%	8%	7%
1970	4%	3%	6%	4%	3%	4%	5%	4%	6%	5%
1980	3%	2%	3%	5%	3%	4%	6%	5%	7%	7%
1990	3%	3%	4%	4%	4%	4%	5%	4%	4%	7%
2000	2%	2%	3%	3%	3%	4%	6%	4%	4%	5%

Source: Electricity revenue data made available by the Canada Dominion Bureau of Statistics, Census of Industry, Part 1-Statistics, Central Electric Stations in Canada, 1920-1998 are labeled with the numbers CS57-202-1920 to CS57-202-1988. The data for the period from 1999 - 2000 are 57-003-x2000000 to 57-003-x2007000. The household per capita income data was prepared from Statistics Canada Table 36-10-0229-01. See also "Long-run provincial and territorial data," Statistics Canada, 2 Nov. 2018, accessed 4 Jan. 2024, <https://doi.org/10.25318/3610022901-eng>.)

cost, had similar domestic consumption levels as the privately owned BC Electric Railway (which provided its shareholders with a return on investment).<sup>80</sup> They also had similar experiences in appliance sales in the 1920s, with flat irons as the best seller, followed by toasters.<sup>81</sup> Likewise, in the late 1930s, large appliance sales surged, including for ranges, refrigerators, washing machines, and vacuum cleaners.<sup>82</sup>

Lower domestic power rates also correlated, in general, with a lower percentage of household spending on electric service. Table 5 presents the average revenue per domestic and farm service customer relative to total household per capita income by Canadian province for 1930 to

<sup>80</sup>A. Lennox Stanton, "The Hydro-Electric Power Commission of Ontario," *Journal of the Royal Society of Arts* 4013, no. 77 (1929): 1115–1130.

<sup>81</sup>Letter from the manager, Light & Power Department, to A. T. Goward, vice president, BC Electric Railway, 20 Sep. 1924, MSS 4, v. 220, 8800580634, British Columbia Electric Railway Co. (BCER Co.), Victoria Records, 1861–1944, British Columbia Archives, Victoria, British Columbia, Canada (BC Archives); Letter from the manager, Light & Power Department, to A. T. Goward, vice president, BC Electric Railway, 6 Sep. 1929, MSS 4, v. 228, 8800580642, BCER Co., Victoria Records, 1861–1944, BC Archives; Stanton, "The Hydro-Electric Power Commission of Ontario."

<sup>82</sup>Tanis Day, "Capital-Labor Substitution in the Home," *Technology and Culture* 33, no. 2 (1992): 302–327; Blair Elliot Tothill, "Living Electrically: The British Columbia Electric Railway Company and the Development of the Domestic Electric Appliance Market in Victoria, 1919–1939" (Ph.D. diss., University of Ottawa, 1997).

2000. British Columbia, Ontario, and Quebec all have the lowest percentages from 1930 to 1950. Manitoba is an outlier in this grouping because it led the country in kWh usage from 1930 to 1950 (due in part to having the lowest power rates in Canada), but it had middling household per capita income relative to other provinces. In the Atlantic region, as domestic power rates decreased, annual household kWh consumption and the percentage of household spending on electricity began to approach that of Quebec by 1970.

### Marketing Power as Rationality, Leisure, and Intimacy in the 1920s

Decreasing power rates were not the only factor behind increases in the number of customers and sales. According to advertising agency advice in *The Electrical News*, the industry's biggest problem in 1920 was the public's lack of understanding of the need for more capital to build utility generation and transmission, and thus expand the scale of the system and reduce the cost of domestic service. The solution to this problem was the "enlightenment of the public so that it will understand not only generally, but specifically, every important phase of the electric light and power industry."<sup>83</sup> In other words, the solution was to educate the public to think like a utility in terms of capital spending and returns. The job for domestic ratepayers was to see the low-cost value of electricity and the potential for further cost reductions as system capacity was increased. The business trade journals had a similar message for electricity marketers, although without the engineers' call to educate consumers on system techno-economics. The advice was to sell the idea of electricity in terms of customer wants, such as more speed and efficiency of electric cooking relative to wood or coal ovens, as a solution to the lack of servant problem or for more leisure time.<sup>84</sup>

The public and private utilities with capacity to expand domestic sales and deliver relatively low power rates, such as BC Electric, Montreal Light, Heat & Power, and Toronto Hydro-Electric, acted on this advice in the 1920s and sold electricity to households as rationality. Local distributors, such as London Hydro, spent about 4 to 5 percent of gross sales on advertising, most of it devoted to newspapers.<sup>85</sup> The message was to raise the efficiency of domestic work by replacing human muscle with electric-powered machines. Manufacturer and utility

<sup>83</sup>George F. Oxley, "Publicity—the Solution of the Biggest Problem of Electric Light and Power Industry," *The Electrical News*, 1 Oct. 1920, 41.

<sup>84</sup>J. E. Bullard, "The Dealer and the Contractor," *The Electrical News*, 1 June 1917, 33; "The Contractor–Dealer," *Marketing and Business Management*, 1 Apr. 1920, 14 (no. 7): 42.

<sup>85</sup>E. V. Buchanan, "Electrical Merchandizing from the Viewpoint of a Municipal Hydro Department," *The Electrical News*, 15 Jan. 1920, 44–45.

advertising sought to teach residential customers the meaning of a kWh in terms of its financial cost per unit and cost-per-task or cost-per-hour so they could calculate the benefits of replacing human labor. The message, for instance, was that electric cooking was fast and you would be foolish not to do it. Ontario Hydro promised that its power and washing machines would “do all the hard work” for busy mothers.<sup>86</sup> Toronto Hydro ads said washing clothes or sweeping rugs by hand could be done by electronic motors for less than 2 cents per hour.<sup>87</sup> BC Electric Railway told its customers a large dinner cost only 4½ cents to cook.<sup>88</sup> A Montreal Light, Heat & Power ad from 1925 showed the decreasing cost per kWh from 1908 (12.75 cents) to 1925 (3.50 cents) versus the increasing cost of labor since 1913 (up 87 percent) and food.<sup>89</sup>

Given that the premise of these kWh-oriented ads rested on customer perception of residential meter accuracy, utilities were particularly concerned when doubts were raised.<sup>90</sup> These doubts about reliability were longstanding, evidenced by advertisements from meter manufacturers in trade magazines during World War I.<sup>91</sup> Montreal Light, Heat & Power had since at least 1933 been running ads to respond to criticism that its meters overestimated power usage, comparing their precision to that of expensive watches.<sup>92</sup> In 1939, the Federal Department of Trade and Commerce commissioned two advertising agencies, R. C. Smith Company and the James Fisher Company of Toronto, to design and publish two ads in newspapers across the country in support of meter accuracy.<sup>93</sup> Utilities from Calgary to Moncton wrote

<sup>86</sup>Parr, *Domestic Goods*, 228. See Note 32 for reference to the Ontario Hydro ads from 1859 to 1960.

<sup>87</sup>Toronto Hydro-Electric, “A Little Electronic Motor Would Do This Work for Less Than 2¢ an Hour,” *The Bulletin* 6, no. 1 (July 1927), Series 1749, File 35, Fonds 408, City of Toronto Archives, Toronto, Ontario, Canada (Toronto Archives). Toronto Hydro-Electric, “Any Woman Who Still Washes Clothes and Turns the Wringer by Hand Is Working for Less Than 2¢ An Hour,” *The Bulletin* 6, no. 8 (Feb. 1928), Series 1749, File 35, Fonds 408, Toronto Archives.

<sup>88</sup>“Yesterday a Dream—Today a Reality in 750,000 Homes,” *The Province*, 2 March 1929, 2.

<sup>89</sup>Montreal Light, Heat & Power presented these in 1925 ads titled “Rates Consistently Reduced” and “The Decreasing Rates for Electricity,” 13404, F09-3422, Hydro-Québec Archives, Montreal, Quebec, Canada (Hydro-Québec Archives).

<sup>90</sup>It was a longstanding firm and customer concern, beginning in the 1880s. See Graeme Gooday, *The Morals of Measurement: Accuracy, Irony, and Trust in Late Victorian Electrical Practice* (Cambridge, 2004), 219–262.

<sup>91</sup>“Where the charges are based on maximum demand and power delivered, meter the circuits with Westinghouse Type RO Watthour Demand Meters,” *The Electrical News*, 1 July 1916, 58.

<sup>92</sup>Montreal Light, Heat & Power, “Accurate as the Finest Watch,” *Dual Service Double* (Jan. 1933), FI/1208, loc: 4188, Hydro-Québec Archives.

<sup>93</sup>Letter from A. Thompson, The James Fisher Company, to Major J. G. Palmer, deputy minister, Department of Trade & Commerce, 4 Jul. 1939; letter from Jas. G. Parmelee, deputy minister, to Allan R. Thompson, The James Fisher Company, 5 July 1939. Both sources from RG20, Vol. 239, no. 32546, Libraries and Archives Canada, Ottawa, Ontario, Canada (LAC).

to the minister to express appreciation to the federal government for instilling public confidence in utility billing and addressing the public's suspicion and lack confidence in meters.<sup>94</sup> Representatives from Kingston Electric Department, Toronto Hydro, Canadian Utilities Limited, and the City of St. Catharines asked the Department of Trade and Commerce to purchase or make copies to distribute to its customers.<sup>95</sup>

Beyond ads, utilities also sought to shape loads—their shorthand for user social practices—through in-house publications, demonstrations, and schools. London Hydro, for instance, published a magazine called *Live Wire*. It was presented to the public through clubs and organizations like the Rotary and YMCA. It also delivered cooking and power equipment demonstrations at local fairs and constructed a showcase dining room and kitchen.<sup>96</sup> Likewise, BC Electric Railway was a heavy advertiser among firms selling electric appliances. As evidence of the appeal of its demonstrations, its 1925 home products fair attracted about 25,000 attendees. It also developed materials for domestic science education programs in local high schools.<sup>97</sup> These courses provided an initial introduction to household technology, standardized methods, and authoritative cookbooks later used in adulthood.<sup>98</sup> While student opinions were mixed as to whether the classes were helpful or a waste of time, interview records from the Behind the Kitchen Door project

<sup>94</sup>Letter from B. M. Bill, Canadian Utilities Limited, to J. C. Parmelee, deputy minister, Department of Trade and Commerce, 18 July 1939; letter from J. McQuaker, Owen Sound Public Utilities Commission, to Hon. W. D. Euler, minister, Department of Trade and Commerce, 20 July 1939; letter from W. H. Munro, The Ottawa Electric Company and The Ottawa Gas Company, to Major J. C. Parmelee, deputy minister, Department of Trade and Commerce, dated 21 July 1938; letter from E. A. Cummings, Moncton Electricity and Gas, to Hon. W. D. Euler, minister, Department of Trade and Commerce, 22 July 1939; letter from Eastern Light & Power to Hon. W. D. Euler, minister, Department of Trade, 24 July 1939; letter from Cyril J. Webb, Pembroke Electric Light Company, to the Publicity Bureau, Department of Trade and Commerce, 17 Sep. 1940; letter from M. C. Gilman to the Hon. W. D. Euler, minister, Department of Trade and Commerce, 21 July 1939; letter from A. M. St. Marie, Montreal Light, Heat & Power, to Hon. W. D. Euler, minister, Department of Trade & Commerce, 28 July 1939. All sources from RG20, Vol. 239, no. 32546, LAC.

<sup>95</sup>Letter from B. M. Bill, Canadian Utilities Limited, to J. C. Parmelee, deputy minister, Department of Trade and Commerce, 18 July 1939; letter from P. B. Yates, City of St. Catharines, to Hon. W. D. Euler, minister, Department of Trade and Commerce, 20 July 1939; letter from C. C. Folger, Electric, Gas and Water Departments, Kingston, to W. D. Euler, minister, Trade and Commerce, 21 July 1939; letter from F. W. Peasnell, Toronto Hydro, to J. G. Parmelee, deputy minister, Department of Trade and Commerce, 10 Aug. 1939. All sources from RG20, Vol. 239, no. 32546, LAC.

<sup>96</sup>W. M. Findlay, "Electrical Interests Find a Way to Enlarge Their Market," *Marketing and Business Management* 16, no. 4 (15 Feb. 1922): 1–2.

<sup>97</sup>Letter from the manager, Light & Power Department, BC Electricity Railway, to A.T. Howard, vice president, BC Electric Railway, 15 Sep. 1925, MSS 4, v. 228, 8800580642, BCER Co., Victoria Records, 1861–1944, BC Archives.

<sup>98</sup>Riley, "Six Saucepans to One," 136.



show an enduring influence through instruction in ironing, cleaning, and cooking with new appliances as well as in more unit-based measurements.<sup>99</sup> There was also influence from these classes when students went on to teach others home economics in the province for the Department of Agriculture and Vancouver area schools.<sup>100</sup>

In addition to predominant messages of efficiency, leisure was presented as the payoff for rational housekeeping, with many ads showing users reading, relaxing, or conversing. For instance, according to a 1920 Toronto Hydro Shop ad, having the electric percolator and toaster on the table meant it was no longer necessary to run back and forth to the kitchen for fresh toast and hot coffee.<sup>101</sup> For women, the ads suggested electric appliances meant more time with friends and husbands. To illustrate the concept, a series of ads from Canadian utilities showed how cooking at the table saved work and allowed more time with husbands, as presented in Figures 1 and 2. Reflecting the expanding awareness of electricity as an enabler of intimacy, the 1916 ad in Figure 1 shows the husband and wife with eyes on the electric appliance, in contrast to the 1927 ad in Figure 2 in which there is now conversation and eye contact.<sup>102</sup>

### From Selling Power and Appliances to Family Happiness and Fun in the 1930s and 1940s

Intimacy, rationalization, and leisure continued as themes in utility advertising in the 1930s and 1940s, with kitchens as a focal place. Ads continued to emphasize labor-saving and the potential to bring husbands and wives together at the dining table.<sup>103</sup> More generally, utilities presented the kitchen as a narrative of progress.<sup>104</sup> Figure 3 illustrates the narrative with two model kitchens from a circa 1950 Ontario Hydro display at the

<sup>99</sup>Dorothy Lorenz, interview, Item T4088:0012; Phyllis Eltringham, interview, Item T4088:0009; Lillian Marshall, interview, Item T4088:0015, all interviews from Behind the Kitchen Door project, PR-2248, BC Archives. Behind the Kitchen Door project is an oral history collection of 64 interviews with Victoria and Vancouver area women conducted by Kathryn Thomson, Lynn Bueckert, Kathy Chopik, and Catherine Hagen.

<sup>100</sup>Lillias Milne interview; Item T4088:0015; Phyllis Eltringham interview, both from PR-2248, BC Archives.

<sup>101</sup>"The breakfast you all enjoy is electrically prepared," *The Globe & Mail*, 30 Jan. 1920.

<sup>102</sup>BC Electric Railway, "Cook Right at the Table," *The Province*, 3 Jan. 1920, 83, Box 8800582862, Item 7, BC Archives.

<sup>103</sup>Montreal Light, Heat & Power, "To the King's Taste," *Dual Service Double* (March 1931): 12, FI/1208, loc: 4188, Hydro-Québec Archives. This ad contrasts new and old dining practices, with the former illustrated to show a female character preparing a meal over a wood stove in a separate room while the male character waits seated at a table.

<sup>104</sup>For a history of how the American "kitchen became the most technologically saturated room in the early twentieth century," see Michelle Mock, "The Modernization of the American Home Kitchen, 1900–1960" (Ph.D. diss., Carnegie Mellon University, 2011).



**ELECTRIC GRILL STOVE WEEK**

## Cook Right on the Table

with the aid of the Electric Grill Stove. It is no toy or experiment, but an up-to-the-minute electrical cooking device.

**What El Grilstovo Can Do:**

<i>BOIL,</i>	<i>MAKE WAFFLES,</i>	<i>and any of two</i>
<i>BROIL,</i>	<i>POP CORN,</i>	<i>of these operations</i>
<i>FRY,</i>	<i>MAKE TOAST,</i>	<i>at the same time.</i>

The Electric Grill Stove is just Electric Iron Efficiency transferred to the dining room table.

Think of the steps between kitchen and dining-room you could save by cooking right on the table.

**“THE THREE-POUND STOVE”**

needs no fuel and causes no fuss; the twitch of a switch puts it in operation.

Figure 1. “Cook Right on the Table,” 1916. Reading from left to right, the surprise was to find a woman at the breakfast table. (Source: BC Electric Railway, “Cook right at the table,” *The Province*, 3 June 1916, 83, Box 8800582862, Item 7, BC Archives.) Image courtesy of the BC Archives.

Canadian National Exhibition. The “country-kitchen” (left) relied on windows and kerosene lamps for light and wood or coal for heat. The table with three chairs centered the kitchen as both dining and workspace. The “operating room kitchen” (right) featured gleaming workspaces lit by windows, ceiling, above-sink, and hanging light. Although tables and chairs were still in the foreground, the dining space was shrunken and decentered from the work area, the new focus of the kitchen.



## Toast for Two

*made so easily*  
*—electrically*

VERY dainty and domestic was she as she served him tender, crispy toast with a little dish of marmalade. As he thought her exceedingly graceful with the preparation and was quite sure that no one else could evolve such a delicious treat.

Of course she used an Electric Toaster, (one she selected at the Hydro Shops) and not only did it make toast but it saved so much work, too.

### TIPS FOR TASTY TOAST

- Cinnamon toast.
- Welch Rarebit on toast.
- Creamed mushrooms on toast.
- Shrimp a la king on toast.
- Creamed cheese and tomato on toast.
- Toast with apricot conserve.
- French toast.
- Sardine Sandwich on toast.
- Asparagus on toast.
- Egg and Green Pepper salad on toast garnished with green olives.

*Come in and see Electric Toasters*  
*at either Hydro Shop*

Figure 2. "Toast for Two," 1927. It is only the women's chair that is drawn, underscoring that she is now being seated. In this version, the male figure leans far across the table with intense eye contact and reaching hand. The table is uncharacteristically without coffee and plate for toast. (Source: Toronto Hydro-Electric, "Toast for two made so easily and electrically," *The Bulletin* 5 no. 10 (April 1927), Series 1749, File 35, Fonds 408, Toronto Archives.)





Figure 3. Ontario Hydro model kitchens. (Source: Box ABO170.1, Folder "Displays," Ingenium Archives, Ottawa, Ontario, Canada Ingenium Archives).

The main narrative of enlightenment-as-progress is reflected in other utility public relations materials of the period, such as a panel cartoon from Shawinigan Water and Power showing the advancement of lighting from fireplaces and candles to coal gas in the early 1800s to lard oil lamps in the 1850s to kerosene lamps in the 1870s and finally to electric-lighted kitchens in the 1940s. The message was that modern kitchen design "speeds work, reduces fatigue, [and] eliminates mistakes."<sup>105</sup> Along with efficiency came convenience and comfort in electrified kitchens. Ads emphasized saying goodbye to fatigue from chopping wood, carrying kindling, stoking fires, and carrying out ashes.<sup>106</sup> In addition to freedom from drudgery and having cleaner and brighter kitchens, it also meant less food waste and more leftovers for marketers.<sup>107</sup> Water on floors from block ice was to be no more. As with the shop floor, electricity meant more productivity and safety for home workers.

These messages were also disseminated in the wider culture. In an article on the new power age, the national *Maclean's Magazine* explained electric utility economics for its readers and the implications for domestic users.<sup>108</sup> The message was that the massive increase in

<sup>105</sup>Shawinigan Water & Power, "Eyes Right," *Bulletin* (Apr. 1942), 10, FI/1209, loc: 4187, Hydro-Québec Archives.

<sup>106</sup>Shawinigan Water & Power, "Kitchen Fatigue," *Bulletin of the Commercial & Distribution Department* 3, no. 4 (May 1936): 33, FI/1209, loc: 4187, Hydro-Québec Archives.

<sup>107</sup>Shawinigan Water & Power, "Keep the 'Leftovers' Fresh and Wholesome," *Bulletin of the Commercial & Distribution Department* 3, no. 8 (Aug. 1936), FI/1209, loc: 4187, Hydro-Québec Archives.

<sup>108</sup>C. L. Sibley, "The New Power Age," *Maclean's Magazine* 43, no. 24 (31 Dec. 1930): 2–53.

power generation would mean salvation of the home through the end of drudgery. Writers in *Maclean's* and the national newspaper *The Globe* also speculated on the coming public problem of having “more leisure time on its hands than it will know what to do with.”<sup>109</sup>

Advertising campaigns to grow domestic use expanded beyond Vancouver, Toronto, and Montreal. The privately held Shawinigan Water and Power Company (co-founded and led by John Aldred, a former vice president of the Canadian subsidiary of Gillette Safety Razor Co. and president of Consolidated Gas and the Electric Light and Power Co. of Baltimore) was particularly active in the use of advertising to grow domestic load in its industrial territory. Its campaigns sought to persuade home users of the efficiency of power by translating the kWh into labor, time, and even pleasure (e.g., equivalent to the work of one maid cleaning an eight-room house, or 13 hours of muscle work).<sup>110</sup> At 5 cents per kWh, it was only about a quarter of the cost of relevant domestic labor in Quebec, at about 20 cents per hour.<sup>111</sup> For smokers, the utility claimed that two hours of electric lighting for a month (using one 100-watt bulb) was equal in value to a package of cigarettes.<sup>112</sup>

Utilities outside of the big cities also sought to show how to make family relationships more intimate, loving, and happier. A 1934 marketing plan from Saskatchewan-based Dominion Electric Power Limited noted that while utilities had been advertising for years, it had been limited to pushing appliance sales or countering the perception of power utilities as greedy monopolists and collaborators in the “Insull crash” of 1929 and the ensuing Great Depression.<sup>113</sup> Moreover, only recently “any real effort has been made to sell electric service of itself,”

<sup>109</sup>George Alger, “Can We Occupy Leisure Hours?” *Maclean's Magazine* 38, no. 10 (1 May 1925): 38; “Use of Electricity Has Robbed Home of all Drudgery,” *The Globe*, 29 Aug. 1925, 7; “Time for Leisure Is Now Available,” *The Globe*, 28 Aug. 1926, 16; “Leisure Time to be the Problem of the Future,” *The Globe*, 29 Jan. 1935, 8.

<sup>110</sup>Claude Bellavance, *Shawinigan Water and Power, 1898–1963: formation et déclin d'un groupe industriel au Québec* (Boréal, 1994); Shawinigan Water & Power, “Electricity: What Is a Kilowatt-Hour?” *Bulletin of the Commercial and Distribution Department* (May 1939): 34, FI/1209, loc: 4187, Hydro-Québec Archives; Shawinigan Water & Power. “One Kilowatt-Hour Equals?” *Bulletin of the Commercial and Distribution Department* 4 no. 7 (July 1937): 60, FI/1209, loc: 4187, Hydro-Québec Archives.

<sup>111</sup>Shawinigan Water & Power, “What 5¢ Can Do for the Housewife!” *Bulletin of the Commercial and Distribution Department* 4, no. 4 (Apr. 1937), FI/1209, loc: 4187, Hydro-Québec Archives; Statistics Canada, “Minimum Wage Rates for Female Workers in Canada Under Orders of Provincial Minimum Wage Boards, as on December 31, 1936,” accessed 4 Jan. 2024, [https://www65.statcan.gc.ca/acyb02/1937/acyb02\\_19370784003a-eng.htm](https://www65.statcan.gc.ca/acyb02/1937/acyb02_19370784003a-eng.htm).

<sup>112</sup>Shawinigan Water & Power, “The Cheapest Comfort You Can Buy,” *Bulletin of the Commercial & Distribution Department* 2, no. 6 (Nov. 1935): 45, FI/1209, loc: 4187, Hydro-Québec Archives.

<sup>113</sup>Dominion Electric Power Limited, “Advertising Campaign Proposal,” (1934), 1, Box F493, File PO. 1, 3-4, The Provincial Archives of Saskatchewan, Regina, Saskatchewan Canada (Sask Archives).

and very little of it had “been done with the object of selling the public on the use of electric energy in the home.”<sup>114</sup> Noting that seven large American companies were now trying to popularize Reddy Kilowatt as the household servant, Dominion took a different approach to emphasize electricity as not only a servant but also as a source of domestic happiness. The idea was to look beyond efficiency and convenience and to what families would do with this saved time.

The advertising should first keep in mind the fact that the consumer has certain wants. He may not want electric services at the start, but he does want comfort, health, leisure, etc. If he is shown that electric service will supply those wants, he will want electric service.<sup>115</sup>

The resulting marketing campaign material used two working-class figures, “Lighter” and “Brighter,” to illustrate the dual function of electricity in the average home. The tableaux of the folksy couple lacked the “brilliance of imagery and intensity of focus” of high production-value American ads of the 1930s.<sup>116</sup> Instead of confident, youthful, and slender elites, we have smiling, middle-aged, and short figures. The male figure, “Lighter,” in a reversal of the gender roles, was the servant who washed and ironed the clothes, vacuumed the carpets and furniture, and cooked the dinners. The female figure, “Brighter,” brightened events and entertained family and friends. Instead of life-as-labor, family life was to be happy and fun and allow for cultivation of intimate relationships. Together, they lightened the housewife’s labor and brightened the hours of leisure and play.

This idea of electricity as an enabler of intimacy was expanded in post-World War II advertising. Pre-World War I advertising that featured the family often had its gaze directed to the electrical appliances.<sup>117</sup> Figure 4 shows the way families were portrayed after World War II, sharing the same room, happily reading, playing, and in conversation.

However, there were limits to messages of intimacy and equality at the table. Utility marketing materials also characterized the home as a workplace where wives were to “not let your mind wander inattentively when he [your husband] is explaining something.”<sup>118</sup> As well, wives were

<sup>114</sup> Dominion, “Advertising Campaign Proposal,” 2.

<sup>115</sup> Dominion, “Advertising Campaign Proposal,” 9.

<sup>116</sup> Marchand, *Advertising the American Dream*, 171-179, 285-324.

<sup>117</sup> Shawinigan Water & Power, “Perpetuate your Thoughtfulness with A Practical Gift,” *Bulletin of the Commercial & Distribution Department* 6, no. 12 (Dec. 1939), FI/1209, loc: 4187, Hydro-Québec Archives.

<sup>118</sup> Shawinigan Water & Power, “The Feminine Realm . . .,” *Bulletin of the Commercial & Distribution Department* (Feb. 1939): 10, Hydro-Québec Archives.



never to be late, and were to inspect their makeup once but the breakfast table three times, according to utility marketing.<sup>119</sup> Wives as laborers and husbands as consumers in the home were predominant themes in utility ads of the period.

### Scaling of Home and Leisure Jobs from the 1950s to 1970s

Post-war utility marketing called for bigger homes; greater rationality in use of electricity; increases in leisure time; and more family intimacy, happiness, and fun. All of this was to be scaled up. Canadian homes as presented by utilities were to be larger in size as well as more open, functional, standardized, and less busy than pre-war homes. Rather than heating in hearths and lighting with candles and kerosene lamps, forcing families to gather together on dark evenings, central and electric baseboard heating and electric lighting allowed for more distance and privacy.<sup>120</sup>

In a 1964 issue of its *Current Events* newsletter, the New Brunswick Electric Power Commission profiled what they called a typical home.<sup>121</sup> The five-bedroom “typical home” had 2,400 square feet. Even in Canada, this was large. Only in 2016–2017 did the median square feet of new homes (single-detached) in Canada’s largest province (by population, Ontario) catch up in square footage to post-war homes.<sup>122</sup> And this was 30 percent larger than median homes (by square feet) built in the 1980s and 1990s, and almost double the median size of homes constructed in 1960 (at about 1,200 square feet). Ironically, these increases coincided with decreases in the average number of people per home in Canada, declining from more than six in 1851 to five by 1906, four in 1951, three in 1976, and 2.5 in 2006.<sup>123</sup> As a consequence, space and power increased as household numbers declined. The “typical home,” for instance, used just under 32,000 kWh in the 12-month

<sup>119</sup>Shawinigan Water & Power, “The Feminine Realm . . .,” *Bulletin of the Commercial & Distribution Department* (March 1939): 23, Hydro-Québec Archives.

<sup>120</sup>Peter Ward, *A History of Domestic Space: Privacy and the Canadian Home* (British Columbia, 1999), 49. Even in summer evenings, families were together given the cost of flammable lighting and the danger they posed if left alone with children.

<sup>121</sup>New Brunswick Electric Power Commission, “Let Us Analyse a Typical Home,” *Current Events* 12, no. 6 (Nov.–Dec. 1964): 15–17. Access provided by NB Power.

<sup>122</sup>Statistics Canada, “New Data on Assessment Value per Square Foot and Above-Grade Living Area,” 2019, accessed 4 Jan. 2024, <https://www150.statcan.gc.ca/n1/daily-quotidien/190503/dq190503b-eng.htm>.

<sup>123</sup>Statistics Canada, “The Shift to Smaller Households Over the Past Century,” 2018, accessed 4 Jan. 2024, <https://www150.statcan.gc.ca/n1/pub/11-630-x/11-630-x2015008-eng.htm>.



Figure 4. Family circle, 1948. This meaning of electric power-as-family-connector has now arrived. The mother and daughter exchange warm looks while the father and sons are absorbed in the funny pages and toy car. A convention of these ads is for mothers and daughters to express love through smiles and fathers and sons to do so through touch. Only the older son is left out, although his brown shoes (matching everyone else's, except those of his sister) visually touches his mother's leg. The mother and father are placed at equal height in the ad (relative to the top border), symbolizing their equality in the tableaux. However, it's the mother's body that extends into the centre frame; she is the centre of the family circle. (Source: Shawinigan Water & Power, *50 Years of Achievement, 1898–1948* [Montreal, 1948], "Customers", OCLC 100687649, LAC.)

period of 1963–1964, far higher than both the 1964 provincial annual average of just under 3,000 kWh and the Canadian yearly average of more than 5,000 kWh. It was also far more than the peaks of average annual usage in New Brunswick (17,125 kWh) in 1994 and in Canada (13,536 kWh) in 1990.

With bigger homes with more rooms, utilities expanded their rationalization messages.<sup>124</sup> Hydro-Québec's Medallion Home Program called for each room to be heated to an optimal temperature for its function, with 68 degrees Fahrenheit in the bedroom, 71 degrees in the kitchen, 72 degrees in the living room, 74 degrees in the bathroom, and 75 degrees in the baby's room.<sup>125</sup> With lighting, there were recipes to be followed for each room and function based on industrial testing programs. Utilities, for instance, provided its customers with prescriptions for reading with a floor lamp. Height to the lower edge of the shade was specified to be not more than 49 inches and not less than 47 inches above the floor. Floor lamps were to be placed 15 inches to the right or left of the center of the reading material and 26 inches to the rear.<sup>126</sup> There were also correct dimensions for shades, to be at least 10½ inches across the top and 16 inches across the bottom. Saskatchewan Power was not alone. In New Brunswick, the local power commission sponsored a two-day course on lighting.<sup>127</sup> Hydro-Québec provided similar direction to its readers. Using material from General Electric, it specified the height of the bottom of floor lamp shades to exactly 47 inches.<sup>128</sup> These lighting recipes were made not just for floor lamps but also for table, wall, and desk lamps; ceiling fixtures; lighted valances and cornices; as well as for task lighting, such as for sewing, playing piano, watching television, cooking, dining, washing dishes, reading in bed, applying makeup, shaving, doing laundry, and ironing. Reflecting mid-century assumptions of "master" bedroom design and problem-solving through consumption, another recipe from General Electric advised homemakers that the best way to unify the experience of sleeping in twin beds was to mount a 6½-foot lighted wall bracket 30 inches above the mattresses. Moreover, the advice was not limited to indoor lights. Utilities provided guidance on outdoor lighting. Quebec

<sup>124</sup>The Ontario Hydro campaign from 1959 underscored this approach with ads titled "Reason Tells You . . . Electricity Is for You!" as featured in *The Pickering News*, 6 Feb. 1959, 6.

<sup>125</sup>Compagnie Québec Power, *Bienvenue dans cette maison médaillons*, 1960, File F19/3319, #3a, Hydro-Québec Archives.

<sup>126</sup>Saskatchewan Power, "Light for Living," *Power Talks* no. 5 (1957), Box 1877, Sask Archives.

<sup>127</sup>New Brunswick Electric Power Commission, "The Canadian General Electric Lighting Course," *Current Events* 5, no. 5 (1957): 5.

<sup>128</sup>General Electric, "See Your Home in a New Light: Enjoy Light for Living in Your Light-Conditioned Home," third edition, File FC19/3319, #3c, Hydro-Québec Archives.



Figure 5. Ontario Hydro mid-century modern kitchen, circa 1960. (Source: Kitchen circa 1960, Box ABO170.1, Folder “Displays,” Ingenium Archives.)

Power offered a brochure for outdoor lighting for “after-dark beauty and family living.”<sup>129</sup> In its customer newsletter, BC Electric showed households how to beauty-light their gardens.<sup>130</sup>

Lighting was also to be reimagined for the larger kitchens of the period. The Ontario Hydro mid-century modern kitchen, shown in Figure 5, was lit with eight potted lights, three floor lights, and a table lamp. Expanded to the size of the old “country-kitchen,” its minimalist décor and island re-integrated the kitchen as both a social space and workspace.

With the home expanded and rooms appropriately heated, lighted, and redecorated, utilities suggested more time for family activities. In the 1950s, televisions began to regularly appear in advertising, fitting nicely in the comfortable, leisure-based domesticity of electrified post-war homes.<sup>131</sup> The range of family activities in advertising included listening to the radio or records, playing cards and games, running model trains, gardening, or just sitting together.<sup>132</sup> A Quebec Power

<sup>129</sup> Quebec Power, “Lighting for Living Outdoors! How to Light Your Yard and Garden for After-Dark Beauty and Family Living,” circa 1960, File FC 19/3319 #3c, Hydro-Québec Archives.

<sup>130</sup> B.C. Electric, “Beauty-Light Your Garden,” *Service Digest* 1, no. 2 (June/July 1960), File H2015.11.4, Museum of Vancouver, Vancouver, British Columbia, Canada.

<sup>131</sup> Emily Rees, “Television, Gas and Electricity: Consuming Comfort and Leisure in the British Home 1946–65,” *Journal of Popular Television* 7, no. 2 (2019): 127–143.

<sup>132</sup> Manitoba Hydro and Edison Electric Institute, *Electric Gardening*, circa 1960, Box No. 1877, Sask Archives.

brochure for outdoor lighting featured a birds-eye view of the yard with a tennis court and pool, included images of families playing tennis, croquet, and archery.<sup>133</sup>

Not only did Canadian electric utilities show their residential customers how to use time saved for more expressive and happy family lives but also how to host and socialize in their new homes. Rather than limiting social events to halls and restaurants and, weather permitting, parks and backyards, parties could happen year-round at home. Consequently, parties featured prominently in utility marketing in the 1950s and 1960s. To address the challenge for women with time increasingly devoted to jobs and busy family lives, utilities provided suggestions on how to entertain. According to a 1961 power utility newsletter:

Informality is the theme for entertaining in most homes today; and a buffet supper has a happy air of informality that adds to that feeling of being able to eat to your hearts' content, even as you relax while conversing with friends.<sup>134</sup>

The image that accompanied the article, shown in Figure 6, showed customers what to expect at these parties. In addition to selling electric hot plates, monthly newsletters and cookbooks published by utilities informed women how to cook and prepare the table for guests. Canadian utilities also suggested what their domestic customers could do after dinner. There were sports in the well-lighted yard, card games at the table, hockey games on the television as well as conversation, dessert, and freshly percolated coffee in the living room. Saskatchewan Power's public relations department suggested dancing. They also published a guidebook for its customers and delivered a square-dancing program on a local radio station.<sup>135</sup> Power in these ads provided a means for deeper and stronger friendships in spending more time together in leisure.

Although rarely mentioned in marketing material before the war, sports featured prominently afterward, whether in lighted backyards, playgrounds, courts, or outdoor neighborhood rinks, as well as the new powered indoor facilities. Baseball, bowling, curling, and hockey leagues filled the pages of power utility newsletters.<sup>136</sup> With more leisure time,

<sup>133</sup>Quebec Power, "Lighting for Living Outdoors!" n.d., File F19/3319 #3c, Hydro-Québec Archives.

<sup>134</sup>Saskatchewan Power, "Entertaining—Buffet Style," *Power Talks* 12 (1961), Box 1877, Sask Archives.

<sup>135</sup>Saskatchewan Power, "Square Dance Notebook," *Power Talks* 4 (1958), Box 1877, Sask Archives.

<sup>136</sup>Saskatchewan Power, "Artificial Ice Gains Popularity," *Power Talks* 2 (1955), Box 1877, Sask Archives.





Figure 6. "Entertaining – buffet style," 1961. This a middle-class home, as illustrated by the limited seating and side tables. Guests sit on stool (man) or floor (woman); drinking glass, cigarette package and ashtray are also on the floor. The martini pitcher and bottles of alcohol (more likely spirits than wine, given English Canadian norms of 1960s) occupy the centre of the tableaux, showing customers what to bring as gifts and expect before dinner. As is conventional in the dinner party tableaux, the hostess holds the attention of the room. She towers over and beneath the guests, nearly touching the top and bottom frame. She is distinguished from the other three women in her light-coloured clothes, matching those of the men. If there is any doubt that she is a unique, largely-than-life super hero, she is revealed here as not only the (most likely) dinner party organizer, hostess, shopper and cook, but also performer and mother, with "M" on her sweater like the "S" of superman. (Source: Saskatchewan Power, "Entertaining – buffet style," *Power Talks* 12 [1961], Box 1877, Sask Archives.)



Canadians increasingly registered themselves and their children for lessons and leagues.<sup>137</sup> Weekday evenings became normalized as times for families to spend together under the lights at bowling alleys, baseball diamonds, hockey and curling rinks, football fields, and church basements for scout meetings. And at home, parents did the organizational work for these groups.

Seasonal festivities such as Halloween were also in the plans of the electric industry. Electrical suppliers sought to benefit from the transformation of Halloween from a nineteenth-century night of “pranks, tricks, illusions, and anarchy” to mid-twentieth-century door-to-door treat-giving to youngsters.<sup>138</sup> In the 1910s, General Electric Canada was an early mover in the emerging culture of trick-or-treating, adding to their sales of strings of Santa Claus and snowmen light bulbs via the shape of pumpkin heads and witches.<sup>139</sup> A New Brunswick Electric Power Commission home economist wrote in the late 1950s about the recent past, before electric street lighting, when Halloween was then an evening at home with taffy and families telling stories that were full of fear, ghosts, and tricks. With lighted streets and houses, it subsequently become “more fun than fear.”<sup>140</sup> In addition to lighting, utilities helped with the cultivation of Halloween in developing plans for themed parties, complete with recommendations for invitations, decorations, cakes, candy apples, face painting, games, and gifts.<sup>141</sup> The lighting up of Halloween was, however, nothing compared to what utilities did in marketing for Christmas.

Christmas was the great annual celebration in utility public relations and marketing materials. No effort was to be spared in its celebration. Utilities recommended indoor and outdoor lighting, recipes for seasonal parties and Christmas day menus, electric-powered presents for family and friends, and decorations.<sup>142</sup> Utility chairmen and general managers addressed their residential customers with wishes

<sup>137</sup>A 2005 Statistics Canada General Social Survey found nearly half of all Canadian parents watch amateur sporting events, often their children's games. Warren Clark, “Kids’ Sports,” *Canadian Social Trends* 85 (2008): 54–61.

<sup>138</sup>Lesley Bannatyne, “When Halloween Was All Tricks and No Treats,” *Smithsonian Magazine*, 27 Oct. 2017, accessed 4 Jan. 2024, <https://www.smithsonianmag.com/history/when-halloween-was-all-tricks-no-treats-180966996/>.

<sup>139</sup>Canadian General Electric Co. Limited, *Electrical Supplies*, Catalogue No. 15 (1915–16), 592; Jack Santino, “Flexible Halloween: Longevity, Appropriation, Multiplicity, and Contestation,” in *Treat or Trick? Halloween in a Globalising World*, ed. Malcolm Foley and Hugh O’Donnell, (Newcastle upon Tyne, 2009), 9–17.

<sup>140</sup>Claudette Lajoie, “Hallowe’en,” *Current Events* 6, no. 5 (Sep.–Oct. 1958): 26–27.

<sup>141</sup>Saskatchewan Power, “Kitchen Papers,” *Power Talks* 10 (1954), Box 1877, Sask Archives; Claudette Lajoie, “Chatting in the Kitchen,” *Current Events* 10, no. 5 (Sep.–Oct. 1962): 38–39.

<sup>142</sup>Saskatchewan Power, “This Christmas—Make It Electrical,” *Power Talks* 11 (Dec. 1956), Box No. 1877, Sask Archives.

for peace on Earth, good will, joy, and happiness. Although the religious meaning was emphasized, so too were the commercial, social, and family experiences of Christmas. The general manager of one utility expressed common themes in his 1954 annual address:

Few of us ... can think of the approaching Yuletide Season without conjuring up visions of loaded dining tables, gaily wrapped gifts and the glamour and sparkle that make a Christmas what is in our happy country. All the better meaning of happy family life, possibly taken too much for granted at our other times, becomes focused in our minds during the Christmas Season.<sup>143</sup>

In a 1955 ad from SaskPower, the meaning of Christmas was synonymous with the meaning of electric power: both had happiness as their *raison d'être*.<sup>144</sup> Happiness, in other words, was the primary job for customers of electric power.

### Conclusion

US histories of mid-twentieth-century electrification emphasize the social and cultural shaping of power technologies. David Nye, in *Consuming Power*, shows energy system changes as being less about the development of technology and more about the development of culture. According to Nye, electrification neither increased nor colonized leisure time. Rather, it intensified an already ongoing transition from Victorian homes with public/private divisions, dark colors, ornamentation, family gatherings by hearths, and task-based production to homes that were lighter; cleaner; safer; more open; easier to maintain; and designed for consumption, efficiency, isolation, and a minimalist aesthetic.<sup>145</sup> Behind this transition were emergent values of home life as leisured, child-centered, managed, efficient, and enjoyable. For Nye, these homes and the new popular culture of the twentieth century arose not from elites or corporations in colonialization models but from consumers.<sup>146</sup> Likewise, Mark Rose, in *Cities of Light and Heat*, shows the influence of culture, politics, and cities in shaping technological change.

The contribution to business history in this article is to show both the transition from “family-as-labor” to “family-as-leisure” and the role of electric utilities in shaping domestic culture and the rise of leisure

<sup>143</sup>J. W. Tomlinson, “Seasons’ Greetings,” *Power Talks* 12 (1953), Box 1877, Sask Archives.

<sup>144</sup>Saskatchewan Power, “Peace on Earth,” *Power Talks* 12 (1955), Box 1877, Sask Archives.

<sup>145</sup>Nye, *Electrifying America*, 239.

<sup>146</sup>Nye, *Consuming Power*, 159–160.

jobs or “leisure-as-labor.” The role of utilities was similar but different than that of manufacturers of durable goods during the period.<sup>147</sup> Like electric appliance manufacturers, utilities developed home service organizations to deliver product demonstrations, speeches, and cook-books while disseminating messages of convenience and money-saving as well as gender roles.<sup>148</sup> However, durable-goods manufacturers turned to a narrower range of organizations to learn about feminine taste—specifically advertising executives, consultants, market researchers, and home economists. Utilities pursued their role by opening up their marketing to social movements and groups that created and disseminated these new meanings of family and social life. The business model innovation exploited in BC Electric; Montreal Light, Heat & Power; Toronto Hydro, Saskatchewan Power; Shawinigan Water & Power; and many other utilities brought allied social groups into the shared production and dissemination of their message.<sup>149</sup> In the case of Saskatchewan Power’s monthly *Power Talks* newsletters to households, the contributors included academics, appliance manufacturers, farmers, food producers, in-house graphic designers, home economists, homemakers, medical doctors, nurses, nutritionists, radio station managers, sports associations representatives, and utility staff.

The marketing of electric living to rationalize the home and make customers conversant about kWhs was the least successful of the campaigns. Although sales figures suggest that residential customers did buy into the basic value proposition of low-cost and high-consumption power, utilities failed in their goal to educate the public to think in terms of utility economics, household kWhs, or lighting-by-inches. Instead, money became the basis to quantify power usage, like dollars for gasoline, versus thinking in liters, joules, or British thermal units.

There was more convergence with ascendent twentieth-century norms in the campaigns to show customers how power may be used to

<sup>147</sup> Regina Lee Blaszczyk, *Imagining Consumers: Design and Innovation from Wedgwood to Corning* (Baltimore, 2000), 275.

<sup>148</sup> Peter Scott, “General Motors’ Other Franchise System: Creating an Effective Distribution Model for Frigidaire,” *Business History* 64, no. 1 (2022): 183–200; P. Scott and J. Walker, “Bringing Radio into America’s Homes: Marketing New Technology in the Great Depression,” *Business History Review* 90, no. 2 (Summer 2016): 251–276. For instance, a 1932 ad for Dominion Electric in Saskatchewan mentioned a General Electric refrigerator and a reduction of 10 percent in food costs due to prevention of food deterioration and waste. This document was made available by the Saskatchewan Archives Board, F493, Pol. 1, 3-4; Sherrie A. Inness, *Dinner Roles: American Women and Culinary Culture* (Iowa City, 2001), 163.

<sup>149</sup> Erika L. Paulson and Mary E. Schramm, “Electric Appliance Advertising: The Role of the Good Housekeeping Institute,” *Journal of Historical Research in Marketing* 9, no. 1 (2017): 41–65.

make family relationships more intimate, loving, and happier as part of “a new companionate family ideal that emerged in the early twentieth century.”<sup>150</sup> Utility marketing materials showed the emotional and organizational labor of the new family and social life. In ads from the 1920s, women could finally sit and talk with their husbands at the breakfast table, which is what marketers assumed women wanted to do. Toasters in these ads were marketed as emotional-connection machines, warming bread and marriage alike. Canadian marketers in the 1930s diverged from some US-based Reddy Kilowatt campaigns that sold electricity as household servants. Instead, utilities like Dominion Electric Power saw their Depression-era customers wanting brightened lives of leisure, play, and domestic happiness. In response, their ads and those from others like Shawinigan Water & Power showed happy, contented families talking, reading, and playing in electrically lighted living rooms. Appliances in these ads were sold as meaning more time for family activities. Likewise, lighted outdoor yards became grounds for family play in the summer and rinks in the winter. And if family members needed some privacy, advertising sold that too, with “typical homes” providing 600 square feet per person in the 1960s, about double the figure in Canada and Europe at the time.<sup>151</sup> Similarly, these utilities helped shape domestic expectations of social lives. Images of brightly lit kitchens, living rooms, dining rooms, and decks showed customers how to confidently create the right look for socializing with friends and neighbors. Lighting helped transform Halloween from scary tales told at home to well-lit neighborhoods and cheerful front-door greetings of trick-or-treaters. Contemporary visions of Christmas recreated the warm glow of the fireplace, with powered presents; lights everywhere; baking stuffed into freezers; and peace on Earth, joy, and happiness for all. Beyond the home, new public and social worlds opened up in new electric-powered indoor gymnasiums, rinks, and bowling alleys constructed in the post-war, and to where Canadians increasingly drove their children and watched them play sports.

This research is intended to lead to other questions about gender in sociotechnical energy transitions and the transformation of family and social life. Given the scope of the article, much has been left out, such as an examination of regional or international differences in utility marketing. Future research should also contribute to understanding firm-level approaches to energy transitions, for example, utility business

<sup>150</sup> Lisa Jacobson, “Revitalizing the American Home: Children’s Leisure and the Revaluation of Play, 1920–1940,” *Journal of Social History* 30, no. 3 (1997): 581–596, 581.

<sup>151</sup> William A. V. Clark, Marinus C. Deurloo, and Frans M. Dieleman, “Housing Consumption and Residential Mobility,” *Annals of the Association of American Geographers* 74, no. 1 (1984): 29–43, 35.

strategies and corporate organization among very different private utilities such as Shawinigan Water & Power and Montreal Light, Heat & Power and public ones such as Saskatchewan Power.<sup>152</sup> New studies of business history and gender in energy transitions should also expand to include state- and political- economy approaches. The methods in this article may be applied to power utility marketing from 1970 to the present, to investigate changing meanings of the home and family and social life. This also applies to understandings of contemporary scholarship as it seeks to realize decarbonized power grids, expansion of electricity into mobility and heating markets, and changing social practices to reduce greenhouse gas emissions. These include the literatures on digital housekeeping<sup>153</sup> and multi-level perspective/ sociotechnical transitions.<sup>154</sup>

. . .

*DAVID FOORD, Associate Professor, University of New Brunswick, Fredericton, Canada*

*Professor Foord has published histories on powered prosthetics, carbon black, and electric power industries as well as on science, technology, and innovation policies.*

<sup>152</sup> Dales, *Hydroelectricity and Industrial Development*.

<sup>153</sup> Line Kryger Aagaard, "When Smart Technologies Enter Household Practices: The Gendered Implications of Digital Housekeeping," *Housing, Theory and Society* (2022): 1–18.

<sup>154</sup> Geert Verbong and Frank Geels, "The Ongoing Energy Transition: Lessons from a Socio-Technical, Multi-Level Analysis of the Dutch Electricity System (1960–2004)," *Energy Policy* 35, no. 2 (2007): 1025–1037.