Notes

1 Introduction

7. This is not to say, however, that promoting energy justice always makes money, or that our other case studies have similar positive cost curves. Many of the cases to come, such as the World Bank’s Inspection Panel, have (deservedly) stopped millions of dollars of energy projects from going forward. The improved transparency from the EITI is undoubtedly losing some oil contractors money. And Denmark had to funnel billions of tax dollars into energy research and development before it became the world leader in wind turbine technology.


22. Ibid.


27. Goldthau and Sovacool (2012).


30. The National Railroad Passenger Corporation, known as Amtrak, began operation in 1971. Amtrak revenue-passenger miles have grown at an average annual rate of 2.9 percent from 1971 to 2006, rising to 5.4 billion passenger-miles in 2005. Commuter rail grew to about 9.5 billion passenger-miles in 2005, and rail transit passenger-miles grew to 16 billion in 2005 (Davis, S. C., S. W. Diegel and R. G. Boundy. Transportation Data Book: Edition 27, ORNL-6081 (Oak Ridge: Oak Ridge National Laboratory; 2008, Tables 9.10–9.12)). In total, these three rail transportation modes represented 30.9 billion passenger-miles in 2005. At the same time, vehicle-miles per capita grew to 10,082 in 2005 (Ibid., Transportation Data Book: Edition 27, Table 8.2). This amounts to 3.2 trillion miles, based on a US population of 296 million in 2005. Thus, the US total passenger-miles on Amtrak, commuter rail, and rail transit represent less than 1 percent of the total vehicle-miles traveled by US passengers in 2005.


33. Sperling and Gordon. Two Billion Cars: Driving Toward Sustainability.


43. Sovacool et al. (2011).


2 Availability and Danish Energy Policy


21. The Chairman of the Presidential Committee on Power Sector Reforms, Dr Rilwanu Lukman, indicates that “the average age of all the transformers, generating stations and sub-stations in the country is twenty five years;” the aging infrastructure has been made worse again, he said, by a “poor maintenance culture.” Dr Lukman estimates that $85 billion dollars is needed to overhaul and fix the decrepit power sector, a sum that does not even include related gas infrastructure needs. “$85 Billion Needed for Stable Power; Supply Won’t Improve Till December;” Daily Trust/All Africa Global Media, June 25, 2008.
Notes

27. Such as waste incineration and the use of biomass.


58. Hamilton, B. A Comparison of Energy Efficiency Programmes for Existing Homes in Eleven Countries (Montpelier: Regulatory Assistance Project; February 19, 2010).


3 Affordability and Fuel Poverty in England


4. Ibid.


7. See also Boardman, B. *Fixing Fuel Poverty: Challenges and Solutions* (London: Earthscan; 2010) and Boardman, B. *Fuel Poverty: From Cold Homes to Affordable Warmth* (London: Belhaven; 1991).


12. Soviet-style district heating systems tend to heat higher floors in prefabricated block apartments much more than lower floors, to the degree where heat is regulated in the winter by opening windows because it is too hot. Panel apartments become very uncomfortable in the summer and most apartments lack even a control device, instead relying on centralized single-loop heat distribution systems. Hungarian consumers must still pay for this heat – and Hungary reports as much as 50 percent higher annual energy and heating costs per person than the European Union average – and the situation is worsened by the difficulty or


28. Ibid.

31. These claims do depend on the self-reported data and projections from WF reports and documents being accurate.
32. Gilbertson, J., M. Stevens, B. Stiell and N. Thorogood, “Home is where the hearth is: Grant recipients’ views of England’s Home Energy Efficiency Scheme (Warm Front),” *Social Science & Medicine* 2006; 63: 946–56.
44. Presuming that 127,930 households received assistance in 2011, and that each household saves 11.2 GJ per year for the next 20 years, and WF will save roughly 28,656,320 GJ or 7,960,088,890 kWh. With total costs of £195,000,000 per year, this amounts to savings of about 2.4 pence per kWh, or 3.85 US cents per kWh.
46. The national health impact evaluation of Warm Front was carried out by The Centre for Regional Economic and Social Research at Sheffield Hallam University in partnership with London School of Hygiene and Tropical Medicine and University College London. It is sometimes collectively referred to as the Warm Front Study Group. See also Critchley, R., J. Gilbertson, M. Grimsley and G. Green, Warm Front Study Group. “Living in cold homes after heating improvements: Evidence from Warm-Front, England’s Home Energy Efficiency Scheme,” *Applied Energy* 2007; 84: 147–58.
47. Warm Front Evaluation Team, *Warm Front Evaluation* (London School of Hygiene and Tropical Medicine; 2006).


52. Ibid.

53. Ibid.


57. According to the latest data available in the WF’s Annual Report, 2.3 million households received assistance from WF over the course of 2001 to 2011. According to them “the average annual increase per customer identified” under a benefit entitlement check amounted to £1,894.79 individually or £4,358,017,000 as a whole (if one multiplies that amount for all 2.3 million households), rising to £87,160,340,000 when multiplied over the duration of 20 years. It must be noted, however, that this calculation is very rough. Benefits reported in the Annual Report are entirely theoretical and computed using a method called the Standard Assessment Protocol. Actual savings will vary by household, and would not take into consideration the rebound effect discussed in the Challenges section.


59. Shortt, N. and J. Rugkasa. “‘The walls were so damp and cold’ fuel poverty and ill health in Northern Ireland: Results from a housing intervention,” *Health & Place* 2007; 13: 99–110.


77. The WF Scheme helped 127,930 homes in 2011, meaning it saved about 3,837,900 tons of carbon dioxide over a 20-year period at a cost of £195 million, resulting in an abatement cost of £50.81.


92. Personal correspondence with Prof. David Elliott.


4 Due Process and the World Bank’s Inspection Panel


29. Notes: 1 IBRD: The International Bank for Reconstruction and Development. 2 IDA: International Development Association. 3 Climate Finance: Includes Carbon Finance, the Clean Technology Fund, the Global Environment Facility and the Program for Scaling Up Renewable Energy in Low Income Countries. 4 Others: These include Guarantees, Special Financing and Recipient-Executed activities. 5 IFC: The International Finance Corporation provides loans, equity, and technical assistance to stimulate private sector investment in developing countries. 6 MIGA: The Multilateral Investment Guarantee Agency (MIGA) provides guarantees against losses caused by noncommercial risks to investors in developing countries.

30. Low Carbon projects include renewable energy projects, energy efficiency projects, and projects that support increased use of cleaner fuels to displace more carbon-intensive ones. Energy Access includes projects aimed at increasing access to electricity services.


42. Ibid.
50. Ibid.
51. Ibid.


67. Ibid.

68. Ibid.


73. Ibid.

74. Ibid.

75. Ibid.


81. Ibid.

82. Ibid.

83. Ibid.


5 Information and the Extractive Industries

Transparency Initiative

35. Ibid.
37. Ibid.
43. Ibid.


56. Ibid.


60. EITI (2012).


63. Ibid.


68. Ibid.


75. Ibid.
Notes

99. Ibid.

6 Prudence and São Tomé e Príncipe’s Oil Revenue Management Law

2. Ibid.


43. Personal correspondence with Jan Hartman, December 2012.


56. IMF (2012).

57. IMF (2012).


60. Ibid.


64. Personal correspondence with Jan Hartman, December 2012.


71. That is partly because nobody wants these unproven blocks. There were open bidding auctions, yet nobody bid. So STP resorted to giving contracts to anybody who would agree to drill.


7 Intergenerational Equity and Solar Energy in Bangladesh


27. Hussain, F. “Challenges and Opportunities for Investments in Rural Energy,” presentation to the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and International Fund for Agricultural Development (IFAD) Inception Workshop on Leveraging Pro-Poor Public-Private-Partnerships (SPs) for Rural Development, United Nations Convention Center, Bangkok, Thailand, September 26, 2011.


42. Masud *et al.* (2007).


52. Total primary energy supply comprises the production of coal, crude oil, natural gas, nuclear fission, hydroelectric, and other renewable resources, plus imports, less exports, less international marine bunkers, and corrected for net changes in energy stocks.


62. This quote comes from one of 48 research interviews conducted in Bangladesh at 19 institutions and communities in five locations over the course of June 2009 to October 2010. It is presented anonymously to respect the wishes of the respondent and to adhere to institutional review board guidelines concerning human subjects research.


65. This quote comes from research interviews, see note 62.


67. This quote comes from research interviews, see note 62.

68. Ibid.

69. Ibid.

70. Ibid.

71. Ibid.

72. Ibid.

73. Ibid.

74. Ibid.

75. Ibid.

76. Ibid.

77. Ibid.

78. Ibid.

79. Ibid.


82. This quote comes from research interviews, see note 62.

83. Ibid.


85. Source: Chowdhury (2010).


89. Ibid.

90. Ibid.

91. Ibid.

92. Ibid.

93. Ibid.

94. Ibid.

95. Ibid.


97. Ibid.


99. This quote comes from research interviews, see note 62.


8 Intragenerational Equity and Climate Change Adaptation


52. GEF, LDCF resources now amount to more than half a billion dollars (US $537 Million) (2012).


55. Grasso, M. *Justice in Funding Adaptation under the International Climate Change Regime* (Springer; 2010).


57. Personal correspondence with the GEF, December 2012.

58. Asian Development Bank, Coastal Greenbelt Project (Loan 1353-BAN[SF]) in the People’s Republic of Bangladesh (ADB; October, 2005).


65. Australian Aid. *Australian Multilateral Assessment of the Least Developed Countries Fund (LDCF)* (Canberra, Australia; March, 2012).


70. GEF. *Accessing Resources Under the Least Developed Countries Fund* (Washington, DC: GEF; 2009).

71. Personal correspondence with the GEF, December 2012.


77. Evaluation Department, Ministry of Foreign Affairs of Denmark. *Evaluation of the operation of the Least Developed Countries Fund for adaptation to climate change* (September 2009).

78. Grasso, M. *Justice in Funding Adaptation under the International Climate Change Regime* (Springer; 2010).


80. Ibid.

81. Ibid.


83. Climate Change Forum. *The Least Developed Countries Fund & the Special Climate Change Fund* (Fact sheet, 2010).

84. Australian Aid. *Australian Multilateral Assessment of the Least Developed Countries Fund (LDCF)* (March 2012).


86. Ibid.

87. Ibid.


89. GEF. *Strategy on Adaptation to Climate Change for the Least Developed Countries Fund (LDCF) and The Special Climate Change Fund (SCCF)* (2009).

90. Personal correspondence with the GEF, December 2012.


Notes

100. Klein, R. J. T. and F. Thomalla. “Resilience to Natural Hazards: How Useful is This Concept?” Environmental Hazards 2003; 5: 35–45.

101. Evaluation Department, Ministry of Foreign Affairs of Denmark. Evaluation of the operation of the Least Developed Countries Fund for adaptation to climate change (September 2009).

9 Responsibility and Ecuador’s Yasuní-ITT Initiative


14. Ibid.

15. Ibid.

16. Ibid.

30. Ibid.


46. Ibid.


48. Yasuní ITT, estado actual de la iniciativa yasuní ITT (Periodo del 10 de febrero al 15 de diciembre de 2011).


60. Ibid.


71. Ibid.


74. Ibid.


92. Personal correspondence with Professor Ann Florini, December 2012.


10 Conclusion – Conceptualizing Energy Justice


7. The results of this exercise are presented using slightly different categories than the principles identified here. For instance, rather than saying “intragenerational equity” respondents were asked to rate “climate change adaptation,” and rather than rate “information” they were asked to rate “energy literacy.” Also, categories not directly related to justice, but still involved in the survey, such as “water” or “decentralization,” are not presented in the Table and Figure. For those who want to read more, full details of the survey are presented in Sovacool, B. K., S. V. Valentine, M. J. Bambawale, M. A. Brown, T. D. F. Cardoso, S. Nurbek, G. Suleimenova, L. Jinke, X. Yang, A. Jain, A. F. Alhajji and A. Zubiri. “Exploring Propositions about Perceptions of Energy Security: An International Survey,” *Environmental Science & Policy* 2012; 16(1): 44–64; as well as Bambawale, M. J. and B. K. Sovacool. “Energy Security: Insights From A Ten Country Comparison,” *Energy & Environment* 2012; 23(4): 559–86.


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