

Publications that Cite EPA’s Health Benefits-per-Kilowatt-Hour (BPK) Values

Publication type	Date Published	Location	Summary	URL	Citation
Report	2021	Wisconsin, United States	Report written by the University of Wisconsin-Madison for the Public Service Commission of Wisconsin to assess barriers that prevent low-income and urban renters from accessing energy-efficient technologies and to make recommendations for program and policy changes that would improve service delivery to this vulnerable population. References BPK tool as a way to measure monetized public health benefits from reduced emissions.	https://lafollette.wisc.edu/images/publications/workshops/2021_PSC_Energy_report.pdf	Downer, L., Leffin, S., McFarlane, M., & Schaefer, N. (2021). Addressing Energy Poverty in Wisconsin Communities. In Workshop in Public Affairs.
Report	April 2021	Northwest United States	Electric Integrated Resource Plan outlining Avista’s resource strategy and planned procurements for the next 24 years. Cites BPK values as an option for estimating non-energy impact (NEI) benefits.	https://www.myavista.com/-/media/myavista/content-documents/about-us/our-company/irp-documents/avista-2021-draft-electric-irp.pdf	Avista. 2021. Electric Integrated Resource Plan. The 17 th Edition.
Report	March 2021	Minnesota, United States	Report documenting status, emerging trends, and issues in Minnesota’s energy supply, consumption, conservation, and costs. Uses BPK to demonstrate the value of health benefits for a solar array installed under Minnesota’s Weatherization Assistance Program solar pilot program for low-and moderate-income (LMI) customers.	https://mn.gov/commerce-stat/pdfs/20210301_quad_report.pdf	Minnesota Department of Commerce. 2021. Energy Policy and Conservation Quadrennial Report, 2020.

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Resource List	March 2021	United States	Includes BPK values in a list of resources that can help support cost effectiveness practices.	https://www.nationalenergyproject.org/wp-content/uploads/2021/03/Cost-Effectiveness-Testing-Resources-3.25.2021.pdf	National Energy Screening Project. 2021. Cost-Effectiveness Testing- Reports and Studies on Various Impacts.
Report	March 2021	New England, United States	The Avoided Energy Supply Components (AESC) Study provides estimates of avoided costs associated with energy efficiency measures for program administrators throughout New England states for purposes of both internal decision-making and regulatory filings. Uses BPK values to calculate non-embedded NOx costs.	https://ma-eeac.org/wp-content/uploads/AESC-2021.pdf	Synapse Energy Economics. 2021. Avoided Energy Supply Components in New England: 2021 Report. Prepared for AESC 2021 Study Group.
Report	February 2021	Illinois, United States	Annual report of the operation and transactions of the Illinois Power Agency. Uses BPK values to estimate the environmental benefits of the IPA's renewable resource procurements.	https://www2.illinois.gov/sites/jpa/Documents/Illinois%20Power%20Agency%20FY%202020%20Annual%20Report%20%282-16-21%29.pdf	Illinois Power Agency. 2021. Annual Report Fiscal Year 2020.
Report	November 2020	United States	Resource for real estate owners and investors looking to develop or accelerate a sustainability program, as well as for developers looking for ways to incorporate sustainability into their overall strategy. References BPK values in a list of resources for considering social equity, community, and workforce development.	https://knowledge.uli.org/-/media/files/research-reports/2020/uli-blueprint-for-green-real-estate.pdf?rev=c092aa16cf6340c9a5e8c1a9c915d74f&hash=545CCEA746EC5F1E5E55AA5F6E58C4B	Urban Land Institute. 2021. The ULI Blueprint for Green Real Estate.

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Report	November 2020	United States	Demonstrates how implementing district-scale high-performance strategies can result in energy savings that increase affordability, improve resilience, reduce emissions, and foster economic development. Cites BPK as evidence that renewable energy installations provide health benefits.	https://www.nrel.gov/docs/fy21osti/78495.pdf	Polly, B., Pless, S., Houssainy, S., Torcellini, P., Livingood, W., Zaleski, S., Jungclaus, M., Hootman, T., & Craig, M. 2020. A Guide to Energy Master Planning of High-Performance Districts and Communities. United States. https://doi.org/10.2172/1734654
Working Paper	October 2020	United States	Cites BPK as an option to estimate health impacts of increased emissions from the electric power sector due to electrification.	https://eelegal.org/wp-content/uploads/2020/09/LCOE2-for-posting-9.17.2020.pdf	Tanton, T. 2020. Cost of Electrification: A State-by-State Analysis and Results.
Report	August 2020	United States	Resource and planning guide for small business owners and staff who want to increase the energy and water efficiency of their properties by creating and implementing a realistic and cost-effective energy improvement program. Highlights BPK report as tool for energy policy development.	https://bridgingthegap.org/wp-content/uploads/2020/08/ENERGYSTAR_Small_Business_AWB_Bridging-the-Gap.pdf	ENERGY STAR. August 2020. ENERGY STAR Action Workbook for Small Business.
Report	August 2020	Midwest United States	Uses BPK to determine the monetized health impact of energy code adoption timing for new single-family homes in nine Midwestern states. Estimates cumulative health benefits for 2009-2019 for the following states: Illinois (\$3,062,096), Indiana (\$28,886,598), Iowa (\$2,848,878), Kentucky (\$13,991,926), Michigan (\$9,495,859), Minnesota (\$17,689,178), Nebraska (\$11,127,039), Ohio (\$16,816,393), and Wisconsin (\$25,953,523).	https://www.mwalliance.org/sites/default/files/meea-research/documenting_the_expanding_benefits_of_strong_energy_codes.pdf?current=/taxonomy/term/11	Burgess, C. & Westfall, N. 2020. Documenting the Expanding Benefits of Strong Energy Codes: How Energy Codes Impact Community Health. Midwest Energy Alliance.

<https://www.epa.gov/statelocalenergy/estimating-health-benefits-kilowatt-hour-energy-efficiency-and-renewable-energy>

Note that links to some publications require a subscription.

Note that inclusion in this list does not necessarily constitute an endorsement of a publication or its methods.

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Public Comment	June 2020	United States	Letter to FERC from NAACP San Diego Branch urging them to reject the New England Ratepayers Association's ("NERA") April 14, 2020 Petition seeking federal jurisdiction over state net metering programs. Cites BPK values.	http://allianceforsolarchoice.com/wp-content/uploads/2021/03/20200615-5049_2020-06-13-FERC.pdf	Maxwell, F. 2020. FERC Must Reject Petition Endangering Net Metering and Urgently-Needed Just Transition to a Clean and Resilient Energy Future (Docket EL20-42 - Petition for Declaratory Order). NAACP San Diego Branch.
Report	June 2020	Wisconsin, United States	Uses the BPK values for the Upper Midwest and Great Lakes/Mid-Atlantic to estimate the non-energy benefits of energy efficiency and renewable energy in Wisconsin by creating a weighted average: 3.96-8.94 cents/kWh. Appendix F (page F-5) provides a detailed discussion of BPK methodology.	https://focusonenergy.com/sites/default/files/WI%20Focus%20on%20Energy%20CY%202019%20Volume%20II.pdf	Cadmus. 2020. Focus on Energy Calendar Year 2019 Evaluation Report: Volume III Appendices. Prepared for Public Service Commission of Wisconsin.
Comments	May 2020	United states	Cites EPA's report, "Public Health Benefits per kWh of Energy Efficiency and Renewable Energy in the United States," in a list of EPA Air Actions relying on underlying scientific data that would be restricted from consideration By EPA's "Strengthening Transparency in Regulatory Science (Supplemental notice of proposed rulemaking)" (Table 1).	https://www.nrdc.org/sites/default/files/media-uploads/2020-05-18_censoring_science_supplemental_proposal_-_nrdc_comments_final.pdf	Natural Resources Defense Council. 2020. Comments of Natural Resources Defense Council on "Strengthening Transparency in Regulatory Science (Supplemental notice of proposed rulemaking)."
Report	May 2020	United States	Cites the BPK values for the Southwest, Great Lakes/Mid-Atlantic and California to show the potential health benefits of energy efficiency in those regions. There is a full table of BPK values included in Appendix C (page 32).	https://naseo.org/data/sites/1/documents/publications/HES%20for%20LMlv9.pdf	Koewler, M. 2020. The Value of Adding Home Energy Score to Low-Income Energy Efficiency Programs. National Association of State Energy Officials (NASEO).

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Report	May 2020	United States	Lists the BPK values as one option for estimating non-energy impacts of energy efficiency programs, and provides a short summary of the BPK methodology and results.	https://escholarship.org/content/qt1924c3g9/qt1924c3g9.pdf?t=qbnieu	Sutter, M., Mitchell-Jackson, J., Schiller, S.R., Schwartz, L., and Hoffman, I. 2020. Applying Non-Energy Impacts from Other Jurisdictions in Cost-Benefit Analyses of Energy Efficiency Programs: Resources for States for Utility Customer-Funded Programs. Lawrence Berkley National Laboratory.
Comments	April 2020	Missouri, United States	Suggests that, in addition to considering the public health costs from continuing to burn coal, Ameren should consider in the air quality and public health benefits of investments in replacement resources, including energy efficiency and renewable energy. Cites the BPK values as a resource for monetizing the benefits from these investments. Explains BPK is consistently updated to reflect public health impacts caused by energy efficiency and renewable energy.	https://static1.squarespace.com/static/5936d98f6a4963bcd1ed94d3/t/5e8dd9e5c19cc97b1dc2b72e/1586354662259/Sierra+Club+2020+Ameren+IRP+Comments.pdf	Sierra Club. 2020. Sierra Club's Initial Comments on Ameren Missouri's 2020 Integrated Resource Planning Process.
Utility Filing	April 2020	Maryland, United States	A group of six electric utilities in Maryland submitted an application to the Public Service Commission of Maryland for energy storage projects. The energy storage projects will displace power consumption during peak hours, and the application uses the EE at Peak BPK values to estimate the health benefits of shifting from on-peak to off-peak hours.	https://webapp.psc.state.md.us/newIntranet/Casenum/submit_new.cfm?DirPath=//Coldfusion/Casenum/9600-9699/9619/Item_4&CaseN=9619\Item_4 (second link, page 44)	Exelon Utilities. 2020. Application of Joint Exelon Utilities for Approval of Energy Storage Pilot Projects. Case No. 9616.
Report	March 2020	United States	Report exploring states' role in better integrating locational value into Distributed Energy Resources siting and development. References BPK values as a resource to estimate the health benefits of investments of renewable energy.	https://www.cesa.org/wp-content/uploads/State-Strategies-for-Valuing-DERs-in-Cost-Effective-Locations.FINAL_.pdf	Hausman, N. 2020. State Strategies for Valuing Distributed Energy Resources in Cost-Effective Locations. Clean Energy States Alliance.

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Report	February 2020	Arizona, United States	Uses BPK to examine the health benefits from implementing a Renewable Energy Standard and Tariff (REST). Found that REST resources deployed from 2008-2018 yielded \$61 million and \$185 million in cumulative benefits for two Arizona utilities.	https://static1.squarespace.com/static/571a88e12fe1312111f1f6e6/t/5e5ec69c3e6900506a8e94a7/1583269539719/AZ+REST+-+Final+Report.pdf	Burgess, E., Roumpani, M., Davidson, M., Latapi, S., and Gorman, J. 2020. Arizona Renewable Energy and Tariff: 2020 Progress Report. Prepared by Strategen Consulting for Ceres.
Memorandum	2020	New Jersey, United States	Cites BPK as a resource for estimating the public health benefits of weatherization. Includes the following BPK values for the Great Lakes/Mid-Atlantic Region in Table 3:3.51-7.95 cents/kWh (uniform energy efficiency, 3% discount rate), 3.14-7.09 cents/kWh (uniform energy efficiency, 7% discount rate), 3.57-8.08 cents/kWh (energy efficiency at peak, 3% discount rate), and 3.19-7.21 cents/kWh (energy efficiency at peak, 7% discount rate).	https://www.nj.gov/bpu/pdf/NJ%20Cost%20Test%20Proposal.pdf	New Jersey Board of Public Utilities. 2020. New Jersey Cost Test Proposal.
Article	2020	North Carolina, United States	Cites BPK as a method to estimate the health benefits of better air quality from increasing clean energy in North Carolina. Lists some of the BPK values for the Southeast region to provide a range of 1.58-4.15 cents/kWh from improvements in outdoor air quality. (Note that the total range for the Southeast is actually slightly larger than what is included in this paper: 1.57-4.24 cents/kWh across all technology types for 2017.)	https://www.ncmedicaljournal.com/content/ncm/81/5/334.full.pdf	Guidry, V.T., Thie, L., and Money, E.B. 2020. Health Benefits of North Carolina's Transition to Clean Energy. North Carolina Medical Journal, 81: 334-335.

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Report	2020	United States	Uses BPK to estimate monetary health benefits due to avoided emissions from utility electric efficiency programs implemented. Estimates health benefits for the following regions: Great Lakes/Mid-Atlantic (\$219 million), Upper Midwest (\$97 million), Northeast (\$70 million), Southeast (\$53 million), Pacific Northwest (\$26 million), California (\$25 million), Southwest (\$22 million), Lower Midwest (\$14 million), Texas (\$10 million), and the Rocky Mountains (\$5 million).	https://energyefficiencyimpact.org/	American Council for an Energy-Efficient Economy, Alliance to Save Energy, and The Business Council for Sustainable Energy. 2020. Energy Efficiency Impact Report.
Presentation	December 2019	Nebraska, United States	BPK is included in a presentation about energy trends in Nebraska. One slide shows some of the BPK values for four of the regions (Northeast, Southeast, Mid-Atlantic, and Upper Midwest), and the slide states that the BPK values “make EE and RE much more cost-effective.”	https://www.raponline.org/wp-content/uploads/2020/01/rap_colburn_seidman_nebraska_trends_2019_dec_17.pdf	Colburn, K. and Seidman, N. 2019. Energy in Nebraska: Trends and Opportunities. The Regulatory Assistance Project.
Blog post	November 2019	United States	Provides an overview of EPA’s report, “Public Health Benefits per kWh of Energy Efficiency and Renewable Energy in the United States.” There is a full table of BPK values included in the blog post.	https://ilsr.org/could-the-health-benefits-of-renewable-energy-cover-your-electric-bill/?utm_source=Energy+Self-Reliant+States&utm_campaign=6a5ad34ae0-Energy_Self_Reliant_States_1_12_151_8_2015_COPY_01&utm_medium=email&utm_term=0_86e661ed1e-6a5ad34ae0-82765397	McCoy, Maria. 2019. Could the Health Benefits of Renewable Energy Cover Your Electric Bill? Institute for Local Self-Reliance.

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Blog post	October 2019	United States	Provides an overview of the BPK values and methodology. Includes BPK values for five regions: Northeast, Southeast, Mid-Atlantic, Upper Midwest, and Texas. It also includes for comparison the costs that two specific utilities are paying for new wind and solar resources: Xcel Wind (0-1.8 cents/kWh), and NV Energy Solar (0-2.1 cents/kWh).	https://www.raonline.org/blog/value-added-measuring-the-health-benefits-of-the-layer-cake/	Lazar, J. and Seidman, N. 2019. Value Added: Measuring the Health Benefits of the "Layer Cake." The Regulatory Assistance Project.