

Energy Efficiency: Offramp on “Highway to Climate Hell”?

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“We are on a highway to climate hell with our foot still on the accelerator,” warned UN Secretary-General António Guterres at the recently concluded COP27 climate change summit. COP27 was held in Sharm el-Sheikh, Egypt pursuant to the United Nations Framework Convention of Climate Change.¹ An important element of COP27’s plan to combat climate change is scaling up energy efficiency and other mitigation initiatives. The United States, including the Department of Energy (DOE), is playing a leading role. Industry needs continued vigilance on such developments.

COP27. The Implementation Plan hammered out at COP27 calls on the Parties to “accelerate the development, deployment and dissemination of technologies, and the adoption of policies, to transition towards low-emission energy systems, including by rapidly scaling up the deployment of clean power generation and energy efficiency measures . . .”² The importance of energy efficiency was also stressed at COP27 by the International Energy Agency (IEA)³ and the Cool Coalition, a network of national governments, cities, businesses, and civil society organizations focused on efficient, climate-friendly cooling.⁴

The mitigation work program launched at COP27 is to continue until 2030, with at least two global dialogues held each year. Governments were also requested at COP27 to revisit and strengthen the 2030 targets in their national climate action plans by the end of 2023. This all builds off international efforts that we have described in previous advisories.⁵

United States. The United States has a key part in the push for energy efficiency and other mitigation measures. At COP27, President Biden announced new initiatives as well as follow-through on existing commitments. He noted, among other things, provisions under the Inflation Reduction Act for, e.g., offshore wind, distributed solar, zero-emission vehicles, sustainable aviation fuels, more efficient electrified buildings, and cleaner industrial processes and manufacturing.⁶ Secretary of Energy Jennifer Granholm reaffirmed the U.S. commitment to accelerate the global transition to net-zero emissions and other initiatives.⁷

A substantial part of DOE’s effort is its drive to issue energy efficiency standards and test procedures pursuant to the Energy Policy and Conservation Act (EPCA)⁸—and to roll back Trump-era efficiency rules. We count at least 12 separate DOE regulatory actions on standards and test procedures since our October 27, 2022, advisory on DOE activity.⁹ The following is a list of DOE’s efficiency rulemakings just since that date. (Our November 10, 2022, advisory focused on a Federal Trade Commission (FTC) labeling initiative under EPCA.)¹⁰

- **Air Cleaners.** DOE held a public meeting on November 9, 2022, for its notice of proposed rulemaking (NOPR) to establish test procedures for air cleaners. Written comments are due by December 19, 2022.¹¹

- **Expansion-Dedicated Outdoor Air Systems.** DOE issued a rule establishing standards for direct expansion-dedicated outdoor air systems (DX- DOASes). These standards are of equivalent stringency as the minimum levels specified in the most recent publication of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1 “Energy Standard for Buildings Except Low-Rise Residential Buildings” (ASHRAE 90.1-2019) when tested pursuant to the DOE test procedure for DX-DOASes– which incorporates by reference the most recent applicable industry standard for this equipment.¹²
- **Automatic Commercial Ice Makers.** DOE issued a rule amending the test procedure for automatic commercial ice makers to update incorporated references to the latest version of the industry standards; establish a relative humidity test condition; provide additional detail regarding certain test conditions, settings, setup requirements, and calculations; include a voluntary measurement of potable water use; clarify certification and reporting requirements; and add enforcement provisions. This rule also provides additional detail to the DOE test procedure to improve the representativeness and repeatability of the current test procedure.¹³
- **Central Air Conditioners and Heat Pumps.** DOE issued a correction of its test procedure for central air conditioners and heat pumps.¹⁴
- **Portable Electric Spas.** DOE issued a notice of data availability (NODA) publishing data and certain preliminary analytical results related to DOE’s evaluation of potential standards for portable electric spas. Comments are due by January 17, 2023.¹⁵
- **Miscellaneous Gas Products.** DOE published a NODA to provide stakeholders with additional information and to provide an additional opportunity for public input on standards for miscellaneous gas products (MGPs). Comments are due by December 19, 2022.¹⁶
- **Single Package Vertical Air Conditioners and Single Package Vertical Heat Pumps.** DOE has issued a pre-publication rule to amend its test procedures for single package vertical air conditioners (SPVACs) and single package vertical heat pumps (SPVHPs), collectively referred to as single package vertical units (SPVUs). DOE is incorporating by reference the most recent version of the relevant industry test standard, AHRI 390-2021, and amending certain provisions for representations for SPVUs. DOE is also establishing definitions for “single-phase single package vertical air conditioners with cooling capacity less than 65,000 Btu/h” and for “single-phase single package vertical heat pumps with cooling capacity less than 65,000 Btu/h” to distinguish such equipment from certain residential central air conditioners and heat pumps.¹⁷ DOE has also issued a pre-publication NOPR and notice of proposed determination (NOPD) on amending the standards for SPVUs. The amendments would be such that the existing standard levels would be based on a new cooling efficiency metric of Integrated Energy Efficiency Ratio (IEER) for SPVACs and SPVHPs, and the current heating efficiency metric of Coefficient of Performance (COP) for SPVHPs (but without any increase in stringency). In addition, DOE has initially determined that more-stringent standards for

SPVUs would not be economically justified and would not result in a significant conservation of energy. DOE will hold a webinar on the proposal on January 9, 2023. Comments are due 60 days after publication in the Federal Register.¹⁸

- **Ceiling Fans.** EPCA prescribes standards for ceiling fans. The Energy Act of 2020 amended the standards for large-diameter ceiling fans (LDCFs). DOE codified these efficiency requirements in a final rule published May 27, 2021. When DOE did so, its test procedure for LDCFs was applicable only to those ceiling fans with a diameter less than or equal to 24 feet. As a result, DOE could not implement the full scope of LDCF standards set forth in the Energy Act of 2020. In order to remedy this situation, DOE has removed this limit on ceiling fan diameter in the most recent test procedure rulemaking for ceiling fans. As such, DOE is now able to implement in this final rule the full scope of standards for LDCFs set forth in the Energy Act of 2020.¹⁹
- **Circulator Pumps.** DOE has issued a pre-publication NOPR proposing standards for circulator pumps. DOE will hold a webinar on January 19, 2023. Comments are due by 60 days after publication in the Federal Register.²⁰
- **Oil, Electric, and Weatherized Gas Consumer Furnaces.** DOE has issued a pre-publication announcement of the availability of the preliminary analysis it has conducted for purposes of evaluating the need for amended standards for non-weatherized oil-fired furnaces (NWOFs), mobile home oil-fired furnaces (MHOFs), weatherized gas furnaces (WGFs), weatherized oil-fired furnaces (WOFs), and electric furnaces (EFs). The analysis is set forth in DOE's preliminary technical support document (TSD) for this rulemaking. Written comments are due by 60 days after publication in the Federal Register. It appears that DOE will hold a webinar on December 19, 2022 (the reference to December 19, 2023, in the pre-publication version appears to be a typographical error).²¹
- **Air-Cooled, Three-Phase, Small Commercial Package Air Conditioning and Heating Equipment and Air-Cooled, Three-Phase, Variable Refrigerant Flow Air Conditioners and Heat Pumps.** DOE has issued a pre-publication rule amending its test procedures for air-cooled, three-phase, small commercial package air conditioning and heating equipment with a cooling capacity of less than 65,000Btu/h and air-cooled, three-phase, variable refrigerant flow air conditioners and heat pumps with a cooling capacity of less than 65,000 Btu/h to incorporate by reference the latest version of the relevant industry test standard. DOE adopts the seasonal energy efficiency ratio 2 (SEER2) and heating seasonal performance factor 2 (HSPF2) metrics specified by that industry test standard in the DOE test procedures for the three-phase equipment that is the subject of the rule. Additionally, the rule amends certain provisions for representations and enforcement for this equipment to harmonize with single-phase products.²²

Conclusion. Energy efficiency for many decades has been a valuable tool to achieve environmental, economic, and strategic goals. It has taken an increased urgency with concerns about climate change both in the United States and abroad—as most recently evidenced by COP27, DOE, and FTC actions. Energy efficiency initiatives have dramatically accelerated in the Biden Administration—and international efforts such as the United Nations Framework Convention of Climate Change will increase pressures. Civil penalties for violations of DOE rules are severe—currently \$503 per violation—and this rate will increase with inflation. Industry should take this all into account in planning for its products and strategies. Stakeholders should take advantage of opportunities to make their views known in efficiency initiatives that could affect them. They should keep in mind that filings, at least in DOE rulemakings, are permissible even after the formal comment period has passed.

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For more information on HWG LLP’s energy practice, please contact John A. Hodges or Gena E. Cadieux.

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¹ António Guterres, *Secretary-General's remarks to High-Level opening of COP27 - as delivered*, United Nations (Nov. 7, 2022), https://www.un.org/sg/en/content/sg/statement/2022-11-07/secretary-generals-remarks-high-level-opening-of-cop27-delivered-scroll-down-for-all-english-version?_gl=1*18nqml6*_ga*MTAzNTk5NTU2Mi4xNjY5MDQ0NTE0*_ga_TK9BQL5X7Z*MTY2OTA1NTg4OC4xLjAuMTY2OTA1NTg4OC4wLjAuMA. COP27 stands for the 27th Conference of Parties to the United Nations Framework Convention of Climate Change.

² UNFCCC, *Decision -/CP.27, Sharm el-Sheikh Implementation Plan* (advance unedited version), § IV(13), <https://unfccc.int/documents/624444>; see also United Nations Climate Press Release, *COP27 Reaches Breakthrough Agreement on New “Loss and Damage” Fund for Vulnerable Countries* (Nov. 20, 2022), <https://unfccc.int/news/cop27-reaches-breakthrough-agreement-on-new-loss-and-damage-fund-for-vulnerable-countries>.

³ IEA, *IEA at COP27: Energy efficiency as a valuable resource - boosting energy performance of the economy and renovating buildings* (Nov. 14, 2022), <https://www.iea.org/events/iea-at-cop27-energy-efficiency-as-a-valuable-resource-boosting-energy-performance-of-the-economy-and-renovating-buildings>.

⁴ *The Cool Coalition goes to COP27*, Cool Coalition (Oct. 26, 2022), <https://coolcoalition.org/the-cool-coalition-goes-to-cop27/>.

⁵ See, e.g., Scott Blake Harris, John A. Hodges, and Stephanie S. Weiner, *Energy Efficiency Initiatives Dramatically Escalate Here and Abroad*, HWG Law (Nov. 15, 2021), <https://www.hwglaw.com/wp-content/uploads/2021/11/HWG-Energy-Advisory-November-2021-.pdf>; Scott Blake Harris, John A. Hodges, Sam Walsh, and Stephanie Weiner, *Sizzling World Presses Industry for Energy Efficiency*, HWG Law (Dec. 4, 2019), <https://www.hwglaw.com/sizzling-world-presses-industry-for-energy-efficiency/>.

⁶ The White House, *Remarks by President Biden at the 27th Conference of the Parties to the Framework Convention on Climate Change (COP27) | Sharm el-Sheikh, Egypt*, (Nov. 11, 2022), <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/11/11/remarks-by-president-biden-at-the-27th-conference-of-the-parties-to-the-framework-convention-on-climate-change-cop27-sharm-el-sheikh-egypt/>.

⁷ DOE, *U.S. Secretary of Energy Advances America’s Commitment to Reaching Net Zero Global Emissions and Combatting Climate Change at COP27* (Nov. 17, 2022), <https://www.energy.gov/articles/us-secretary-energy-advances-americas-commitment-reaching-net-zero-global-emissions-and>.

⁸ 42 U.S.C.A. § 6291 et seq.

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- ⁹ John A. Hodges, *Climate Change, Energy Shocks Increase Focus on Energy Efficiency*, HWG Law (Oct. 27, 2022), <http://www.hwglaw.com/wp-content/uploads/2022/10/Climate-change-energy-shocks-increase-focus-on-energy-efficiency-October-27-2022.pdf>.
- ¹⁰ John A. Hodges, *FTC Explores Changes to Energy Labeling Rule, Right to Repair*, HWG Law (Nov.10, 2022), <http://www.hwglaw.com/wp-content/uploads/2022/11/HWG-Energy-Efficiency-Alert-November-10-2022.pdf>.
- ¹¹ DOE, Office of Energy Efficiency and Renewable Energy, Test Procedure for Air Cleaners, Notification of Rescheduled Public Meeting, 87 Fed. Reg. 65533 (Oct. 31, 2022).
- ¹² DOE, Office of Energy Efficiency and Renewable Energy, Energy Conservation Standards for Direct Expansion-Dedicated Outdoor Air Systems, Final Rule, *id.* 65651 (Nov. 1, 2022).
- ¹³ DOE, Office of Energy Efficiency and Renewable Energy, Test Procedure for Automatic Commercial Ice Makers, Final Rule, *id.* 65856 (Nov. 1, 2022).
- ¹⁴ DOE, Office of Energy Efficiency and Renewable Energy, Test Procedure for Central Air Conditioners and Heat Pumps, Correction, *id.* 66935 (Nov. 7, 2022).
- ¹⁵ DOE, Office of Energy Efficiency and Renewable Energy, Energy Conservation Standards for Portable Electric Spas, NODA, *id.* 69082 (Nov. 17, 2022).
- ¹⁶ DOE, Office of Energy Efficiency and Renewable Energy, Energy Conservation Standards for Miscellaneous Gas Products, NODA, *id.* 68931 (Nov. 17, 2022).
- ¹⁷ DOE, Office of Energy Efficiency and Renewable Energy, Test Procedure for Single Package Vertical Air Conditioners and Single Package Vertical Heat Pumps, Final Rule (pre-publication), <https://www.energy.gov/sites/default/files/2022-11/spvu-tp-fr.pdf>.
- ¹⁸ DOE, Office of Energy Efficiency and Renewable Energy, Energy Conservation Standards for Single Package Vertical Units, NOPR, NOPD (pre-publication), <https://www.energy.gov/sites/default/files/2022-11/spvu-ecs-nopr-nopd.pdf>.
- ¹⁹ DOE, Office of Energy Efficiency and Renewable Energy, Energy Conservation Standards for Ceiling Fans, Final Rule, 87 Fed. Reg. 72862 (Nov. 28, 2022).
- ²⁰ DOE, Office of Energy Efficiency and Renewable Energy, Energy Conservation Standards for Circulator Pumps, NOPR (pre-publication), https://www.energy.gov/sites/default/files/2022-11/circulatorpumps-ecs-nopr_0.pdf.
- ²¹ DOE, Office of Energy Efficiency and Renewable Energy, Energy Conservation Standards for Oil, Electric, and Weatherized Gas Consumer Furnaces, Notification of Availability (pre-publication), <https://www.energy.gov/sites/default/files/2022-11/oweg-ecs-pa.pdf>.
- ²² DOE, Office of Energy Efficiency and Renewable Energy, Test Procedure for Air-Cooled, Three-Phase, Small Commercial Package Air Conditioning and Heating Equipment with a Cooling Capacity of Less than 65,000 Btu/h and Air-Cooled, Three-Phase, Variable Refrigerant Flow Air Conditioners and Heat Pumps with a Cooling Capacity of Less than 65,000 Btu/h, Final Rule (pre-publication), <https://www.energy.gov/sites/default/files/2022-11/3-phase-cuac-tp-fr.pdf>.