



First Published July 2023; Last Updated April 2024

Subject: **GLOBAL RENEWABLE AND ALTERNATIVE ENERGY SUMMARY AND DEMONSTRATION OF CONFORMANCE TO IEEE 1680.1 (2018) and 1680.1a (2020) SECTION 4.9.4.2 INTEL CORPORATION – CALENDAR YEAR 2022**

Dear Customer:

Climate change is a serious environmental, economic, and social challenge. At Intel, we focus on reducing our own direct climate “footprint” through greenhouse gas (GHG) reduction goals, energy conservation and alternative or renewable electricity supply contracting and investments. Our alternative and renewable electricity investments include renewable energy certificate (REC) purchases, off-site and onsite alternative electricity projects.

In addition to generating on-site and off-site renewable electricity and purchasing renewable electricity from our utility suppliers, we purchase green attributes¹ from multiple sources of generation that may include wind, solar, hydro, and geothermal that may be certified and verified by nonprofit validation accreditors such as the Center for Resource Solutions’ Green-e program. We contract only certified attributes based on regional or country credible certification, such as RECs, IREC, GOOs, etc.

Our approach to renewable and alternative electricity investments has been to reduce our own carbon footprint while encouraging others to take similar actions. We aim to stimulate the market to make these options less expensive and more accessible over the long term. Over the last five years, Intel’s renewable electricity supply and renewable electricity attribute purchases have totaled more than 33.6 billion kilowatt-hours (kWh). In 2022, we continued our 100% renewable electricity commitment for our US, European Union, Israel, and Malaysia operations, and we are focused on finding credible and scalable opportunities to reach 100% globally by 2030. Some of Intel’s recent alternative and renewable electricity accomplishments and recognitions are included in Attachment A.

As a major supplier to other leading electronics companies, we know that Intel’s actions can impact the performance and reputation of our customers and their products. We are committed to helping our customers reduce their environmental footprint and support supply chain transparency. Over the past few years, we have experienced a significant increase in the volume of customized survey and information requests from our customers on our environmental sustainability performance, including renewable energy. To support your information needs, we have developed this Global Renewable and Alternative Electricity Summary including frequently requested information and performance data in Attachment B. This letter also provides demonstration of conformance with IEEE 1680.1 (2018) and 1680.1a (2020) Section 4.9.4.2 – Optional Criterion for Renewable Energy Use by Manufacturer Suppliers. This disclosure has been updated to align to the EPEAT 1680.1a (2020) definition of eligible renewable electricity from hydroelectric sources.

If you require information which is not included in this package, please contact me at fawn.bergen@intel.com

Sincerely,

Fawn Bergen
Sustainable Operations Director

Attached:

Attachment A – Global Renewable and Alternative Electricity Recognitions, page 2

Attachment B – Global Renewable and Alternative Electricity Summary, page 3

¹ Purchased through accredited RECs, GOOs, IREC, etc.

Attachment A – Global Renewable and Alternative Energy Recognitions

Some of Intel's recent global alternative and renewable electricity accomplishments and recognitions, as of December 31, 2022, include:

- Through 2022, Intel has completed more than 110 alternative and renewable electricity installations with capacity of more than 50,000 kW across 22 campuses. The installations use 22 different technology applications, such as solar hot and cooling water systems, solar electric photovoltaic-covered parking lots, and mini bio-energy, motion power, geothermal energy, and micro wind turbine array systems.
- In September 2020, Intel became a member of RE100, a global coalition of businesses committed to long-term goals for 100% renewable electricity use.
- United States:
 - 100% renewable electricity purchases for our US sites
 - Note: Intel purchased 100% renewable electricity in 2022, however a portion of this electricity supply was from hydropower that was not certified to the Low Impact Hydro Institute (LIHI) Standard. For the purposes of this Dear Customer Letter, we have removed the non-certified hydropower from the US total.
 - Some of the largest corporate solar carports in the country with over 15 megawatt (MW) and nearly 7,000 spots covered
 - Top 25 in Solar Energy Industries Association rankings for on-site installed solar electric facilities, capacity installed, and solar user
 - Off-site solar power purchase agreement enabling a new 100 MW solar installation in construction in Arizona via local utility, which has been producing energy since December 2020
 - Off-site solar power purchase agreement enabling a new 140 MW solar installation in construction in Oregon via local utility, which will come online in 2024
 - First and largest micro wind turbine array²
- European Union:
 - 100% renewable electricity purchases for our sites
 - One of the largest voluntary green power purchasers in Ireland
- India:
 - First and largest fuel cell power project²
 - Largest solar-powered adsorption cooling system²
 - Largest solar thermal system installation on single roof²
 - First motion-powered interactive walkway project to convert footsteps into off-grid energy and data
 - Smart Energy Decisions Innovation award for industrial on-site energy solution
- Israel:
 - 100% renewable electricity purchases for our sites
 - First energy generation from water/air exhaust system²
 - One of the largest purchasers of voluntary green attributes
- Malaysia:
 - 100% renewable electricity purchases for our sites
 - Largest solar thermal installation in a semiconductor plant²
- Vietnam
 - First and largest solar photovoltaic rooftop power project²

² At time of installation.

Attachment B – Global Renewable and Alternative Electricity Summary

Data Summary ³						
Indicator	CY2022			CY2021 ⁴		
	Electricity Consumed (Billion kWh)	Purchased Renewable Electricity (Billion kWh)	Renewable Electricity ⁵ (% of Supply)	Electricity Consumed (Billion kWh)	Purchased Renewable Electricity (Billion kWh)	Renewable Electricity ⁴ (% of Supply)
Global Total	9.01	5.39	60% ¹⁰	9.64	7.75	80%
Total, By Country ⁶						
China	0.26	0	0%	1.47	0	0%
Costa Rica	0.13	0	99% ⁷	0.09	0	0%
India	0.06	0	0%	0.05	0	0%
Ireland	1.02	1.02	100%	0.89	0.89	100%
Israel	1.12	1.12	100%	1.06	1.06	100%
Malaysia	0.50	0.50	100%	0.44	0.44	100%
Mexico	0.02	0	0%	0.02	0	0%
Poland	0.03	0.03	100%	0.02	0.02	100%
USA	5.63	2.72	48% ¹⁰	5.33	5.33	100%
Vietnam	0.24	0	0%	0.25	0	0%
Sources	Renewable electricity sources: Wind, solar, hydro, and geothermal					
Certification	Accredited third-party validations such as RECs, GOOs, EKO, IREC by appropriate region					
Renewable Electricity Supply Information	Purchased renewable electricity was either located in the country or electrical grid where generated, or where it meets the market boundary requirements of WRI's <i>GHG Protocol Scope 2 Guidance</i>. Renewable electricity supply includes one or more of the following: - Procurement of energy attribute instruments: - Renewable electricity directly connected to Intel facilities from on-site installations; no electricity is sent to the grid from on-site projects - Green attributes from off-site generation utility supplied to Intel; or - Attribute from an off-site grid connected generator (e.g., PPA, etc.).					

³ Data provided for calendar year (CY): January 1 through December 31. Small differences between individual locations and totals are due to rounding.

⁴ The Dalian, China site was sold subsequent to year-end 2021 as part of the first closing of the divestiture of our NAND Memory business. Therefore, Dalian is not included in our sustainability metrics beginning in 2022.

⁵ Represents electricity from renewable sources. Calculated as the % of total electricity consumed that is renewable.

⁶ For a list of all manufacturing sites (Fab, Technology Development and ATM), visit <https://csrreportbuilder.intel.com/pdfbuilder/pdfs/CSR-2022-23-Full-Report.pdf> (page 17). For a list of all manufacturing and non-manufacturing Intel locations, visit <https://www.intel.com/content/www/us/en/location/worldwide.html>.

⁷ Costa Rica's grid electricity supply is nearly 100% from renewable energy sources. Therefore, beginning in CY2022 reporting, we include electricity consumption in Costa Rica as renewable when calculating our global total.

Documentation	Scope 2 GHG emissions and renewable electricity information is verified as part of Intel's third-party annual assurance process to ensure reporting meets the requirements of WRI's <i>GHG Protocol Scope 2 Guidance</i> market-based methodology ^{8,9} .
----------------------	--

⁸ A copy of the CY2021 Independent Limited Assurance statement can be found on page 89 at: <https://csrreportbuilder.intel.com/pdfbuilder/pdfs/CSR-2021-22-Full-Report.pdf>

⁹ A copy of the CY2022 Independent Limited Assurance statement can be found on page 96 at: <https://csrreportbuilder.intel.com/pdfbuilder/pdfs/CSR-2022-23-Full-Report.pdf>

¹⁰ A portion of the renewable electricity purchased in the United States in CY2022 was not certified to the Low Impact Hydro Institute (LIHI) standard. The non-certified LIHI renewable electricity has been removed.