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ABOUT ADVANCECT

OUR MISSION

AdvanceCT is a nonprofit economic development organization that drives job creation and new capital investment in Connecticut through business attraction, retention, and expansion work.

ECONOMIC DEVELOPMENT

Economic development is the lifeblood of Connecticut's economy, and AdvanceCT plays a critical role in the state's business attraction and business retention efforts. We work to attract corporate investment and to support existing businesses as they expand. AdvanceCT works in close partnership with public and private organizations across the state to ensure new and existing businesses have the support they need to thrive in Connecticut.

WHAT WE DO

We focus on inclusive business development and business retention work in close collaboration with the Connecticut Department of Economic and Community Development, other economic development organizations throughout the state, and the private sector.

LEARN MORE AT **ADVANCECT.ORG**





VALUE PROPOSITION



Powering the Future of Clean Innovation

Connecticut delivers a unique advantage for cleantech companies: enabling end-to-end innovation, from R&D and prototyping to advanced manufacturing. With a legacy of engineering excellence, a top-ranked STEM talent pipeline, and state-backed momentum behind energy innovation and pollution reduction, Connecticut is purpose-built for clean technology growth. Within Connecticut's highly supportive ecosystem, businesses benefit from streamlined production, access to major markets, and robust public-private collaboration, making Connecticut a premier hub for developing and scaling sustainable and cost-saving solutions.



CLEANTECH DEFINITION

Clean technology ("cleantech") refers to commercially viable innovations that reduce environmental impact and improve energy and resource efficiency across sectors.

- Better resource utilization and performance gains leads to significant cost savings and other efficiences
- Spans energy, transportation, and industry

Cleantech advances environmental performance and efficiency across sectors, defined by **pollution reduction**, **resource optimization**, and **scalable solutions** aligned with global decarbonization goals.



A National Leader in Clean Energy

Connecticut enjoys broad State and community support for clean technology adoption. From household adoption of electric vehicles and solar panels to more efficient jet fuels, industrial materials recovery, and grid-level energy solutions, Connecticut demonstrates statewide support for clean and efficient technologies.

Connecticut is among the top 10 ranked states for:

- Lowest energy consumption per capita²
- Highest share of electricity generated from nuclear power³
- Energy-efficient economies, using less energy per dollar of GDP⁴
- Most environmentally friendly⁵



SOURCE: 1.5WALLETHUB, 2025. 2,3,4U.S. ENERGY INFORMATION ADMINISTRATION, 2024.

CLEANTECH IN CONNECTICUT

While cleantech spans a broad array of industries, clean energy alone has a significant presence in Connecticut:



46,000

Clean Energy Jobs¹

\$7.6B

Clean Energy State GDP²

\$100M

ClimateTech VC Fund by Connecticut Innovations³

\$2.88B

Green economy investment via Connecticut Green Bank and private partners (since 2011)⁴ **\$238M**

2024 electric energy efficiency investments via Connecticut's Conservation & Load Management program⁵

SOURCE: 1-2-4 CONNECTICUT GREEN BANK, 2024 – RELEASED MAY 2025. 3 CONNECTICUT INNOVATIONS, 2024. 5 CONNECTICUT ENERGY EFFICIENCY BOARD, PROGRAMS AND OPERATIONS REPORT, 2024, RELEASED MAR 2025.



A Diverse Cleantech Ecosystem







Recycling & Renewables



Manufacturing & Technology



























































Connecticut's Cleantech Workforce

Connecticut's cleantech sector is powered by a deep bench of engineers and skilled tradespeople trained at top-tier universities and technical programs. The state's workforce combines advanced research expertise with practical, hands-on capabilities, enabling companies to innovate, prototype, and scale without leaving the state. Furthermore, both Connecticut's R&D and production talent are cost-competitive relative to other cleantech hubs. With a ready supply of seasoned professionals and a steady pipeline of fresh graduates, Connecticut delivers the talent needed to compete in a rapidly evolving global market.



Connecticut's cleantech jobs are concentrated in the power, storage, and efficiency segments¹

- Solar (PV and Thermal)
- Wind Energy
- Fuel Cells and Hydrogen
- Bioenergy and Advanced Fuels
- Hydroelectric Power
- Nuclear Generation and Fuel
- Energy Storage (Battery and Thermal)
- Building Electrification
- Green and Recycled Building Materials
- Smart Grids and Microgrids
- Environmental Resilience and Infrastructure.

Map of Clean Energy Employment by County, 2023 Tolland Litchfield County 14,568 Hartford County Connecticut has more than New 46,000 clean energy jobs London New County Haven statewide, with the highest **Fairfield** County 618 number in Hartford, Fairfield, County and New Haven counties.²

SOURCE: ¹LIGHTCAST 2024 – Q3 2025 RELEASE. ADVANCECT-DEFINED NAICS CODES REFLECT EMPLOYMENT RELEVANT TO, BUT NOT EXCLUSIVE TO, CLEANTECH. ²CONNECTICUT GREEN BANK, 2024 – RELEASED MAY 2025.



ABUNDANT R&D TALENT

Connecticut has 39% more engineers than the national average.1



More than 1.8X

the national concentration²

Marine Engineers &
Naval Architects (#1 in the U.S.)
Architectural & Engineering
Managers (#2 in the U.S.)



Faster Job Growth³

Mechanical Engineers, +28% (vs. U.S. -1%) Chemical Engineers, +23%

(vs. U.S. -37%)



More than 1.25X

the national concentration4

Mechanical Engineers (#3 in the U.S.) Electrical Engineers

Landscape Architects
Financial & Investment Analysts



80% more advanced manufacturing jobs than the national average

2.9x the national average for tool and die makers

1.7x the national average for CNC tool operators and programmers

1.9x the national average for machinists

SOURCE: 1.2.4LIGHTCAST 2024 – Q3 2025 RELEASE. TALENT BASED ON CONNECTICUT DEPARTMENT OF LABOR GREEN JOBS CAREER LATTICES. 3LIGHTCAST 2024 – Q3 2025 RELEASE. GROWTH CALCULATED FROM 2016-2024.



Nationally Competitive Talent Costs

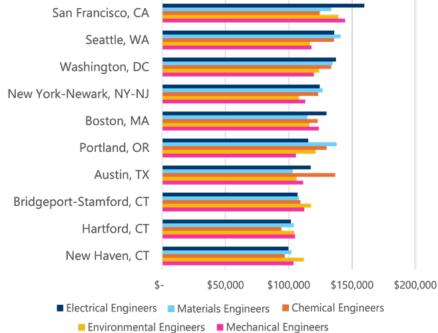
Connecticut Has Lower R&D Talent Cost

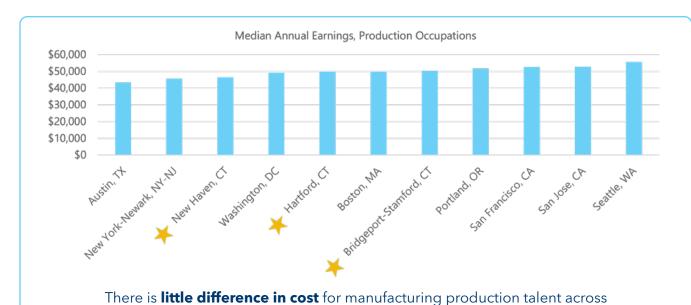


While Connecticut boasts an exceptionally skilled workforce, R&D talent costs are lower than other cleantech hubs.



Median Annual Earnings, R&D Talent





SOURCE: LIGHTCAST, 2024 - Q3 2025 RELEASE. DATA BY MSA.

U.S. cleantech hubs.



PIPELINE FOR CLEAN TECHNOLOGY

With over 30 institutions offering cleantech-aligned degrees and certifications, Connecticut's education system is powering talent pipelines in **renewable energy, sustainability, advanced manufacturing, and green infrastructure**.











































UCONN¹ UNIVERSITY OF CONNECTICUT

- Center for Clean Energy Engineering (C2E2)
- Institute of the Environment (IoEE)
- Environmental Engineering
- Environmental Studies
- Environmental Sciences
- Clean Earth Lab
- 2,400+ STEM degrees in 2023³

Yale²

- Center for Business and the Environment (CBEY)
- School of the Environment
- Environmental Engineering
- Environmental Sciences
- Clean Energy Collaborative
- 3,100+ STEM degrees in 20234

SOURCE: JUNIVERSITY OF CONNECTICUT 2025, 2YALE UNIVERSITY 2025, 3,41 IGHTCAST 2024 - O3, 2025, RELEASE





STATE OF INNOVATION

Connecticut's clean technology sector thrives on a culture of invention. With one of the highest patent rates per capita in the nation, the state's innovators are advancing breakthroughs in energy efficiency, advanced materials, storage solutions, and sustainable manufacturing. This R&D intensity fuels the commercialization of new technologies, attracting investment, creating market advantages, and Connecticut's leadership in technological innovation.

Home to innovators and changemakers throughout history, Connecticut continues to draw the most visionary workers and companies to its dynamic sector ecosystems. Connecticut is **ranked #5 in the U.S. for patents per capita**,¹ and was also identified by WalletHub as a **top-ranked state for innovation potential**.²

SOURCE: ¹U.S. CENSUS BUREAU, PEP, 2024; U.S. PATENT AND TRADEMARK OFFICE, 2024; ADVANCECT CALCULATIONS ²WALLETHUB, 2025





35.3% of Connecticut clean energy patents since 2019 are in clean grid technologies



31.1% of Connecticut clean energy patents since 2019 are in alternative transportation



25.1% of Connecticut clean energy patents since 2019 are in energy efficiency

Connecticut is a springboard for clean energy innovation, dominated by highimpact patent activity and rapid growth across top technology areas.

SOURCE: CONNECTICUT GREEN BANK, CLEAN ENERGY INDUSTRY REPORT 2024–RELEASED JUN 2025.



Pioneers in Space Exploration

NASA

Many Connecticut companies have made the transition to space with propulsion systems, air filtering equipment, avionics, and other mission critical components manufactured in Connecticut.

Efficiency – especially fuel efficiency – is critical as a craft carrying less weight has greater maneuverability, range, and payload capacity and a significantly lower cost to launch.

TOP NASA MANUFACTURING CONTRACTORS IN CONNECTICUT

BASED ON FY 2022-2024 CONTRACT AWARD DATA





















"This is a pivotal time for space travel and exploration, and we are excited about our role in enabling these missions and technologies."

Bill Lee

Chairman of the Board of Directors, The Lee Company

"We welcome the opportunity to continue our support of human spaceflight, which began in 1965 supplying the products to the Saturn/Apollo programs. We are honored to be a small part of the diverse and brilliant team that will bring mankind safely to places never gone before..."

- Chad Thompson

President, Ensign Bickford Aerospace and Defense





Connecticut: A Manufacturing Powerhouse



Connecticut's deep expertise in advanced manufacturing and process development offers a critical advantage to cleantech companies working to scale new technologies.

The state boasts a highly skilled production workforce, cutting-edge prototyping facilities, and a dense network of contract manufacturers and supply chain partners. This foundation enables cleantech innovators to accelerate the transition from labscale breakthroughs to scalable, market-ready products, with support for everything from materials sourcing to automation and quality control.

Connecticut provides the technical know-how and infrastructure needed to streamline production, reduce time-to-market, and scale clean technologies efficiently and competitively.

Company	Industry	Revenue ('24)	CT Jobs
ASML	Semiconductors	\$30.6 billion ¹	3,20012
Collins Aerospace	Aerospace & Defense	\$28.3 billion²	Not available
Pratt & Whitney	Aerospace & Defense	\$28.1 billion ³	11,00013
Stanley Black & Decker	Tools & Accessories	\$15. billion⁴	1,70014
Amphenol	Electronic Connectors	\$15.2 billion ⁵	Not available
OTIS Worldwide	Elevator Systems	\$14.3 billion ⁶	1,00015
Electric Boat	Ship Building	\$10.4 billion ⁷	15,000 ¹⁶
Sikorsky	Aerospace and Defense	\$6.9 billion ⁸	7,500 ¹⁷
TRUMPF	Machine Manufacturing	\$6.0 billion ⁹	50018
Kaman Aerospace	Aerospace & Defense	\$775.9 million ¹⁰	Not available
Pursuit Aerospace	Aerospace & Defense	\$678.9 million ¹¹	Not available

SOURCE: 14.5.6 PITCHBOOK, FY 2024. 23RTX, SEC 10-K, FY 2024. 7GENERAL DYNAMICS, SEC 10-K, FY 2024. REVENUE FOR NUCLEAR SUBMARINE PRODUCT; THE PORTION ATTRIBUTABLE TO ELECTRIC BOAT WAS NOT SPECIFIED. 8 LOCKHEED MARTIN PUBLIC COMMENTS BY JAY MALAVE, CFO ON DEC. 3, 2024 – TRANSCRIPT ACCESSED IN PITCHBOOK, FY 2023 – ACCESSED MAY 2025. 19TITCHBOOK, FY 2025 – ACCESSED SEPT 2025. 12.14.17CT INSIDER, 2025. 13.15THE REGISTER CITIZEN, 2025. 14 NORWICH BULLETIN, 2025. 15 HARTFORD BUSINESS JOURNAL 2025.





RESOURCES

Connecticut offers targeted tax incentives, competitive grant programs, and robust financing tools to help cleantech companies scale from R&D to full commercialization. The state's stability and commitment to decarbonization make it a low-risk, high-reward location for cleantech growth.

100%

In new legislation passed in 2025, Connecticut targets economy-wide net zero emissions by 20501



Green Bank to accelerate the green economy in 2011²



Established the nation's first ever Wide array of executive orders and legislation encompassing waste and carbon emissions at state agencies and broader, statewide adaptation and resilience initiatives³



Multiple State incentive programs supporting private sector adoption of clean, efficient energy and carbon reduction technologies4

CLEANTECH RESOURCES



Connecticut Innovations (CI) ClimateTech Fund⁵

A \$100M investment vehicle backing startups and scale-ups driving sustainability, clean energy, and green technology innovation across the state.





Supports manufacturers with energy efficiency upgrades, workforce training in fuel cells and advanced manufacturing, and technology demonstration programs that accelerate clean energy adoption and commercialization.

SmartBuildings CT (by CCAT)

Free, data-driven tools and analytics to improve energy efficiency, air quality, and sustainability in commercial buildings.

CONNECTICUT GREEN BANK

Connecticut Green Bank⁷

Nation-leading financing solutions that accelerate clean energy adoption for property owners, municipalities, contractors, and investors, mobilizing private capital to scale impact.





Unbeatable Location

Connecticut sits at the strategic crossroads of the Northeast, with direct access to Boston, New York City, and the global markets they connect. Proximity to world-class ports, freight rail, and highway networks ensures efficient supply chain movement, while the state's position in a leading clean energy corridor accelerates market adoption and regional collaboration. Ready industrial space and competitive lease rates enhances the state's desirability as a cleantech manufacturing and innovation hub.



Within 500 miles of Connecticut:

- States comprising over 29% of the U.S. population, 29% of U.S. business establishments, 30% of U.S. jobs, and 33% of U.S. GDP
- Canadian provinces with 66% of Canada's population, 62% of Canada's businesses, and 66% of Canada's employment



SOURCE: U.S. BUREAU OF ECONOMIC ANALYSIS, 2023-2024; U.S. BUREAU OF LABOR STATISTICS, 2023; STATISTICS CANADA, 2023-2024; ADVANCECT CALCULATIONS.

COMPETITIVE PRICES



Not only is Connecticut an Advanced Manufacturing industry leader, but it also has some of the **lowest industrial property rents** across the country.



SOURCE: CUSHMAN & WAKEFIELD INDUSTRIAL MARKETREAT OF 2025 *REPRESENTS STATEWIDE AVERAGE



TRANSPORTATION





BY WATER

There are three deep water ports in Connecticut: Bridgeport, New London, and New Haven – the busiest port between New York and Boston.¹



BY AIR

Bradley International is the 2nd largest airport in New England and handles nearly 350 million pounds of cargo annually.²



BY ROAD

I-95 and I-91 connect Canada to Florida, and I-84 connects to Massachusetts and New York State CT is 13th in the nation for overall highway performance, cost-effectiveness, and condition.³



BY RAIL

Connecticut's freight is handled by CSX, Housatonic Railroad, Naugatuck Railroad, PanAm Southern Railway, and Providence & Worcester Railway, serving interstate and intrastate transportation.

SOURCE: 1CITY OF NEW HAVEN, 2025, 2BRADLEY AIRPORT, 2025, 3REASON FOUNDATION, 2025



CONNECTICUT PORTS

Significant public and private investment continually expands the capabilities of Connecticut's ports. With intermodal connectivity, the three deepwater ports are an asset for offshore projects (including wind), freight logistics, and regional industrial development.



NEW HAVEN

Highest-volume port on Long Island Sound and the busiest between Boston and NYC, with direct access to I-95, I-91, and freight rail. Spanning 366 acres, it handles petroleum, scrap metal, bulk goods, and project cargo across a range of active, privately operated terminals.¹

NEW LONDON

Deepwater, heavy-lift terminal with \$310M in upgrades, positioned as a premier hub for offshore wind, cargo, and long-term growth.²





BRIDGEPORT

Supports commercial shipping and ferry services, with potential for expansion. Cargo includes bulk commodities, breakbulk, and roll-on/roll-off.³

SOURCE: ¹CITY OF NEW HAVEN, 2025. ²CTMIRROR, 2025; DEVELOP NEW LONDON, 2025. ³CONNECTICUT PORT AUTHORITY, 2025.





Access to Capital

Connecticut offers a robust financing ecosystem for cleantech ventures. The state is home to active angel networks, venture capital firms with clean energy portfolios, and strategic corporate investors. Public-private partnerships and organizations like the Connecticut Green Bank and Connecticut Innovations unlock pioneering financing models, accelerating deployment. Combined with proximity to major financial hubs in New York and Boston, this capital environment fuels the commercialization and scaling of transformative clean technologies. Incubators and academic collaborations further enhance the success of early-stage companies.



Connecticut Green Bank has invested over \$409 million, leveraged to attract an additional \$2.47 billion in private investment.1

Connecticut Innovations \$100 million Climate Tech Fund supports innovative, growing companies in Connecticut.²

INVESTMENT IN CLEANTECH



Stamford-based Altus Power acquired for \$2.2B by TPG Rise Climate in April, 2025 to scale clean energy operations.³



\$160M, 7.4 MW fuel cell plant in Hartford, announced January 2025, delivering Class 1 renewable baseload power under a 20-year PPA, securing long-term revenue to anchor private investment.⁴



\$5M, brownfield-based ~5 MW fuel cell facility in Stratford, approved March 2025, generating low-emission electricity under a 20-year PPA, ensuring stable returns and enabling project financing.⁵

















..puraclenz WRIGHTONE

SOURCE: ¹CONNECTICUT GREEN BANK, 2024. ²CONNECTICUT INNOVATIONS, 2025. ³BUSINESS WIRE, 2025. ⁴GLOBAL NEWS WIRE, 2025. ⁵CT POST, 2025.



Cleantech Incubators





University Of Connecticut C2E2: Center For Clean Energy Engineering¹

C2E2's goals include developing innovative clean energy solutions, collaborating with industrial partners to implement new technologies, and educating future energy professionals through cutting-edge research and academic programs.



Future Climate Venture Studio at UConn²

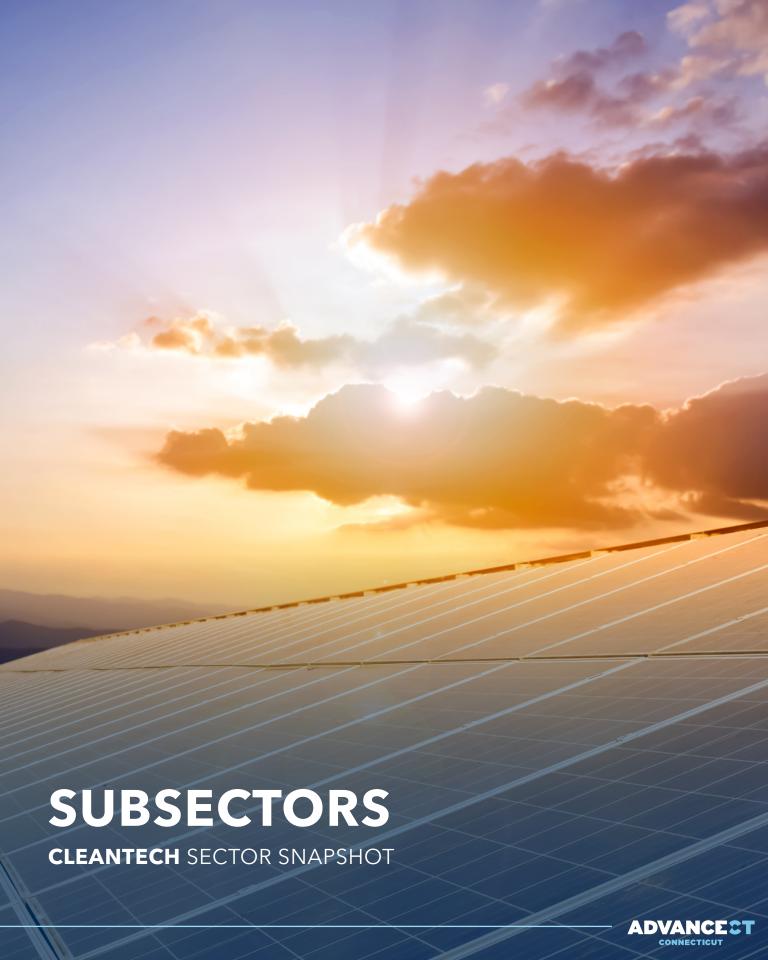
Collaborates with startups addressing the most critical dimensions of the climate challenge, including decarbonization, alternative energy, social impact, and more.



ClimateHaven³

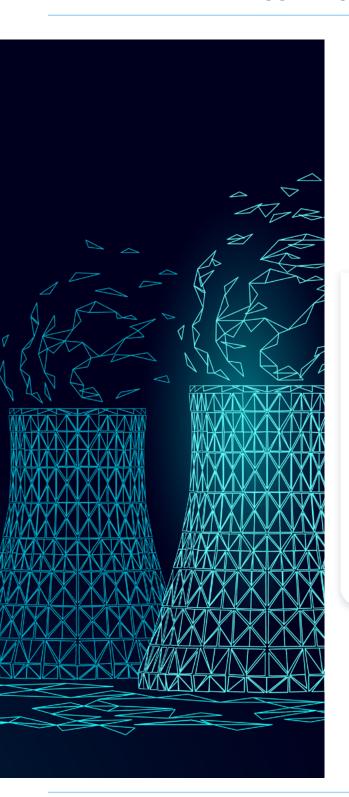
Purpose-built climate tech incubator in New Haven (~10,000 sq ft). Backed by DOE, Yale, CI, and others; supporting ~17 startups in areas like CO2-to-methanol conversion and battery recycling, and now launching a Water Innovation Hub to pilot next-gen water resilience solutions.

SOURCE: 1,2UNIVERSITY OF CONNECTICUT, 2025; 3CLIMATEHAVEN, 2025.





CONNECTICUT NUCLEAR





NUCLEAR ENERGY PRODUCTION

Connecticut ranks **5th nationally** in share of electricity from nuclear power,¹ accounting for **90%** of the state's carbon-free electricity generation.²

THE MILLSTONE POWER STATION



Connecticut's premier nuclear facility, operated by Dominion Energy

- Generated 47% of the state's electricity³
- Avoids 8.3 million metric tons of CO2 emissions per year,⁴ helping Connecticut meet climate targets
- Helps ensure grid reliability and energy price stability in New England's competitive electricity market

SOURCE: ¹U.S. ENERGY INFORMATION ADMINISTRATION, 2024 - ACCESSED JUL 2025. ^{2,3,4}DOMINION ENERGY - ACCESSED SEP



Hydrogen and Fuel Cell Technology



FuelCell Energy operates two of North America's largest fuel cell parks, both located in Connecticut.¹

FuelCell Energy and its subsidiaries hold 531 fuel cell technology patents worldwide,² and the company has committed \$160M to strengthen Hartford's local energy grid, advancing Connecticut's clean energy leadership.³

Connecticut's phased hydrogen plan drives early deployment in trucking and infrastructure, expands into storage and aviation, and prioritizes equity, innovation, and long-term investment.⁴



TARGET BY 2040⁵



Connecticut has robust hydrogen growth targets, including:

472,000 tons

Greenhouse gas reduced per year

40%

Adoption rate for long-term energy storage

\$5B

Capital Investment

SOURCE: ^{1,3}FUELCELL ENERGY, NOV. 2023 - ACCESSED JUL 2025. ²FUEL CELL ENERGY, 2024. ^{4,5}CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, FINAL 2024 CONNECTICUT CLEAN HYDROGEN ROADMAP, 2024.



Connecticut Solar





Solar energy production enjoys both widespread popularity and state support in Connecticut.

SOLAR ENERGY PRODUCTION

101,863 installations: enough to power 279,213 Connecticut homes

\$4.6 billion in total solar market value

2,415 jobs supported across the state

146 solar companies

STATE SUPPORT & INCENTIVES

- Residential & commercial renewable energy programs
- Community solar and net metering
- Performance-based incentives for low- or zeroemission renewable energy
- School and municipal solar initiatives

SOURCE: SOLAR ENERGY INDUSTRIES ASSOCIATION, 2025





Emerging Technologies

Connecticut is uniquely positioned to advance emerging clean technologies poised for rapid growth. Areas like grid-scale energy storage, green hydrogen production, offshore wind services, and circular economy solutions are already attracting significant interest and investment. The state's cross-disciplinary expertise, spanning advanced materials, maritime engineering, and environmental analytics, creates a launchpad for innovators to pilot, scale, and commercialize next-generation solutions.



High-Potential Subsectors



SUSTAINABLE AVIATION

Decarbonizing aviation is essential to achieving global netzero goals. Connecticut is well positioned to lead innovation in this space, leveraging its aerospace heritage, world-class R&D institutions, and leading aviation companies to advance next-generation propulsion and fuel technologies.



EV CHARGING INFRASTRUCTURE

Connecticut is home to domestic EV charger manufacturers, offering an early-mover advantage as the state accelerates deployment of public and private charging networks to meet rising demand.



OFFSHORE WIND

With three federally designated deep-water ports, a labor force with relevant skills, and a deep manufacturing and shipbuilding supply chain, Connecticut is positioned as a Northeast hub for offshore wind manufacturing, staging, and deployment.



High-Potential Subsectors, cont.



NUCLEAR SMALL REACTORS

Existing nuclear infrastructure, coupled with a strong defense and advanced manufacturing base, makes the state an ideal testbed for SMR development. Recent policy support and local expertise position Connecticut as a compelling location for nuclear R&D, prototyping, and early deployment.



ENERGY EFFICIENCY

Connecticut's aging building stock and above-average energy costs present both a challenge and opportunity. The state is advancing residential and commercial retrofits, grid-interactive technologies, and building electrification to manage demand, lower emissions, and improve energy resilience.



BATTERY STORAGE

As renewable energy sources scale across the Northeast, Connecticut presents upstream opportunities for battery storage innovators to improve grid stability, support distributed generation, and enhance energy resilience.



WASTE MANAGEMENT

With over 40% of municipal waste currently exported out of state, Connecticut faces an urgent need for local waste processing solutions that reduce costs and support circular economy goals.¹



ADVANCED COMPONENTS & BATTERY RECYCLING

Connecticut's high consumption of electronics and EVs creates local opportunities for battery material recovery, supporting circular economy initiatives and domestic critical mineral supply chains.



ELECTRIFICATION

Roughly 80% of Connecticut homes rely on gas or oil for heating, offering a significant decarbonization opportunity through residential and commercial electrification, essential to reducing the state's greenhouse gas emissions.²

SOURCE: 1DEEP COMPREHENSIVE MATERIALS MANAGEMENT STRATEGY (CMMS) AMENDMENT, 2023 - ACCESSED JUL 2025; 2U.S. ENERGY INFORMATION ADMINISTRATION, 2024.

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LEARN ABOUT CONNECTICUT'S KEY INDUSTRIES AT ADVANCECT.ORG











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