



Executive Summary

Inspired by tomorrow.

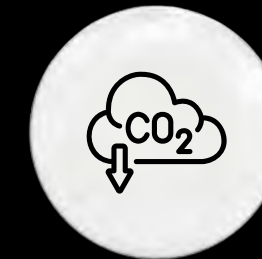
PCI's Net-Zero Vision

PCI is committed to achieving net-zero emissions across all scopes by 2045, integrating sustainability into pharmaceutical manufacturing operations and delivering long-term environmental and economic value to stakeholders and clients.

Our Vision

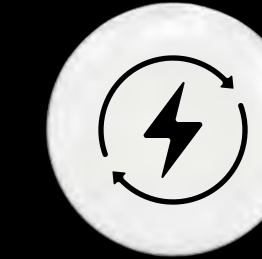
To lead pharmaceutical CDMO decarbonization through science-based climate action, operational excellence, and value chain transformation — reducing emissions while maintaining the highest standards of product quality and regulatory compliance.

Strategic Priorities



Carbon Footprint

Reduce operational and supply chain emissions



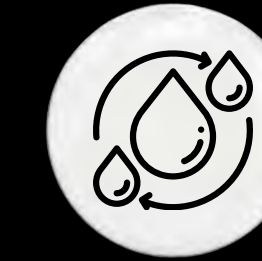
Renewable Energy

Transition to solar, wind, and green hydrogen



Waste Reduction

Expand circular economy initiatives



Water Stewardship

Enhance water recycling and reduce operational water use

Key Targets

2030

48% reduction in Scope 1 & 2 emissions; 25% reduction in Scope 3 emissions

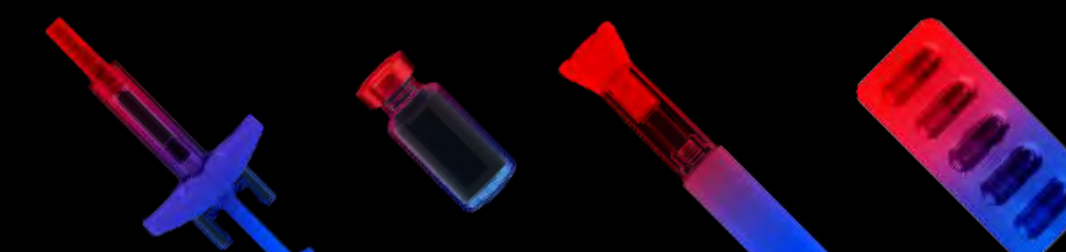
PCI is on track to achieve its 2030 targets and interim 2027 milestones. Continued goal attainment requires strategic investment.

2045

Achieve Net-Zero across Scope 1, 2 & 3 emissions

Global Alignment

PCI's decarbonization strategy is validated by the **Science-Based Targets** initiative (SBTi) and supports the **Paris Agreement's** 1.5°C pathway and **United Nations Sustainable Development Goals** (SDGs) 7, 12, and 13.





Strategy Framework

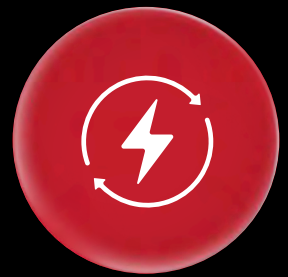
PCI's five-pillar approach to Net-Zero

Strategic Pillars

PCI has established five core strategic pillars to drive meaningful reductions in emissions, energy consumption, waste, and water use. These pillars form the foundation of our sustainability efforts and are aligned with our SBTi-validated targets and global best practices.

PCI's five-pillar approach to Net-Zero

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Energy Efficiency & Process Optimization

Goal : Reduce energy consumption and operational emissions.

- ✓ Optimize manufacturing processes to minimize energy waste.
- ✓ Upgrade to high-efficiency equipment & automated energy management.



Renewable Energy Transition

Goal : Achieve 100% renewable energy use by 2030.

- ✓ Invest in on-site solar, wind, and battery storage solutions.
- ✓ Secure long-term renewable energy agreements.



Waste Minimization & Circular Economy

Goal : Reach zero waste to landfill by 2045

- ✓ Reduce packaging waste & implement closed-loop recycling.
- ✓ Partner with suppliers on sustainable material sourcing.



Water Stewardship & Conservation

Goal : Decrease water usage intensity by 50% by 2030

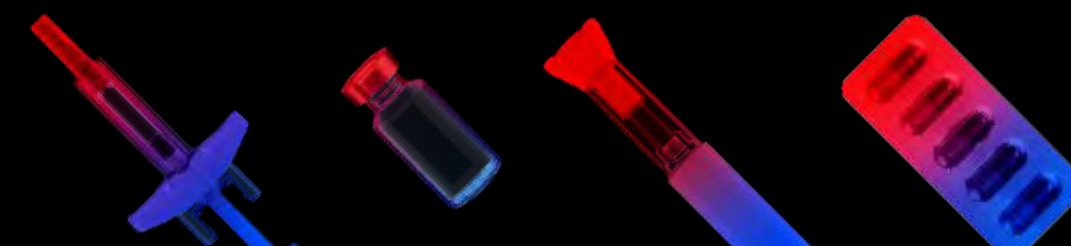
- ✓ Install water recycling systems & low-impact cooling processes.
- ✓ Implement rainwater harvesting in select locations.



Supply Chain Decarbonization & Scope 3 Reductions

Goal : Reduce Scope 3 emissions by 25% by 2030.

- ✓ Engage suppliers & logistics partners in carbon reduction strategies.
- ✓ Shift to low-carbon transport & eco-friendly product design.





The Roadmap to Net-Zero

Key initiatives and targets defined for Scope 1, 2, and 3 emissions.

Net-Zero Roadmap

PCI's Net-Zero Roadmap outlines a clear, step-by-step plan for reducing greenhouse gas emissions across all operations. The roadmap includes short-term, mid-term, and long-term milestones, with key initiatives and targets defined for Scope 1, 2, and 3 emissions.

Laying the Foundation for Net-Zero

The short-term phase (2025–2027) is centered on building the infrastructure, systems, and practices necessary to achieve PCI’s long-term sustainability goals. This phase involves optimizing current operations, transitioning to cleaner energy sources, and establishing a data-driven sustainability culture.

Key Targets for 2027

30%
Reduction in Scope 1 & 2 emissions
(baseline year: 2023)

63%
Of total energy consumption
from renewable sources

30%
Reduction in water usage intensity
(baseline year: 2023)

20%
Reduction in non-hazardous waste
production intensity (baseline year:
2023)

20-30
Top 20-30 suppliers enrolled in
reporting program

Key Initiatives



Energy Efficiency:

- Conduct energy audits and install smart monitoring systems
- Deploy building automation systems (BAS) for schedule optimization and equipment control
- Retrofit existing systems with high-efficiency equipment
- Optimize cleanroom HVAC systems



Renewable Energy Transition:

- Lock renewable electricity contracts at priority sites (Rockford, Philadelphia, Bedford) before renewals
- Secure Power Purchase Agreements (PPAs), Renewable Energy Certificates (RECs), and green tariffs via brokers
- Begin on-site solar PV feasibility studies



Waste Reduction:

- Launch waste segregation programs and vendor reporting systems at all facilities
- Increase supplier collaboration for responsible packaging solutions



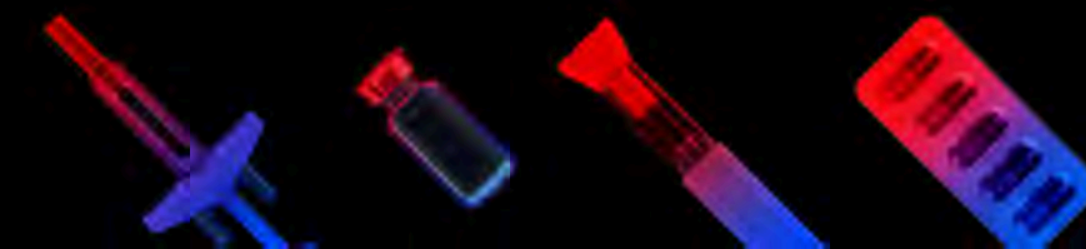
Water Stewardship:

- Install water-efficient technologies in production processes
- Begin rainwater harvesting pilot projects
- Deploy air-cooled chillers to reduce cooling tower losses (Philadelphia priority)



Scope 3 Emissions:

- Identify and engage key suppliers to track and reduce Scope 3 emissions, focusing on priority categories
- Establish a supplier sustainability reporting system
- Launch virtual-first business travel policies and rail-over-air for short trips
- Expand employee hybrid/remote programs and transit incentives



Scaling Sustainable Practices

The mid-term phase (2027–2030) focuses on scaling the sustainability measures introduced during the short-term phase. The goal is to achieve significant reductions in emissions and resource consumption by accelerating renewable energy adoption, expanding circular economy practices, and further decarbonizing PCI’s supply chain.

Key Targets for 2030

48%

absolute reduction in Scope 1 & 2 emissions (baseline year: 2023)

100%

Transition to renewable electricity across all facilities

50%

Reduction in water usage intensity (baseline year: 2023)

33%

Reduction in non-hazardous waste production intensity (baseline year: 2023)

25%

25% absolute reduction in Scope 3 emissions (baseline year: 2024)

Key Initiatives



Energy Efficiency:

- Complete high-efficiency equipment replacements, including advanced HVAC systems with optimized air-change rates and high-efficiency chillers with minimum COP thresholds
- Expand waste heat recovery systems
- Complete LED retrofits and advanced controls across all sites



Renewable Energy Transition:

- Achieve 100% renewable electricity procurement across all facilities
- Deploy on-site solar PV where feasible
- Secure long-term PPAs and green tariffs providing 10-20 year price stability



Waste Reduction:

- Expand waste-to-energy and material recovery initiatives
- Introduce circular supply chain models in partnership with key vendors



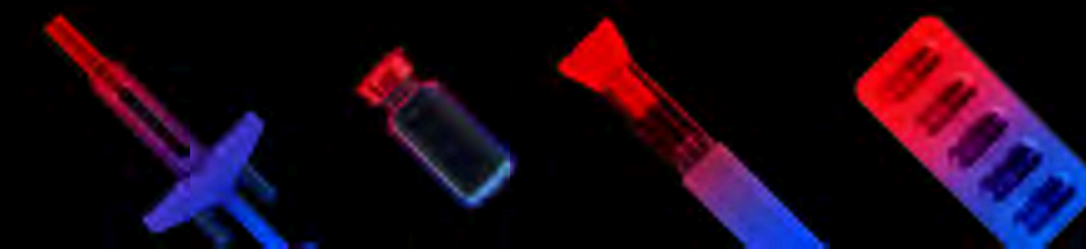
Water Stewardship:

- Extend water recycling systems to all water-intensive facilities
- Optimize irrigation processes for non-industrial sites



Scope 3 Emissions:

- Scale supplier engagement to 50-70% of emissions footprint
- Require Environmental Product Declarations (EPDs) from major structural materials vendors
- Embed low-carbon defaults in Master Service Agreements
- Collaborate with partners to develop low-carbon transportation solutions
- Optimize logistics through modal shift programs (GLEC/ISO 14083 compliance)



Achieving Full Net-Zero

The long-term phase (2031–2045) marks PCI’s final sprint to achieving full Net-Zero emissions. The focus shifts from emission reduction to long-term carbon neutrality and establishing PCI as a climate-positive organization. This phase emphasizes continuous performance improvement, supply chain decarbonization, and the development of next-generation sustainability innovations.

Key Targets for 2045

100%

reduction in Scope 1, 2, & 3 emissions, with offsets for residual (Net-Zero)

100%

renewable energy use across operations and supply chains

50%

reduction in overall water usage compared to the 2023 baseline

0

Zero-waste-to-landfill status achieved globally

Key Initiatives



Energy Efficiency:

- Integrate next-generation clean energy technologies, including green hydrogen and advanced energy storage systems
- Continuous commissioning programs maintaining peak efficiency over equipment lifecycles



Complete Decarbonization:

- Achieve 100% electrification of heating systems
- Zero high-GWP refrigerants across all operations
- Complete fleet electrification, including 100% electric vehicles and material handling equipment



Waste Reduction:

- Expand circular production models across all product lines
- Develop innovative recycling technologies with R&D partners
- Advanced recycling with robust chain-of-custody verification
- Closed-loop material flows with suppliers and major customers



Water Stewardship:

- Install closed-loop water systems across all manufacturing sites
- Partner with communities on water conservation education initiatives
- Achieve water-positive status at select flagship sites
- Water returned to watersheds exceeds consumption
- Advanced treatment and recharge systems



Scope 3 Emissions:

- Achieve 90%+ supplier compliance with SBTi-aligned goals
- Collaborate with industry groups for shared sustainability frameworks
- Near-zero carbon logistics for air, sea, and road transport
- Regional supply chain redesign to minimize transportation distances
- Carbon offsets for residual unavoidable emissions
 - High-quality, verified carbon removal projects
 - Nature-based solutions and direct air capture where appropriate
 - Preference for projects with co-benefits (biodiversity, community development)

