WuXi Biologics
Global Solution Provider

WuXi Biologics Green CRDMO White Paper

September, 2025

https://www.wuxibiologics.com/sustainability

Contents

Disclaimer

This White Paper is published by WuXi Biologics as a contribution to analysis and insights in the field of biologics green solution.

For any inquiries regarding this White Paper, please contact us at: ESG@wuxibiologics.com

Foreword

At WuXi Biologics, we believe that long-term business success is inseparable from our responsibility to people, society and the planet.

Unleashing the power of our unique CRDMO business model, technology strength and operational excellence, WuXi Biologics has been successfully executing our “Follow and Win the Molecule” strategies and has maintained sustainable momentum with notable achievements.

With sustainability as the enduring cornerstone of our business growth, we keep powering green technology innovations to provide advanced end-to-end Green CRDMO solutions for global clients and partners, while consistently delivering our own ESG excellence.

Ensuring the planet’s resilience begins with the choices that are made today. WuXi Biologics recognizes that protecting the planet is not just a responsibility but a necessity for future generations. We are dedicated to the perpetuation of good environmental stewardship regarding climate change, resource efficiency, circularity, ecosystem protection, and green innovation. The company consistently enhances the capabilities of itself as well as its employees, suppliers and communities, to appropriately address climate change. Working together with global clients and partners, we are committed to delivering broader impacts across the value chain to achieve sustainable development.

Dr. Chris Chen
WuXi Biologics CEO
ESG Committee Chairman

Executive Summary

Global endeavor to proactively tackle climate change

Green transition to be the inevitable path for sustainable business development

Global Collaboration

Proactively tackle climate change

- *Paris Agreement:* aims to keep the global average temperature rise well below 2°C above pre-industrial levels and to pursue efforts to limit the increase to 1.5°C; enhances the ability to adapt to climate change and fosters climate resilience; aligns financial flows with low greenhouse gas emissions and climate-resilient development pathways.

Nation-Wide Commitment

Maintain economic growth while advancing green transition

- China has pledged to reach peak carbon emissions before 2030 and achieve carbon neutrality before 2060; Germany has pledged to reduce greenhouse gas emissions by 65% compared to 1990 by 2030 and achieve net-zero emissions by 2045; Ireland has committed to carbon neutrality by 2050 and to reduce greenhouse gas emissions by 51% compared to 2018 by 2030; Singapore has pledged to achieve net-zero emissions by no later than 2050.

Healthcare Industry Efforts

Actively explore low-carbon business model although not high energy-consuming industry

- According to a report by the World Economic Forum, greenhouse gas emissions from the healthcare sector (including medical services, biopharmaceuticals, medical devices, etc.) account for only 4% to 5% of global greenhouse gas emissions.
- However, healthcare companies are actively advocating green and zero-carbon practices to promote sustainable development of their business and the entire industry.

Executive Summary

Global governments to promote public procurement strategies for the green transition

Key policy tools in place for achieving a low-carbon economy

Federal Acquisition Regulation (FAR) and Environmentally Preferable Purchasing (EPP)

FAR mandates federal agencies to prioritize the procurement of specific environmentally friendly products recommended by the EPP program

Ecodesign for Sustainable Products Regulation

Sets out sustainable product requirements for both private and public sector products placed on the EU market, which entered into force on 18 July 2024

Medicines Carbon Footprint Assessment Methodology

France introduced a carbon assessment methodology of the product and supply processes for all strategic health products (medicines and medical devices)

Commonwealth Procurement Rules (CPRs)

Australia advanced its 2050 net-zero target and circular economy goals. Effective on July 1, 2024 with two key policies: *Sustainable Procurement Guide* and *Environmentally Sustainable Procurement (ESP) Policy*

GB/T 41835-2022 Sustainable Procurement Guidance, China

Sustainability Criteria for Government Purchasing in Sweden

National Agency for Public Procurement launched harmonized criteria for pharmaceutical procurement across the regions

Evergreen Sustainable Supplier Assessment in England

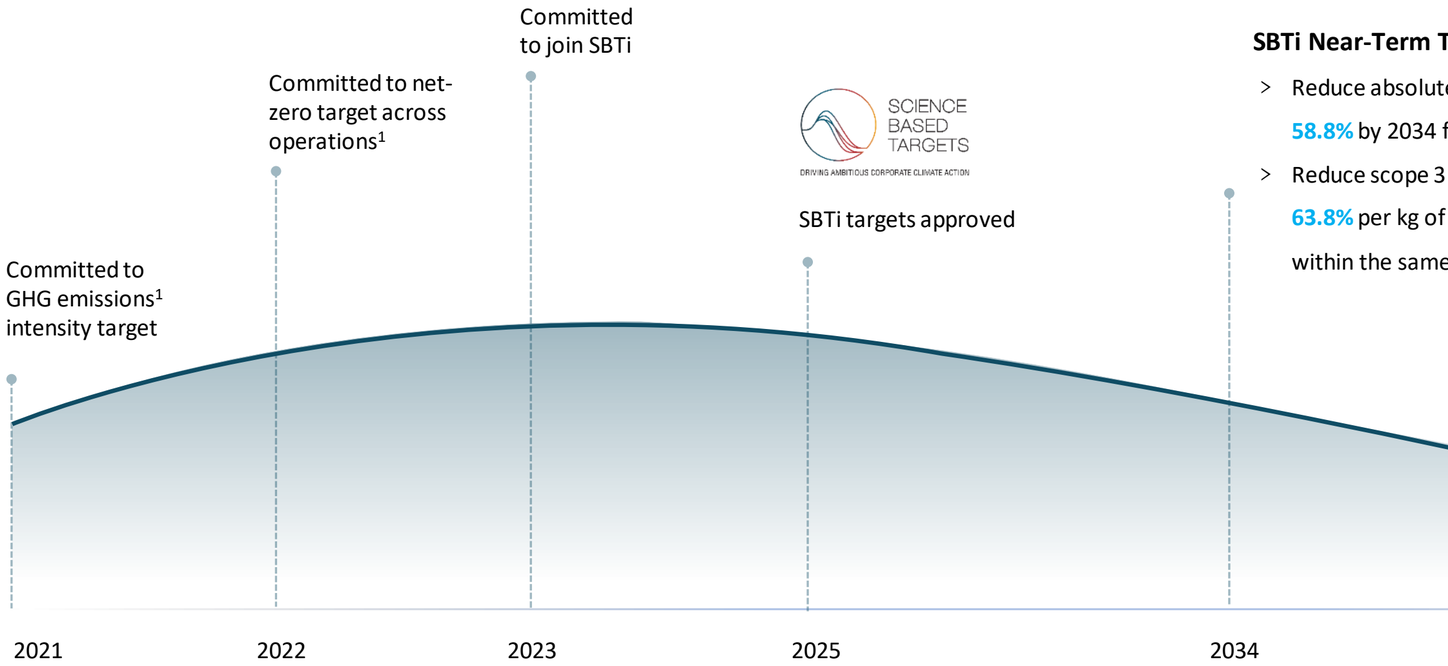
From 2024 all NHS England medicine tenders require an Evergreen Assessment and Carbon Reduction Plan

The Pharmaceutical LCA Consortium

A collaboration of 11 global pharmaceutical companies formally launched on 1st November 2023 aims to facilitate a universal approach to assessing the environmental impact of pharmaceutical products, under the banner of Pharmaceutical Environment Group (PEG)

End-to-End Biologics Green CRDMO Solution

Actively establish climate change target matrix to lead the path of net-zero economic transformation



SBTi Near-Term Targets

- Reduce absolute GHG emissions[1] **58.8%** by 2034 from a 2024 base year
- Reduce scope 3 GHG emissions[2] **63.8%** per kg of product produced within the same timeframe

SBTi Long-Term Targets

- Reduce absolute GHG emissions[1] 90% by 2050 from a 2024 base year
- Reduce absolute scope 3 GHG emissions[3] 90% within the same timeframe

SBTi Net-Zero Target

- Reach net-zero greenhouse gas emissions across the value chain by 2050

1: Scope 1 and 2
2: Including Scope 3 Category: purchased goods and services
3: Including Scope 3 Categories: purchased goods and services, capital goods, fuel and energy related activities, upstream transportation and distribution, waste generated in operations and employee commuting

End-to-End Biologics Green CRDMO Solution

Align with United Nations Sustainable Development Goals

Join International Sustainable Development Initiatives

Industry Leader with Outstanding ESG Performance

Trusted Partner to Enable Global Clients

Top 1% Member of Dow Jones Sustainability Indices
Corporate Sustainability Assessment (CSA) 2024 Score Powered by the S&P Global CSA
DJSI World Indices
S&P Global ESG Indices
(2023-2024)

MSCI ESG RATINGS AAA
MSCI Selection Indexes Constituents 2025
MSCI ESG Ratings AAA
MSCI Selection Indexes
(2023-2025)

PLATINUM Top 1% ecovadis Sustainability Rating JAN 2025
EcoVadis Platinum Medal
Global 1%
(2023-2025)

SUSTAINALYTICS REGIONAL ESG TOP RATED
SUSTAINALYTICS INDUSTRY ESG TOP RATED
Sustainalytics Negligible-Risk
Industry & Regional Top Rated
(2021-2025)

CDP A List 2024 | CDP Discloser 2024 | CDP 2024
A List – Water Security
A List - Supplier Engagement
Leadership Score - Climate Change
(2023-2025)

FTSE4Good
FTSE4Good Emerging Index
Industry Top 4%
(2021-2025)

Selected in UNGC 20 Case Examples for 20 Years

WuXi Biologics

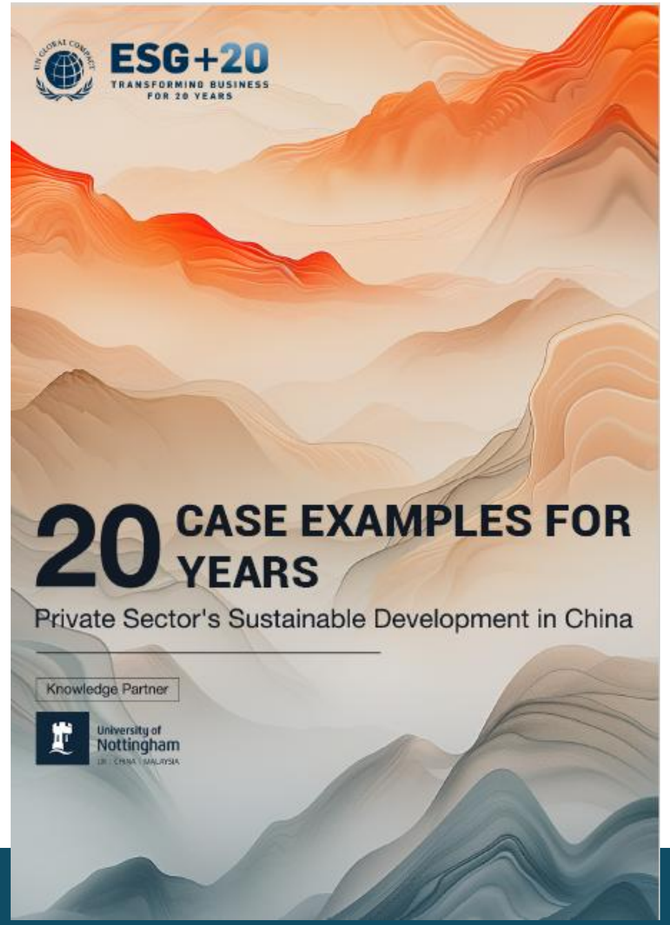
Leading in Green Biologics Solutions for a Healthier Future

Vision

Every biologic can be made.

Mission

Accelerate and transform the discovery, development and manufacturing of biologics to enable our global partners and benefit patients worldwide.



- Systematically articulate sustainability strategy and how WuXi Biologics tackles climate change
- Promote green innovative technologies and excellent energy-saving and carbon-reduction practices across the entire biologics lifecycle
- Leverage lean management to improve resource and energy efficiency for continuous improvement
- Unleash the great potential of digitalization to enhance governance

- End-to-End Green CRDMO Solution
- Cover entire lifecycle of biologics research, development, manufacturing
- Lead the global wave of green biologics solution

End-to-End Biologics Green CRDMO Solution

Driven by green innovative technologies

Full lifecycle of biologics research, development, manufacturing

Leverage lean management and digitalization

Best practice showcase for energy-saving and carbon-reduction

Promote green and sustainable business operations

Green Research

WuXiBody™ - Proprietary Bispecific Antibody Technology Platform

WuXiHybrid™

WuXiBody™

Green Development

WuXiUI™ - Ultra-Intensified Fed-Batch Platform

WuXiUP™ - Ultra-High Productivity Continuous Processing platform

WuXia™

WuXian™

WuXiDARX™

WuXiUI™

WuXiUP™

Green Manufacturing

Highly flexible and environmental friendly Single-Use Technology (SUT)

Continuous processing

Scale-out biomanufacturing

Green Operations

Build a Holistic Landscape for Green Technology

Diverse Systems

Span key process, system and equipment from biologics research, development to manufacturing

Diverse Scenarios

Production facilities, laboratories, warehouses, offices, utilities

Diverse Energies

Electricity, steam, natural gas and water savings, achieving operational synergy and substantial annual cost reductions

Diverse Technologies

Implement green technologies throug lifecycle - from system design and smart management to equipment upgrades - to maximize energy efficiency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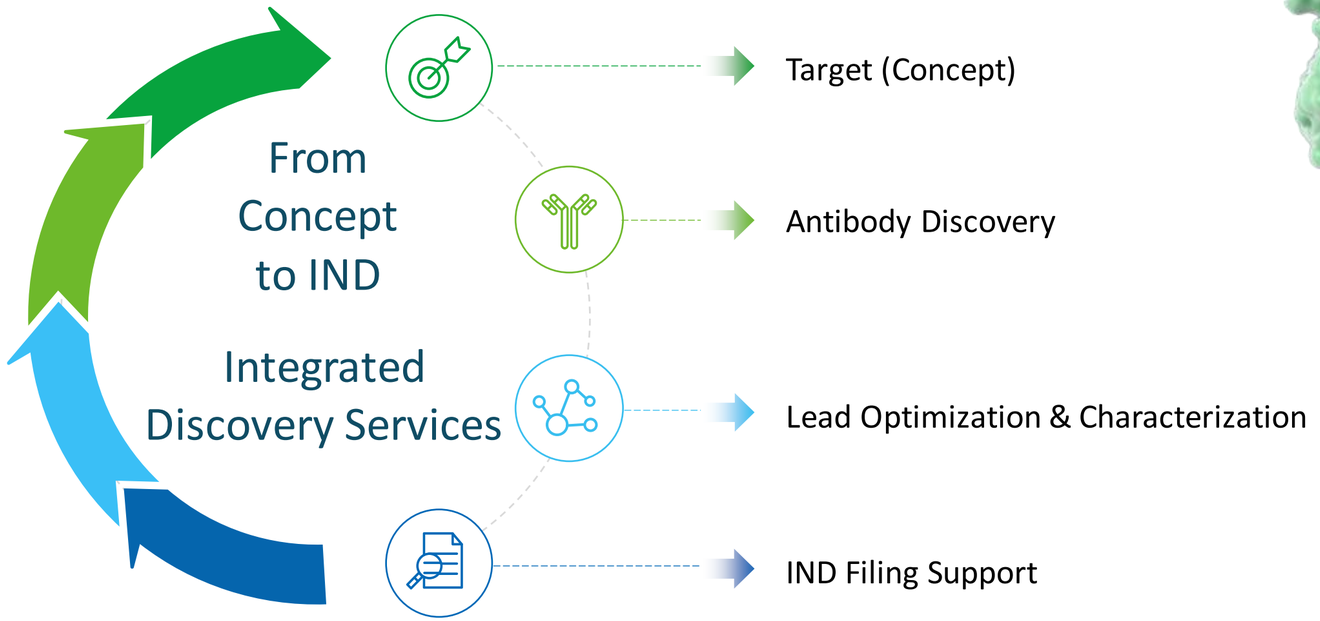
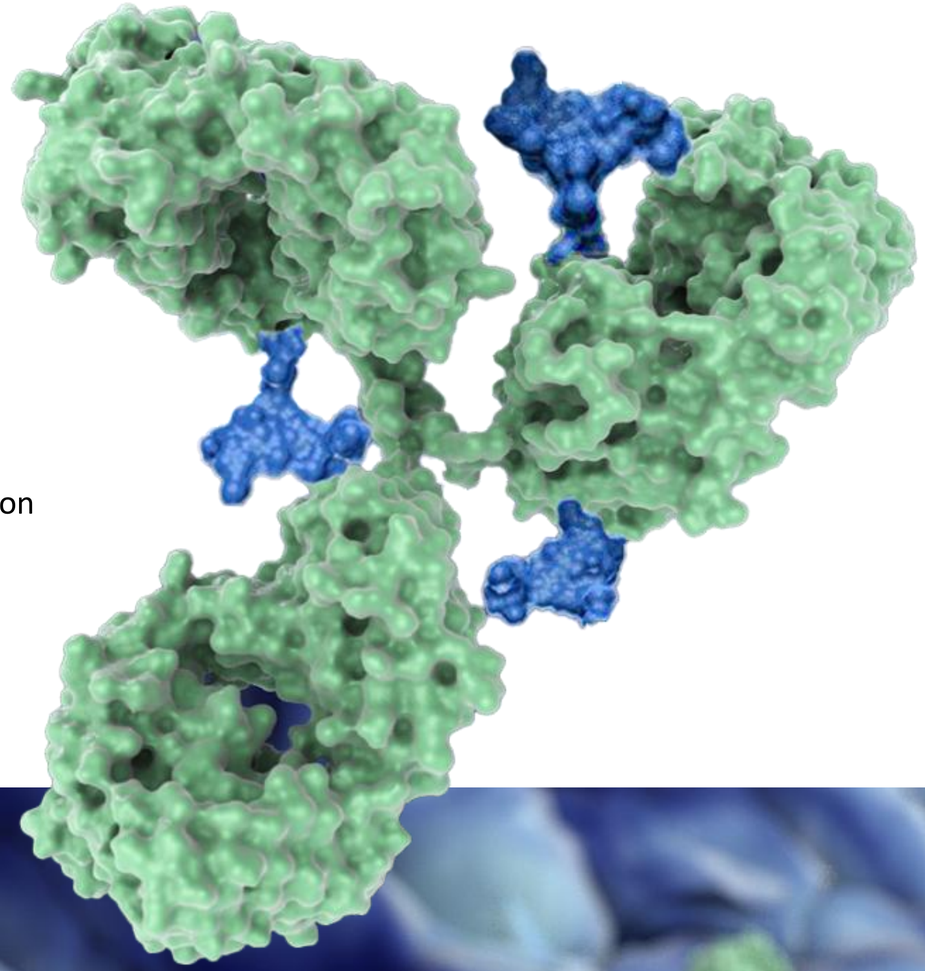
Green Research

Green Research





WuXiBody™ WuXiHYbrid™

Green Research

Proprietary Bispecific Antibody Technology Platform WuXiBody™

Empower global partners to develop innovative antibodies

It has strong compatibility, and – through exquisite protein design – can combine almost any ordinary monoclonal antibody sequence. Its unique structure can flexibly construct various formats with different valencies (e.g., 2, 3 or 4 binding sites), and its excellent developability solves CMC challenges.

- Accelerate 6-18 months of R & D timeline
- Significantly reduce production costs
- Minimize natural resource & energy consumption
- Greatly reduce environmental impact

In January 2023, WuXi Biologics leveraged WuXiBody™, along with the company's CD3 antibody technology platform, to enter a license agreement with GSK for multiple novel bi- and multi-specific T-cell engagers. Recently, one of those molecules entered into clinical stage, becoming the fourth TCE project enabled by WuXi Biologics to advance into clinical stage. To date, the company's integrated research services have enabled more than 50 molecules.

In January 2025, the company announced an agreement with Candid Therapeutics for a tri-specific T-cell engager, further evidencing the recognized capabilities of WuXiBody™ to deliver transformative and customized multi-specific antibodies.

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Global Solution Provider

Green Development

Green Development

- Cell Line Engineering
- Assay Development
- Process Development
- Drug Product Development
- Drug-Device Combination Product Development
- DS & DP Scale Up
- Cell Banking & Characterization
- Pilot Scale Manufacturing
- Viral Clearance
- Late-stage Dev & PC/PV
- IND & BLA Filing Support

Mammalian

- Monoclonal Antibody
- Bispecific Antibody
- Fc-fusion Protein
- Antibody Drug Conjugate
- Viral Vaccine
- Oncolytic Virus
- Virus Like Particle (VLP)
- Recombinant Protein
- Antibody Fragments

Microbial

Green Development

Novel and Green Technology Platforms Driven by Innovation

WuXia™

Proven, High-Yielding Cell Line Development Platform

WuXiUP™

Ultra-High Productivity Continuous Processing Platform

WuXian™

Rapid, High-Quality Protein Production Platform

WuXiDARx™

Integrated ADC Drug Research and Development Platform

WuXiUI™

Ultra-Intensified Fed-Batch Platform

WuXiHigh™

High-Concentration Protein Drug Product Development Platform

Green Development

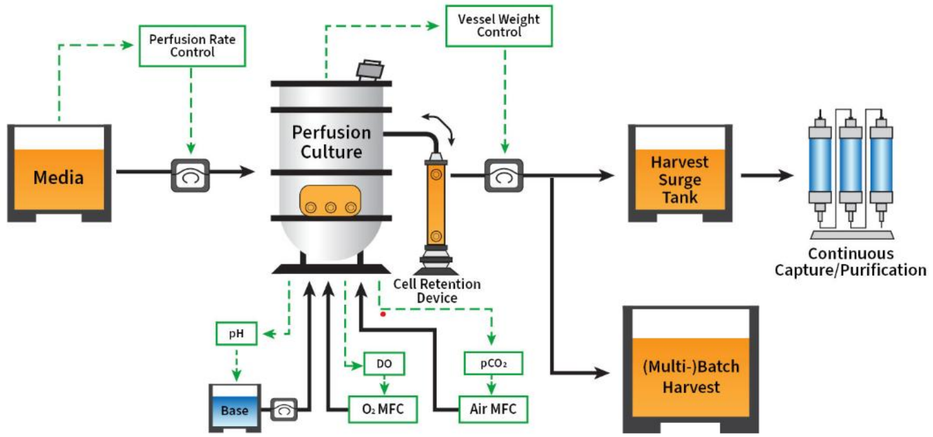
WuXiUP™

Ultra-High Productivity

Continuous Processing Platform

- Excellent developability and stability
- Ensure the highest quality
- 5 to 20-fold higher productivity
- Downstream yield up to 80%-90%

- Significantly reduce resin usage
- Less demand for production building space
- Lower carbon footprint in facilities



Compared to traditional purification processes, WuXiUP™ continuous or hybrid downstream processes can improve downstream purification efficiency. Continuous capture processes reduce the demand for chromatography resins and associated costs, which can not only accelerate biologics development and manufacturing but also lower manufacturing costs and reduce carbon footprint.

In August 2024, Merck announced it would acquire full global rights to bispecific antibody CN201 from Curon Biopharmaceutical, one of the clients enabled by WuXi Biologics. CN201 is developed using four of WuXi Biologics' proprietary technology platforms: WuXiBody™, WuXiUP™, TCE and WuXia™. The deal is a reflection of client recognition for WuXi Biologics' leadership in technology innovation and perfect execution.

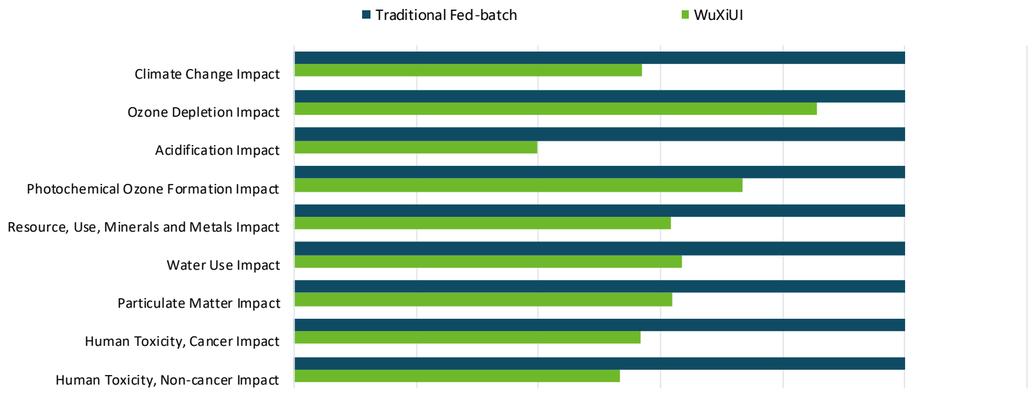
Green Development

Innovative Ultra-Intensified Fed-Batch Platform

- 3-6-fold increase in productivity
- Notable increase in drug substance output by up to 500% at a similar production scale
- Improve manufacturing efficiency and agility for industrial applications

- Minimize media use
- Reduce waste generation
- Up to 60% LCA reduction

Environmental Impact Comparison of Traditional Fed-batch and WuXiUI™*



** The comparison is based on full capacity scenario of real project data using traditional fed-batch and WuXiUI™*

Green Manufacturing

Green Manufacturing

Core Competence for Biologics Manufacturing

- High Efficiency
- Cost Effective
- Environmental Friendly
- Large-Scale

- Technology Innovation
  - Highly flexible Single-Use Technology (SUT)
  - Ultra-intensified fed-batch platform WuXiUI™
  - Ultra-high productivity continuous processing platform WuXiUP™
  - Scale-out biologics manufacturing
  - Sterile filling production of complex biologics
- Lifecycle Product Carbon Footprint (PCF)
  - Cover drug substance and drug product
  - Cover PCF calculation and carbon reduction glidepath mapping
- ESG Lean Management
  - Enable energy saving and emission reduction
- Integrate Digitalization to Manufacturing

Industry-Leading

Mature Clinical and Commercial Drug Substance Manufacturing Capability

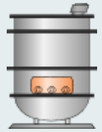
End-to-End

Comprehensive Clinical and Commercial Drug Product Manufacturing Capability

Green Manufacturing

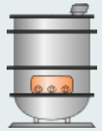
Flexible Manufacturing Service to Meet Market Demand

SUT + Advanced Technology Platform



+ WuXiUI™

- 3-6-fold increase in productivity (compared with traditional process)
- Harvest fed-batch protein concentration: 10-35g/L



+ WuXiUP™

- 5-20-fold increase in productivity (compared with traditional process)
- Downstream fed-batch yield up to 80%-90%

Scale-out Strategy

Largest scale

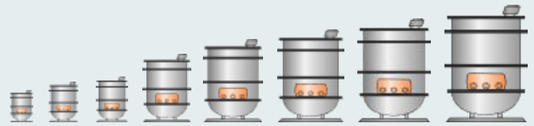
16,000 L per batch

- Remove non-linear scale-up risks
- Support urgent production
- Support different process types
- Facilitate manufacturing flexibility
- Enable rapid growth (or reductions) directly in line with demand

2,000L/4000L/5000L **Scale-out** | 12,000L 6x2,000L | 15,000L 3x5,000L | 16,000L 4x4,000L

Scale-up Strategy

- Explore the application of a range of larger volume single use bioreactors for scaled-up commercial manufacturing, from 2,000 L to 4,000 L, 5,000 L, etc.
- Precisely match diverse manufacturing needs of global clients for drug substance, compatible with equipment models and volumes from different brands (such as Thermo Fisher Scientific, Sartorius, ABEC, DynaDrive)



50L 200L 250L 500L 1,000L 2,000L 4,000L 5,000L

Green Manufacturing

Global Leader in Single-Use Technology
Leading Biologics Green Manufacturing

Lower construction capital investment

Reduced cleaning cost expenditure

Shorter construction cycle

Ultra-high flexibility and production efficiency

Environmental Friendly Single-Use Technology (SUT)[1]

70%
Water saving

30%
Electricity consumption reduction

33%
Resource use reduction

Reduce WFI consumption in stainless steel system

25% CO_2 emission reduction

Compared with the combination of TFB and traditional stainless-steel process, the combination of WuXiUI™ and SUT can achieve up to 80% in product carbon footprint reduction per gram of protein[1]

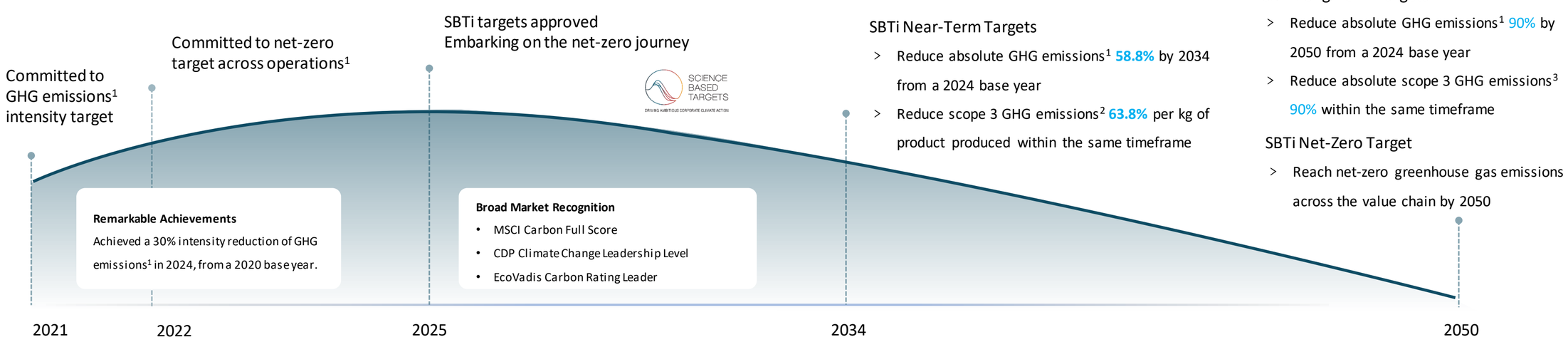
WuXiUI™ + SUT = ~80% Product carbon footprint reduction

1 Source: UNGC 20 Case Examples for 20 Years

Green Operations

Green Operations

From Commitment to Action: Leading the Way in Climate Change



Five-Step Approach - Carbon Reduction		Enabling Tools - Carbon Reduction	
Measure	**Reliable and Science-Driven Measurement:** annual GHG inventory across the Company based on ISO 14064 and GHG Protocol for Scopes 1, 2, 3	ESG Guideline for Kaizen Projects	In-depth integration of ESG and lean management to identify opportunities for improvement
Avoid	**Integrate Green Concepts into New Facility Design:** implement emission prevention measures starting from the construction phase for all new sites	ESG Lean Toolkit for ECR	7 steps for energy consumption and carbon emissions to drive lean management
Reduce	**Energy-saving Practices across global sites** to achieve significant cumulative benefits annually **Life Cycle Assessment (LCA)** based on ISO 14067 to evaluate environmental impacts through product life cycles	Energy Saving and Carbon Reduction White Paper	Building a holistic green technology landscape to facilitate sharing and promotion of best practices across global sites
Substitute	**Accelerate Renewable Energy Usage:** 12% renewable electricity consumption globally in 2024; Ireland site achieved 100% green electricity operations	Water Excellence Stewardship	Manage water quality, provide employees with safe drinking water, sanitation and hygiene (WASH), reduce water use, etc.
Offset	**Explore Offset Options:** prioritize energy efficiency and green energy solutions, while exploring carbon offset options where needed	SMART ESG	Digitalized data collection, calculation and management for efficiency improvement

1: Scope 1 and 2
2: Including Scope 3 Category: purchased goods and services
3: Including Scope 3 Categories: purchased goods and services, capital goods, fuel and energy related activities, upstream transportation and distribution, waste generated in operations and employee commuting

Green Operations

Innovation-Driven
Green Biologics Revolution

Building a Holistic Landscape for Green Technology

Stocktaking of best practices across global sites

Building a Holistic Landscape for Green Technology

Diverse Systems

Spanning key processes, systems and equipment from biologics research, development to manufacturing

Diverse Scenarios

Covering key scenarios including production facilities, laboratories, warehouses, office spaces, and utility areas

Diverse Energies

Conserving multiple energy resources (electricity, steam, natural gas) and water through integrated management, achieving operational synergy and substantial annual cost reductions

Diverse Technologies

Implementing green technologies throughout the lifecycle - from system design and smart management to equipment upgrades - to maximize energy efficiency in site operations

Resources Savings Across Global Sites in 2024

14,356
Carbon Reduction/ tCO2e

8,627
Steam Savings/GJ

12,442
Electricity Savings/MWh

130,906
Water Savings/tonnes

1,399,720
Natural Gas Savings/Nm3

~17 million
Cost Savings/RMB

Resources Savings Across Global Sites from 2022 to 2024

39,909
Carbon Reduction/ tCO2e

53,773
Steam Savings/GJ

36,272
Electricity Savings/MWh

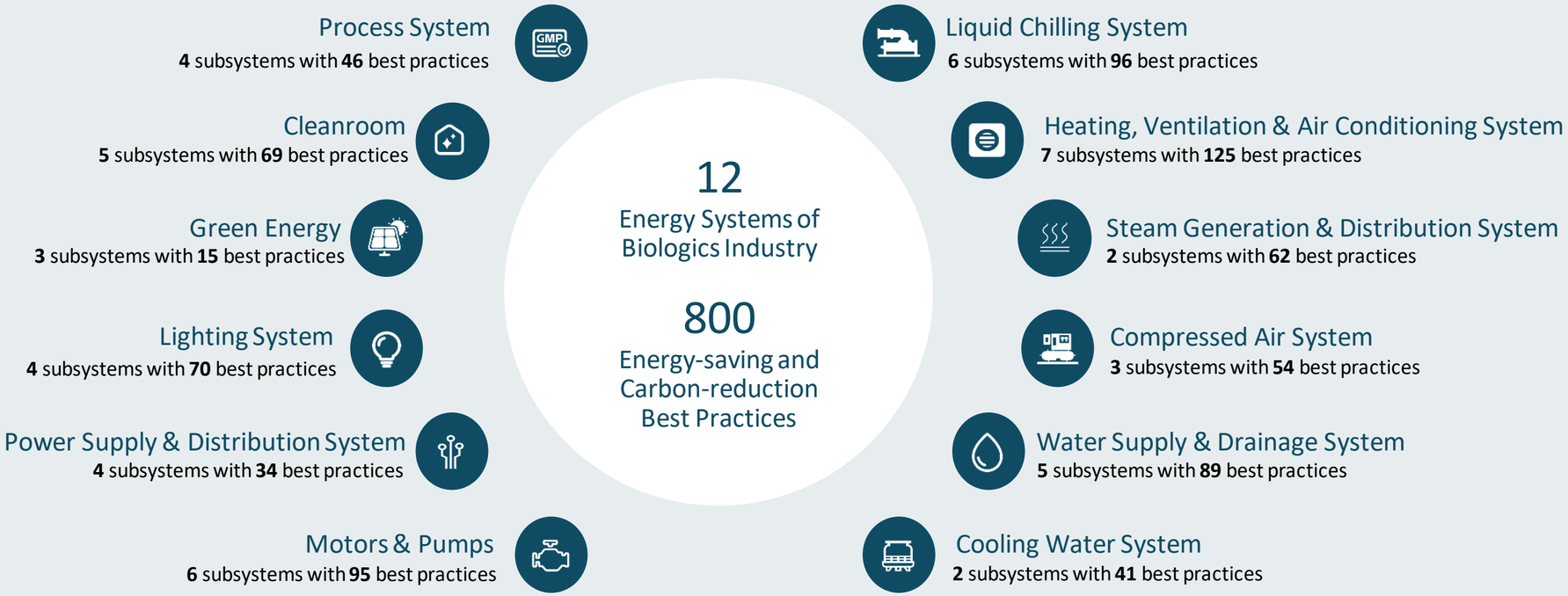
402,806
Water Savings/tonnes

2,639,398
Natural Gas Savings/Nm3

~ 49 million
Cost Savings/RMB

Green Operations

Building a Holistic Landscape for Green Technology



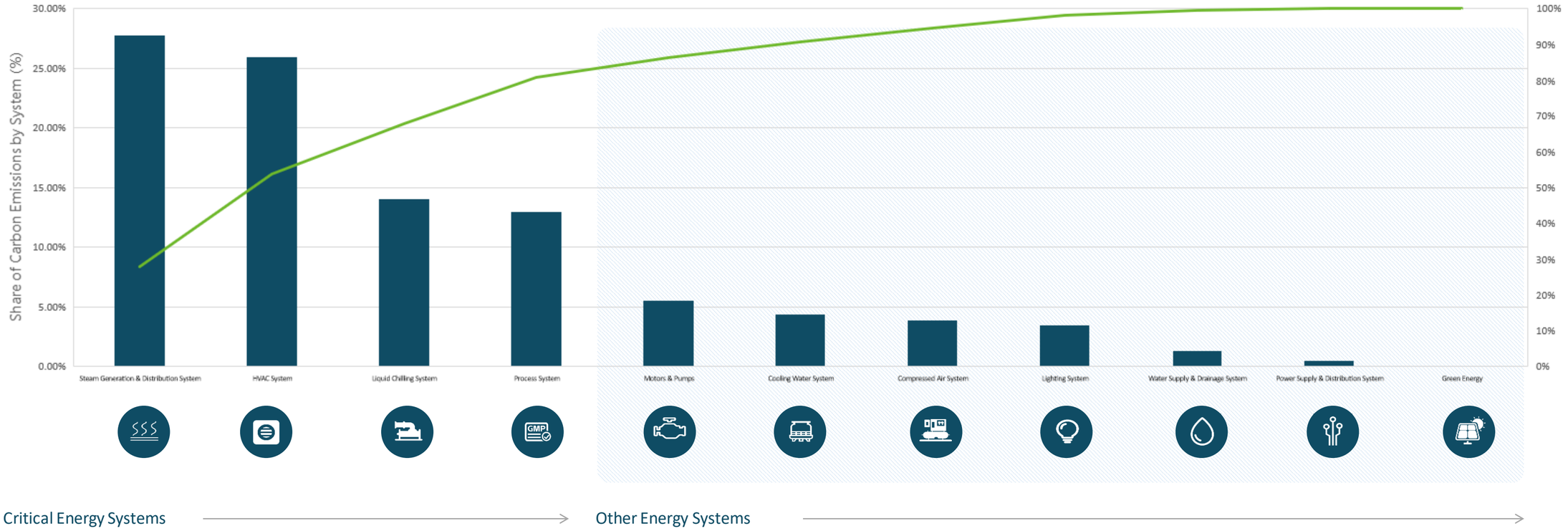
Establish Low-carbon Transition Industry Benchmark Through End-to-End Green Technology and Best Practices

Source of information: NEA's Best Practice Guide for Pharmaceutical Plants; Energy Star's Energy Efficiency Improvement and Cost Saving Opportunities for the Pharmaceutical Industry (U.S. EPA-sponsored); PSCI & Accenture's Decarbonization Playbook for the Pharmaceutical Industry; and WuXi Biologics' internal analysis.

Green Operations

Analysis on Green Practices: A Structural Perspective of Site-Level GHG Emissions

- While comprehensively implementing energy-saving measures across our global sites, strategic prioritization should be directed toward critical systems following the Pareto Principle.
- Focus on Critical Energy Systems: Steam System, HVAC system, Chilled Water System, and Process System constitute the four keyemission sources, collectively accounting for over 85% of carbon emissions. Cleanroom operations, being highly synergistic with these systems, have been integrated into the critical system considerations.



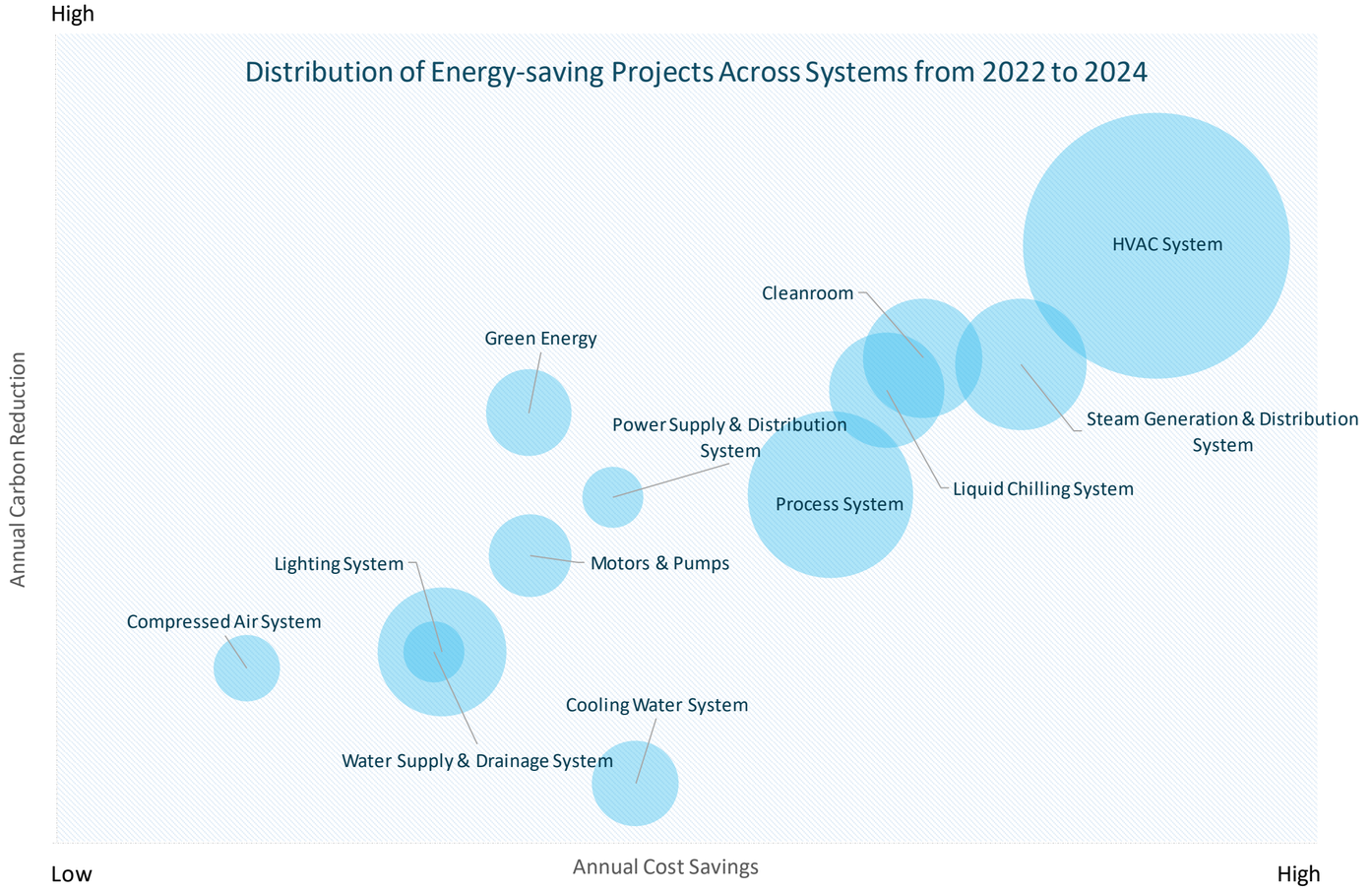
Notes:
1. *The above analysis is based on statistical data of energy consumption from a specific factory area at Wuxi Mashan.*
2. *Green energy sources (e.g., rooftop photovoltaic systems) do not generate direct carbon emissions during operation; therefore, their carbon emission proportion is accounted as zero.*

Green Operations

- Diverse Systems: 12 energy systems
- Spanning key processes, systems and equipment from biologics research, development to manufacturing
- Systematically advance carbon reduction initiatives

From 2022 to 2024, the energy-saving projects implemented at WuXi Biologics' global sites have comprehensively covered 12 energy systems involved in the biologics industry. Across these systems, 25 categories of energy-efficient technologies have been adopted to systematically advance carbon reduction initiatives.

Through thorough implementation of the *WuXi Biologics Best Practice Guide for Energy Saving and Carbon Reduction*, green practices have been deeply integrated into the entire process from biologics discovery and development to production. This approach maximizes energy-saving potential at global sites, laying a solid foundation for achieving SBTi targets.



Green Operations

Diverse Scenarios

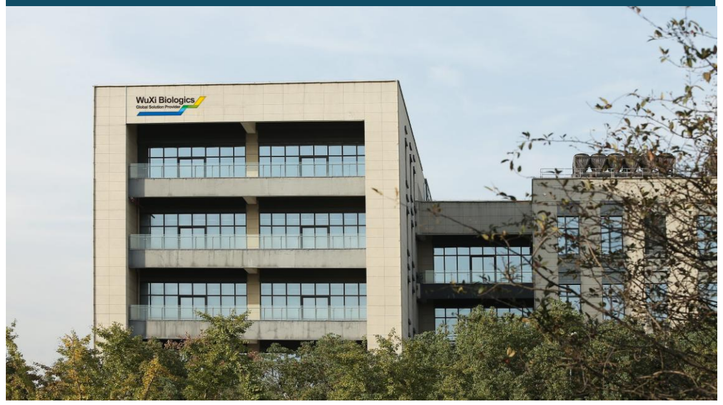
5 Key Energy-Saving Scenarios

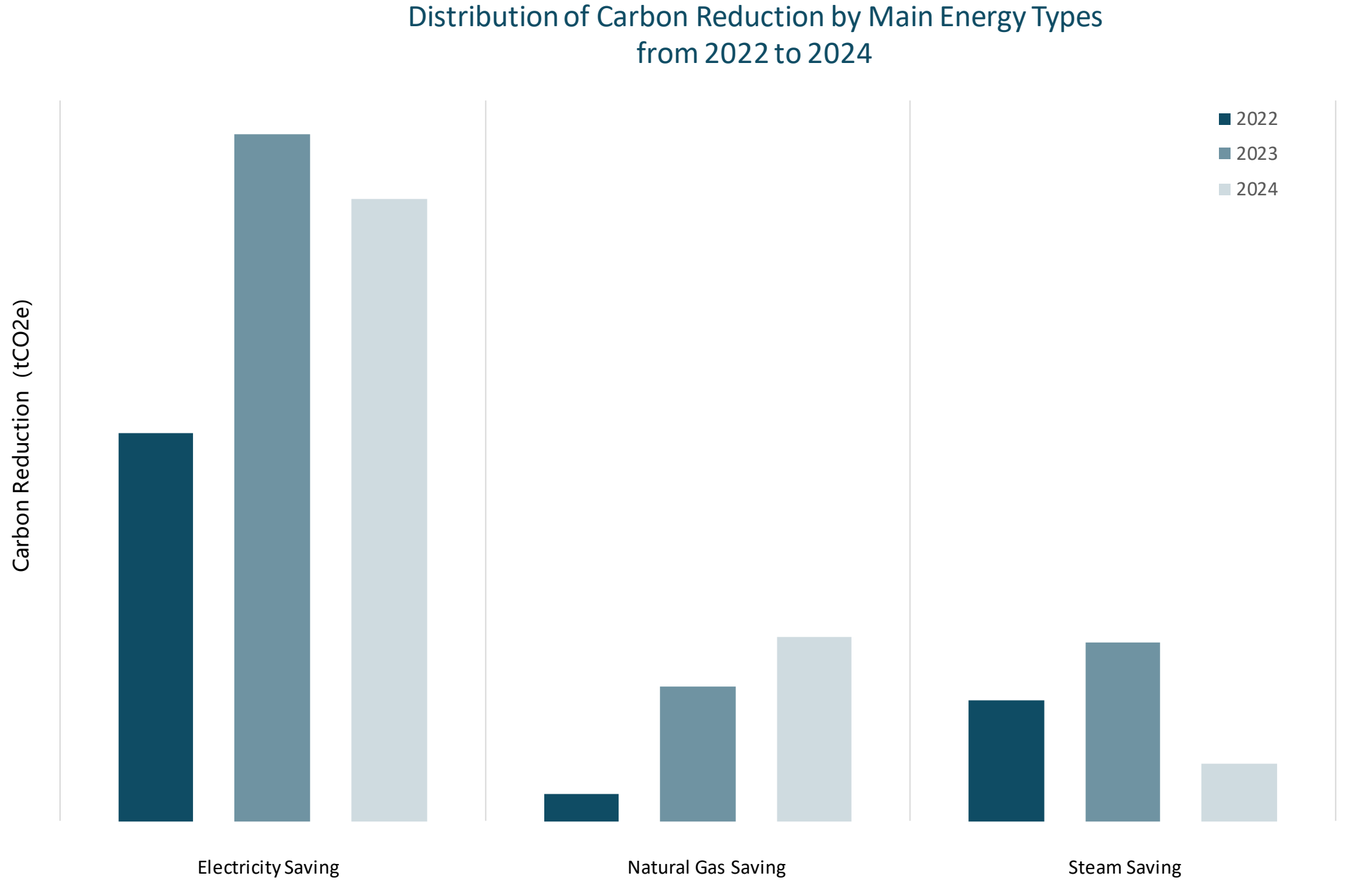
	Production Area	Laboratories	Warehouses	Office Area	Utility Area
Functional Area	• Drug Substance • Drug Product • Non-GMP Pilot Plant • Quality Control • Quality Assurance	• Cell Culture Process Development • Downstream Process Development • Drug Product Development • Analytical Science	• Central Weighing • Cold Storage • Refrigerator • High Bay Warehouse • Ambient Storage • General Warehouse • Hazardous Chemical Warehouse	• Office & Meeting Rooms • Catering Area • Public Area	• Substation • Boiler Room • Chilling Water Station • Water Purification Statuion • Compressed Air Station • Water Treatment Station
Energy System	• Liquid Chilling System • HVAC System • Compressed Air System • Motors & Pumps • Process System • Lighting System • Green Energy	• Liquid Chilling System • HVAC System • Lighting System • Green Energy • Cleanroom Process System	• Liquid Chilling System • HVAC System • Lighting System • Green Energy	• HVAC System • Lighting System • Green Energy	• Lighting System • Motors & Pumps • Liquid Chilling System • Cooling Water System • Compressed Air System • Water Supply & Drainage System • Power Supply & Distribution System • Steam Generation & Distribution System

Green Operations

- Diverse Energies: Electricity, Steam, Natural Gas
- Achieving operational synergy and substantial annual cost reductions

- Minimize dependence on environmental resources
- Carbon reduction benefits from electricity, steam, and natural gas savings accounted for 71%, 15%, and 14% respectively
- Approx. 400,000 tonnes of water saved by global sites



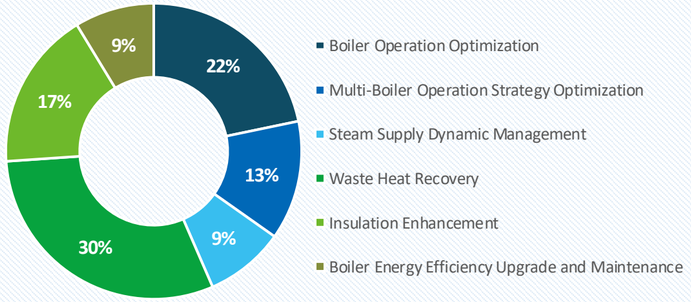


Green Operations

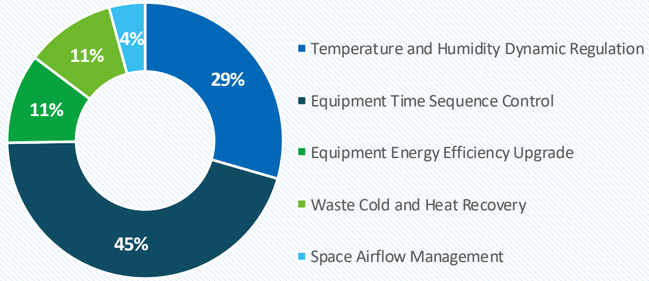
- Diverse Technologies: 25 Categories
- Implement green technologies throughout the lifecycle to maximize energy efficiency in site operations
- From system design and smart management to equipment upgrades

5 critical systems — 25 technology categories — 242 projects

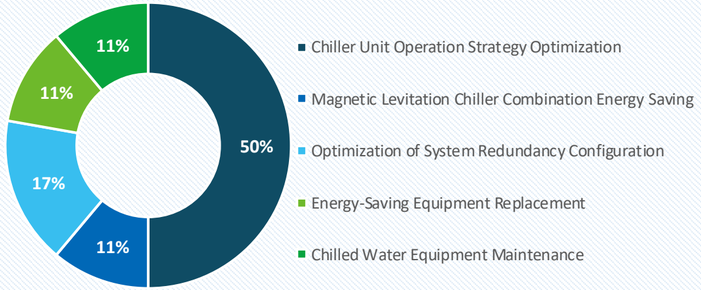
Steam Generation & Distribution System



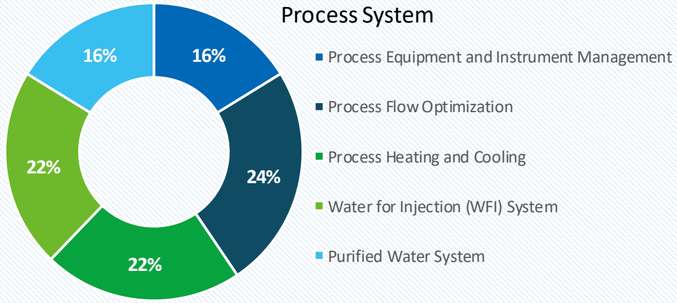
HVAC System



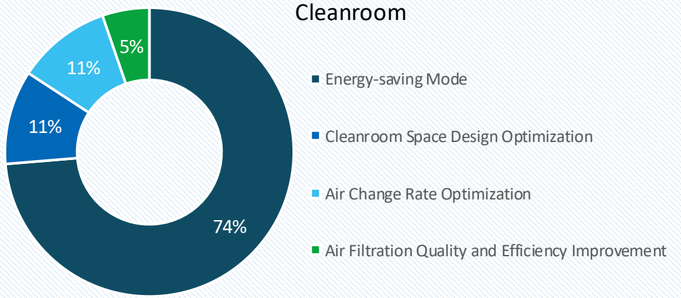
Liquid Chilling System

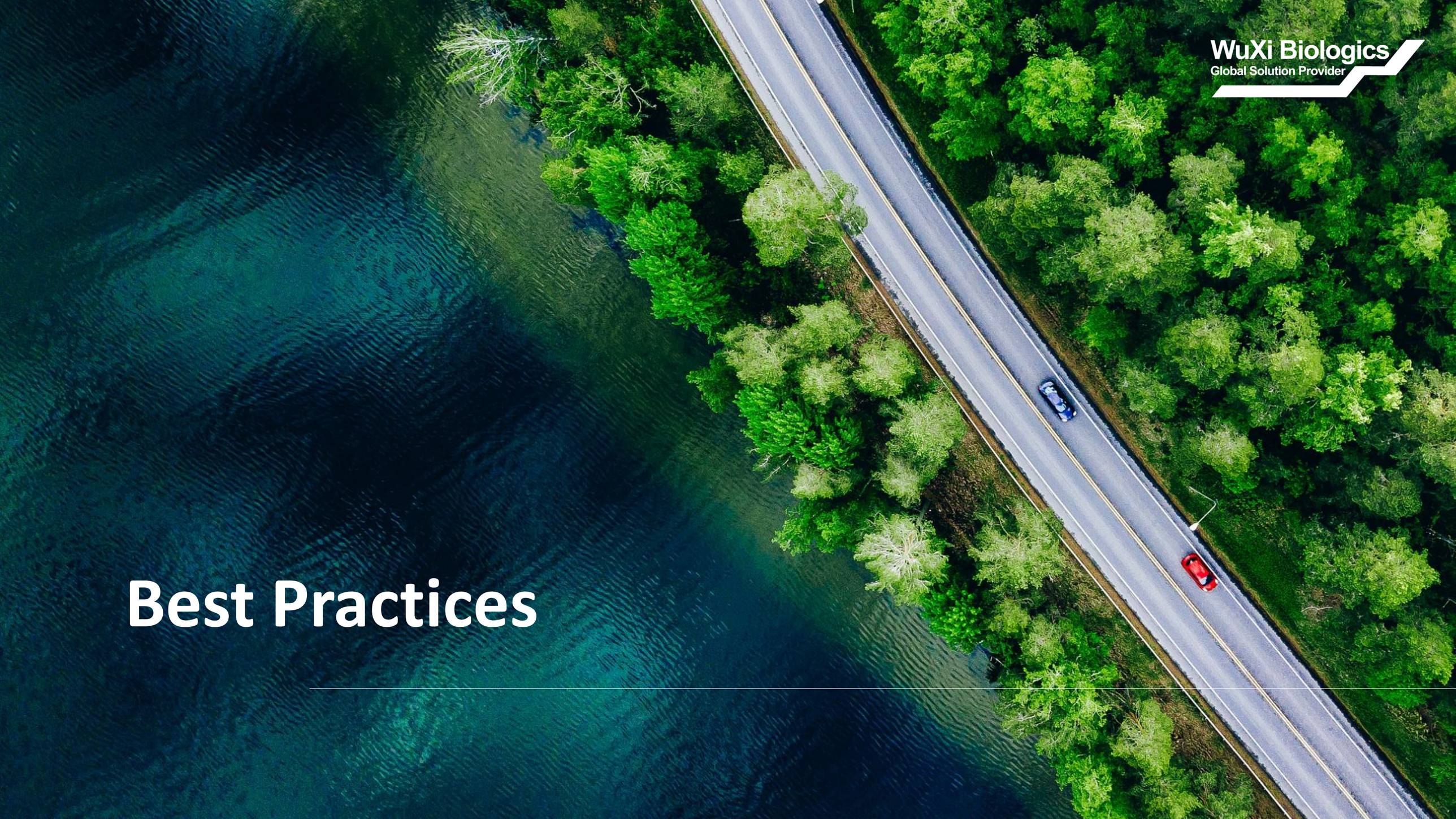


Process System



Cleanroom





Best Practices

Best Practices

WuXi Biologics
Flagship
Green Factory
Dundalk, Ireland

100%
Green electricity

Rainwater collection
Water storage 1100+m^3

Smart building design
Utilize natural light
Motion-sensing LED lighting
Reduce energy consumption

ISO 50001 energy management
ISO 14001 environment management
ISO 14064 GHG verification

2023 ISPE Facility of the Year Award for Operations
2025 Operational Excellence in Life Sciences Award

Best Practices

- Absolute carbon emission reduction
- Energy Management Information System
- Roof top solar power system
- Advocate green commuting
  80% electrical shuttle bus
  80% e-cars for business
- Water-Saving Enterprise and Green Development Leading Enterprise in Jiangsu
- Conduct LCA/PCF
- Excellent Water Stewardship (WES) pilot site
- Wastewater treatment
  Reclaimed water reuse
- ISO 14064 GHG verification
  ISO 14067 product carbon footprint
  ISO 14001 environment management
- Steam Condensate Reuse and Heat Recovery

Best Practices

China

AstraZeneca

UK

- 2024 World Economic Forum Lighthouse
- Implemented over 30 Industry 4.0 new technology applications
- Transform a pharmaceutical factory with over 20 years of operation into a smart factory

- AI computer vision
- End-to-end factory process information system
- IoT-supported autonomous material delivery
- Predictive engine and inventory control tower based on machine learning

- Partnership with CR Gas and Everbright Environment on a biomethane green energy project
- Provide Wuxi Site with 36,000 MWh of biomethane and biomethane-based steam annually
- Equivalent to reducing 9,700 tCO2e per year, decarbonizing its pharmaceutical production and supply chains

- Partnership with Future Biogas to establish the UK's first unsubsidized industrial-scale biomethane plant
- Energy from biomethane facility will supply UK sites with 100 GWh renewable heat annually
- Reduce emissions by an estimated 20,000 tCO2e, adding renewable energy capacity to the national gas grid

Source of information: AstraZeneca Official Media; Wuxi City People's Government Official Website; Wuxi Daily.

Best Practices

Johnson & Johnson

J&J's CO_2 Capital Relief Program

- Provide financial support annually to internal energy-saving projects with carbon reduction potential and financial return
- Completed 205 projects, with an average 17% Internal Rate of Return (IRR)

Projects completed in 2024

- Heat recovery system optimization (Suzhou Site, China)
- Chilled water optimization (Anasco Site, Puerto Rico)
- Production process heat recovery (Schaffhausen Site, Switzerland)

- Geothermal Plant at J&J Innovative Medicine Campus in Belgium
- Belgium's first industrial-scale private geothermal project completed in 2023, using the cutting-edge geothermal technology to achieve efficient and reliable energy supply

- J&J Ethicon Campus in Cincinnati, Ohio (U.S.), installed a closed-loop, geothermal system with the capacity to provide heating and cooling to the entire 45-acre campus while substantially reducing emissions

Source of information: J&J Official Media; European Commission Official Report; J&J 2024 Health for Humanity Report

Best Practices

Novartis

Develop science-based carbon reduction pathway

Decarbonization targets approved by SBTi, consistent with the goal of the *Paris Agreement*

Systematically integrate life-cycle assessment (LCA) in R&D pipeline to calculate and improve the environmental impact of products

Committed to transitioning its fleet to electric vehicles by 2030

Deploy capital expenditure of USD 40 million on environmental projects in 2024 to improve energy efficiency, adopt renewable energy solutions across operations, and reduce consumption of natural resources

GSK

Explore renewable energy application

GSK signed a 10-year energy deal with Sembcorp, covering the electricity demand for all three of GSK's sites in Singapore

- Partnership with Farm Energy through a 20 year Power Purchase Agreement (PPA)
- Invest in a long term project for 2 new wind turbines (8 MW) and a 56 acre, 20 MW solar farm at Irvine Site, covering over 50% of electricity demand of the site

Source of information: GSK Official Media; Singapore EDB; Novartis in Society Integrated Report 2024

Closing Remarks

- Build environmentally friendly and low-carbon business
- Strengthen product life cycle carbon assessment
- From active commitments to tangible actions across value chain
- Empower partners to go global with sustainable competitive advantages
- Collaborate with clients worldwide for more sustainable operations
- Drive green development across the entire industry and society

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About WuXi Biologics

WuXi Biologics (stock code: 2269.HK) is a leading global Contract Research, Development and Manufacturing Organization (CRDMO) offering end-to-end solutions that enable partners to discover, develop and manufacture biologics – from concept to commercialization – for the benefit of patients worldwide.

With over 12,000 skilled employees in China, the United States, Ireland, Germany and Singapore, WuXi Biologics leverages its technologies and expertise to provide customers with efficient and cost-effective biologics discovery, development and manufacturing solutions. As of June 30, 2025, WuXi Biologics is supporting 864 integrated client projects, including 24 in commercial manufacturing.

WuXi Biologics regards sustainability as the cornerstone of long-term business growth. The company continuously drives green technology innovations to offer advanced end-to-end Green CRDMO solutions for its global partners while consistently achieving excellence in Environment, Social and Governance (ESG). Committed to creating shared value, it collaborates with all stakeholders to foster positive social and environmental impacts, and promote responsible practices that empower the entire value chain.