







Sustainability and Energy Management

Integrating Supply, Demand and Sustainability

Energy Supply

-  Energy generation
-  Storage solutions
-  Energy mgmt. and grid control (Microgrid)
-  Clean energy sourcing and alternative fuels

Demand Side Efficiency

-  Energy audit and monitoring
-  Turnkey energy efficiency solutions
-  Process and Asset performance management
-  Strategic Energy Planning



 Electrification

e-charging 

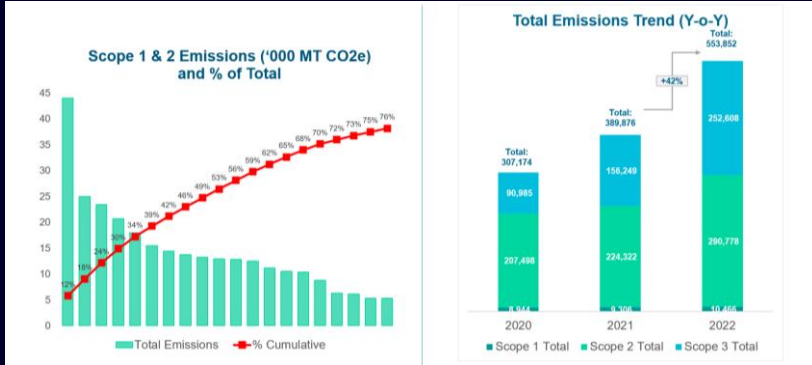
 Digitalization and Digital Twin



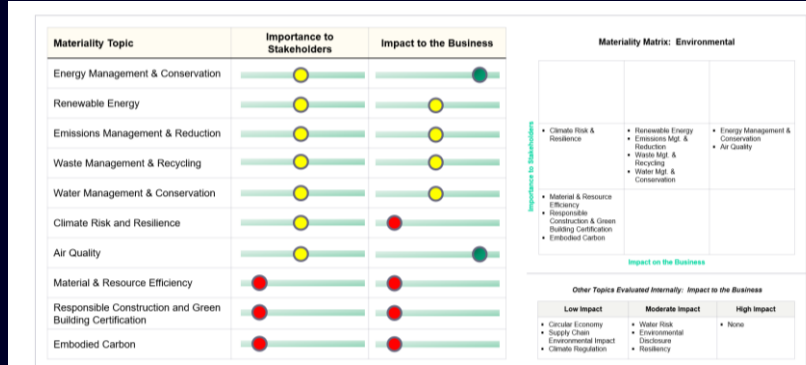
Efficiency & Sustainability Consulting

Example Work Products

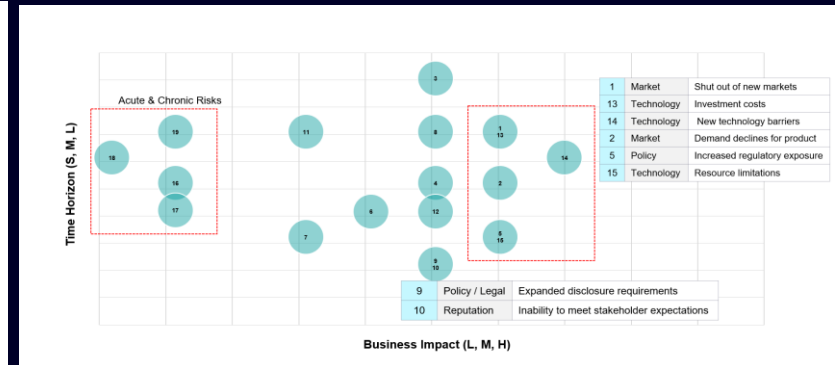
Energy & Carbon Analytics



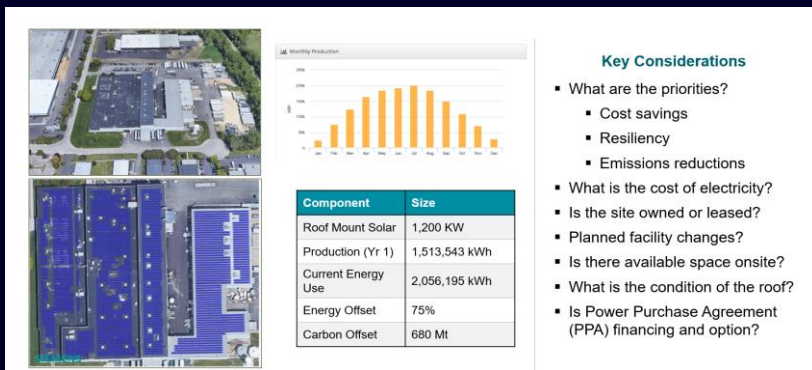
ESG Program Advisory



Climate Risk Assessments



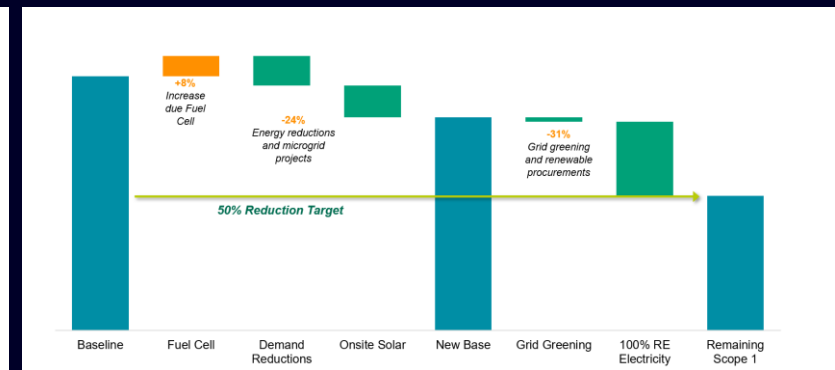
Clean Energy Strategies



Energy & Decarb. Assessments



Decarb. Glidepaths






Decarbonization Trends

Key Drivers for Action

External Factors	Market Pressure <ul style="list-style-type: none"> • Customer expectations • Investor / lender • Talent acquisition / retention
	Regulatory / Policy <ul style="list-style-type: none"> • GHG / energy mandates • Funding and incentives • Disclosure requirements
Internal Factors	Internal Cultural <ul style="list-style-type: none"> • Leadership commitments • Corporate responsibility
	Commercial <ul style="list-style-type: none"> • Manage financial risk • Ops. efficiency / resiliency • Low carbon economy oppty.

Challenges

Financial	
	<ul style="list-style-type: none"> • CAPEX Investment • Higher OPEX • Limited funding access • Risk tolerances
Technical	
	<ul style="list-style-type: none"> • Decentralized approach • Process integration • Lack of expertise • Early adoption risk
Organizational	
	<ul style="list-style-type: none"> • Resistance to change • Programs / partnerships • Targets w/o strategy • Lack of cooperation • Supply chain mgmnt.

Opportunities

<p>Flexible finance structures, grants, tax credits and other incentives (e.g., IRA).</p>
<p>Reduce operational costs and improve efficiency, productivity and resiliency.</p>
<p>Align to customer and stakeholder expectations.</p>
<p>Access new markets by innovating “greener” product and services.</p>
<p>Attract and retain tenants and talented teams.</p>

Decarbonization Levers to Drive ESG, Manage Costs, and Build Resiliency



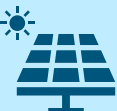



Siemens helps to define clear, actionable strategies.

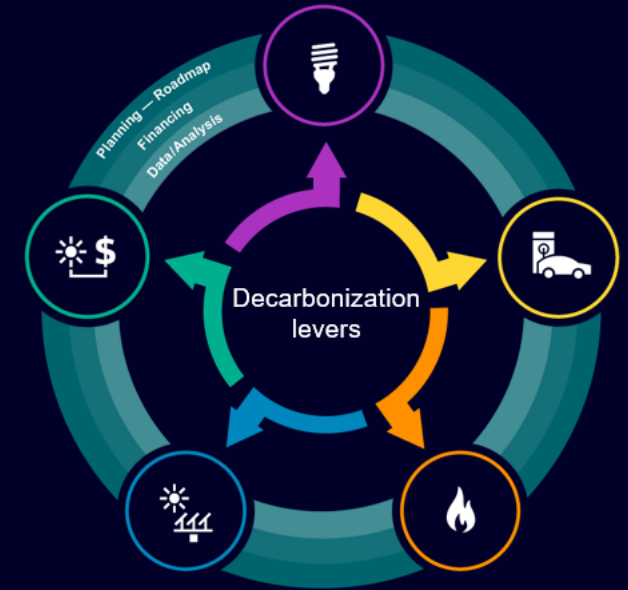
Core Decarbonization Levers:

- Reduce consumption
- Vehicle electrification
- Manage thermal loads
- Energy generation and storage
- Clean energy sourcing



Opportunity Identification Across the Decarbonization Levers

Reduce Consumption	
	Onsite & virtual energy / decarb. Audits.
Scopes 1 & 2	
Vehicle Electrification	
	EV charger planning & implementation.
Scopes 1 & 3	
Energy Generation & Storage	
	Market, policy and site evaluations for applicability.
Scopes 1 & 2	
Manage Thermal Loads	
	Assess electrification and fuel conversion.
Scope 1	
Clean Energy Sourcing	
	Develop clean energy sourcing strategies.
Scopes 1 & 2	
Address Value Chain	
	Engagement strategy for up & down-stream emissions sources.
Scope 3	



Planning Considerations

- Are the objectives clearly defined?
- Do we have competing objectives?
- Can we adequately measure performance?
- Do we know what actions to prioritize?
- Is the organization poised for change?
- Are risks understood and managed?
- Are funding / financing strategies aligned to the goals?

Decarbonization Strategy | Journey Map

Strategy Setting and Baselineing

Strategy to Action "Bridge"

Strategy Implementation

ESG Strategy

- Stakeholder Alignment
- SBTi Target Development
- ESG Target Development
- Glidepath Modelling
- Technology Roadmaps
- Materiality Assessments

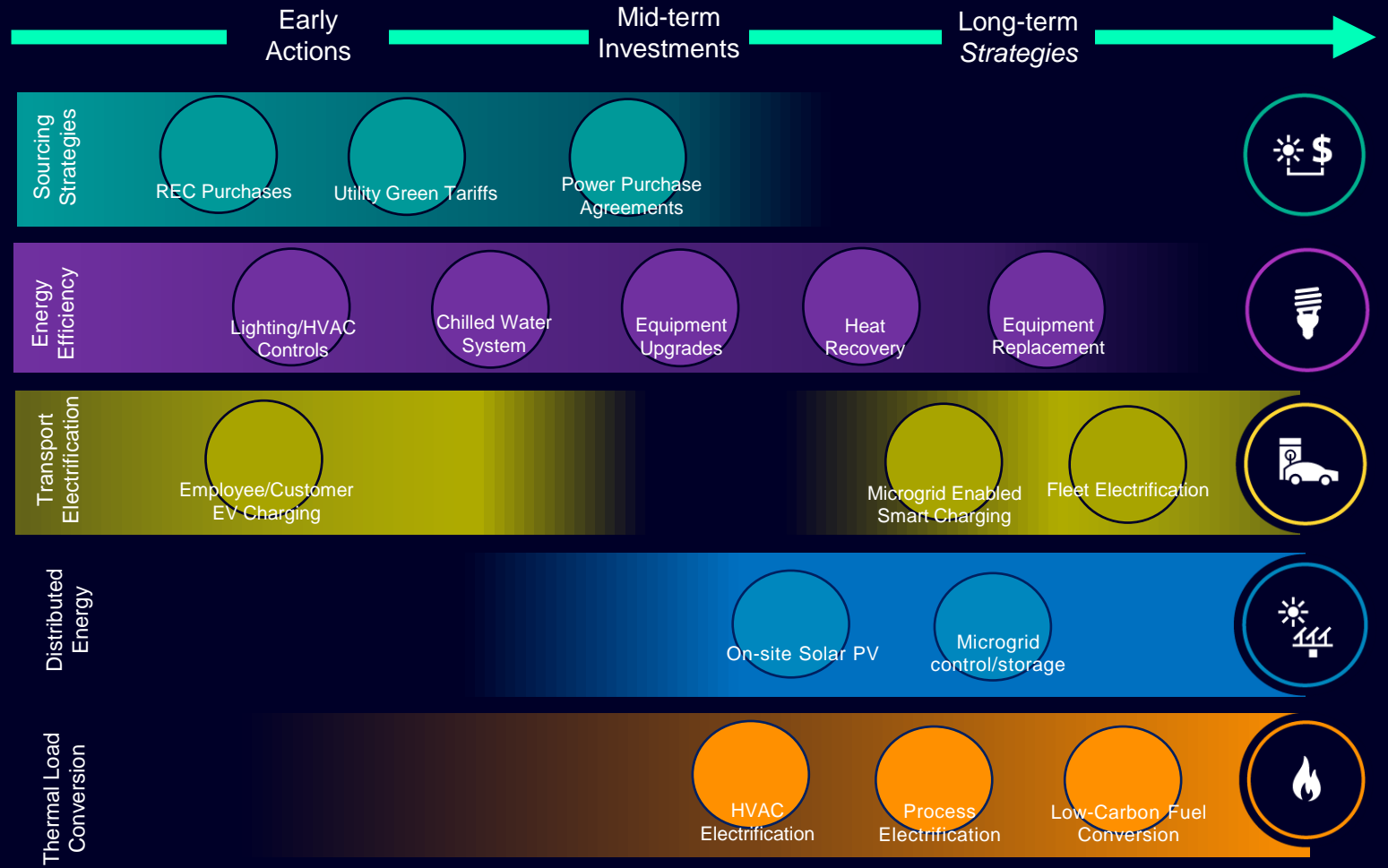
Baselineing

- Utility Bill Review
- Peer Analysis
- Internal Benchmarking
- Energy Audits
- Energy and Carbon Analytics
- Biodiversity Risk Screening
- Water Risk screening

Digitalization / Data Capture

Implementation Partners

Funding & Financing



Decarbonization Strategy & Glidepath Development

Proven Decarbonization Planning Process



ESG Target and priority alignment, Baseline & benchmarking



Identify, evaluate and prioritize decarbonization actions

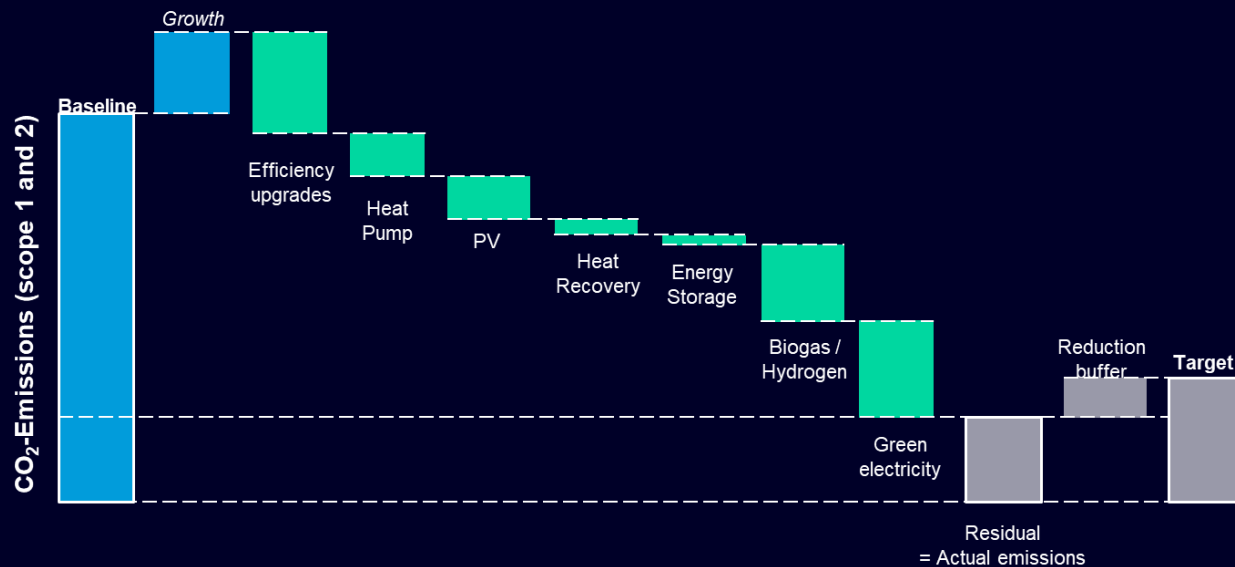


Establish scenario-based strategies & executive summary



Implementation plan & ongoing support

Representative Decarbonization Glidepath Model



Siemens Decarbonization Planning Approach

Advisory services focused on strategic alignment and goal setting

Assess the current condition: Energy and carbon baseline, “ESG readiness”, stakeholder priorities, and

Prioritize operations and actions for decarbonization

Onsite or virtual decarbonization assessments to define and evaluate energy efficiency, electrification, and fuel switching opportunities

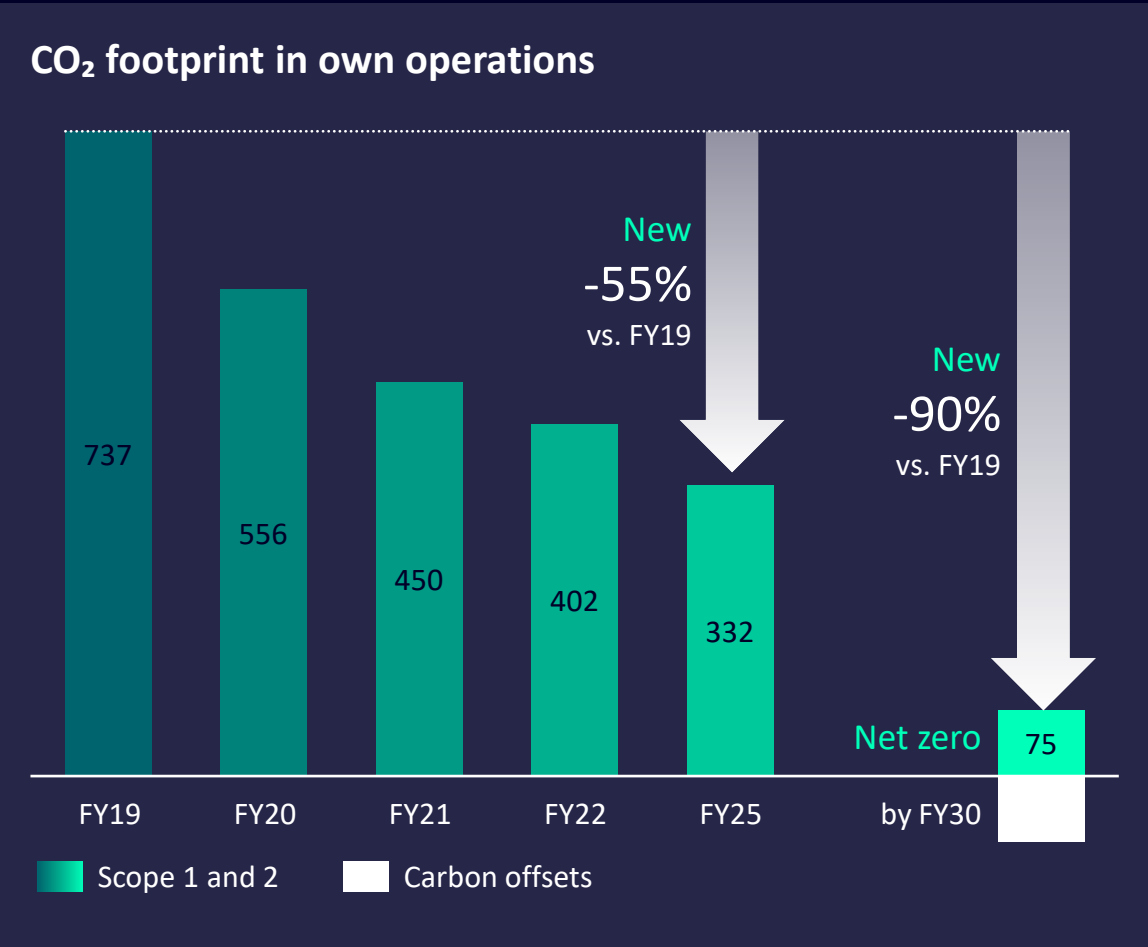
Develop clean energy sourcing strategies and evaluate sites for onsite solar based on market and policy screening

Formalize the strategy based on identified opportunities and priorities

Implementation and funding planning along with ongoing reporting, communications, and strategy updates.

Siemens Net Zero Commitment

We are accelerating CO₂ emission reductions in own operations



We accelerate the emission reduction pathway (w/o SHS)

New	Introduction of new FY25 reduction target of -55%	DEGREE target
New	More ambitious FY30 reduction target of -90%	
✓	CO ₂ footprint reduced by 46% from FY19 to FY22	
✓	Already 37 Siemens locations with net zero CO ₂ emissions	
New	Invest of ~€650m in operational decarbonization between FY22–FY30 (for fleet electrification, buildings, and production emissions)	

We maintain our existing commitments for Siemens (w/ SHS)

✓	Validated 1.5 °C-aligned SBTi (2021)	<p>SCIENCE BASED TARGETS DRIVING AMBITIOUS CORPORATE CLIMATE ACTION</p>
✓	100% electrical vehicles, 100% renewable energy, and 100% net zero buildings by 2030	
✓	2015 Carbon-neutral commitment by 2030	<p>CLIMATE GROUP EP100</p> <p>CLIMATE GROUP EV100</p> <p>RE100</p> <p>CLIMATE GROUP</p>

Sustainability Manager

Overview



Building X



Openness and APIs

Get full transparency of the entire building portfolio for data-driven decision-making across systems and domains. Create customer-owned applications with state-of-the-art cloud architecture with open APIs for your ecosystem.



Analytics Services

Operate, monitor, gain insights, and optimize your buildings in the fields of comfort, safety, security, and sustainability. Grant access based on stakeholders needs.



Connectivity

Be part of a growing ecosystem and get access to a global network of service and solution experts to support your transformation process.

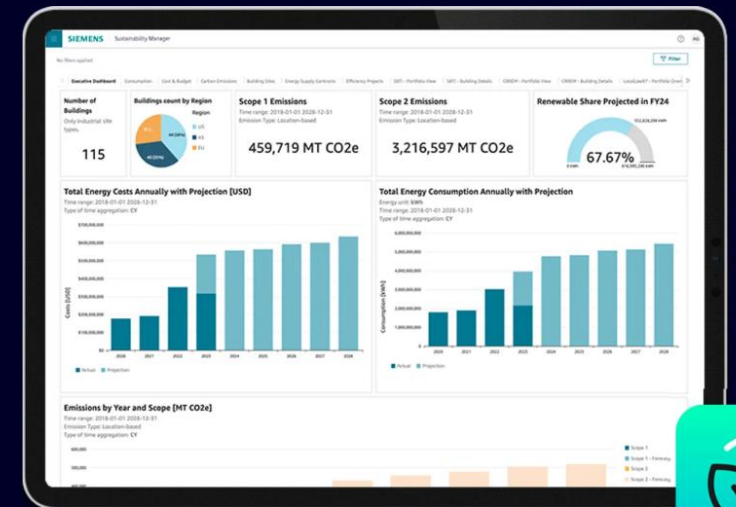


Cyber security

Vendor-agnostic connectivity solutions enable smooth integration of third-party software and cloud services according to your requirements, always with security in mind.

Sustainability Manager

Develop transparency and drive enterprise results on net-zero goals, energy budgets, and energy category management in a single App



SIEMENS

Building X

Sustainability Manager



Utilities Data Collection & Assessment

Energy, Carbon, Waste, and Water Analysis

Goal Setting & Net-Zero Planning

Guided Plan Aligned to Most Urgent KPIs & Compliance

Initiative Kick Off & Monitoring

Centralized Tracking with Alerts and Progress Notifications

Reporting and Communication

Automated Report Generation & Data Driven Insights

Incremental Improvement

Identify New Opportunities With Portfolio Data Intelligence

Energy Usage

Consumption
Energy/Utilities

Budget
Energy/Utilities

Carbon Mgmt.

Net Zero Targets
Glidepath

Carbon Emissions
Scope 1 & 2

Certifications
Benchmarking

Grid Mix
Energy Source Type

Admin

Vendor Management
Contract

Notifications
Contract Expirations

Capital

Budget Forecasting
Capital Planning

Building Sites
Portfolio Overview

Misc.

Personalized Views
Custom Dashboard

Onboarding
Data Ingest/Update

Building X Sustainability Manager



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On behalf of the Siemens Team,

Thank you