

SP Guidance Document, V1.0 June 2025



Advancing Sustainability in the Built Environment: New Building Recommendations for Suppliers

SP Guidance Document

June 2025

Dear Valued Supplier,

As the automotive industry continues to strive toward a more sustainable future, the role of suppliers in shaping that future remains essential. The collective efforts of suppliers across the value chain have long supported innovation and operational excellence. Today, we encourage suppliers to apply that same leadership to the construction, renovation, and operation of their facilities by proactively considering emerging best practices in sustainable design.

Sustainability thinking has evolved to inspire a holistic approach to design; one that upholds the tried and true, "reduce, reuse and recycle," but matures into a holistic view of the impact of the built environment. Current thinking has broadened to consider health and well-being of building occupants, the quality of the air and built environment, and advances into social equity and resilience of buildings to better endure extreme weather.

Key Considerations for Suppliers

- 1. **Tailor to Context:** Every sustainable response is unique and should be tailored to your unique location and condition. There is no such thing as an "off-the-shelf" option.
- 2. **Engage Diverse Perspectives:** We encourage you to leverage many voices and think synergistically during an initial design charrette to start of new projects. Your project boundary may stop at your property boundary, but the impact of your project can have a much broader reach.
- 3. **Think Full Life Cycle:** Consider the life cycle of your building and the products going into it. If the cost of your choices seems high, consider ROI but also ongoing operations and asset value.
- 4. **Measure and Improve:** Reflect on the results by finding ways to measure how well you did. This gives you a new baseline to then continue to improve and fine tune your building and environment.

Thank you for your ongoing partnership and dedication to sustainability. Together, we can improve the built environment, collectively reduce our environmental footprint, and foster a healthier planet for future generations.



Contents

PRE-DESIGN PHASE	3
Integrative Project Planning	3
Green Certification	3
Selection of Sites	4
DESIGN PHASE	5
Low CO2e embodied materials	5
Bio-Climatic Design	5
Energy Efficiency & Management	6
Water Efficiency & Management	7
Biodiversity	8
Air & Water Quality	9
Indoor Environmental Quality	10
Circular Economy	11
CONSTRUCTION PHASE	12
Commissioning or Measurement and Verification	13
PROJECT OPERATIONS	13
Resources for More Information	13

Acknowledgements: This guidance document was produced through a collaborative process between vehicle manufacturer and supplier members of the Suppliers Partnership for the Environment (SP). SP extends sincere thanks to Ford Motor Company for its leadership in introducing this concept for consideration within the SP community, with special thanks to James Read for his significant contributions to this document. Special thanks as well to Toyota Motor North America and General Motors for their thoughtful contributions to the guidance document, and to practitioners across the SP membership for their work on the additional resources cited.

Contact: Please submit any feedback on this guidance or suggestions for future improvements to info@supplierspartnership.org.

Disclaimer

This document sets forth various findings based on information available to working group members at the time of issuance. These findings are not intended to set forth any industry rule, requirement or standard. Each Member should independently determine its own processes and practices, including, without limitation, levels, measurements, vendors, materials, equipment, energy sources, energy use, emissions, and recyclability. This document should not be considered to contain legal advice. SP and its member companies make no warranty, expressed or implied, regarding the accuracy or completeness of the information contained in this document, and they will not be liable for any errors or omissions in this information nor for the availability of this information. The authors of this document reserve the right to change it at any time, as they deem appropriate within their sole discretion. SP and its member companies will not be liable for any losses, injuries or damages that may result from the use of the information contained in this document.



PRE-DESIGN PHASE

Integrative Project Planning

Integrative Project Planning is the very first phase of pre-design, once a project is conceived. It is an iterative and holistic planning methodology used by owners, building operators, architectural and engineering teams, and should represent all building stakeholders.

This is generally a half or full day activity that can be led by a sustainability professional. It starts with identifying the high-level vision and goals of the project. At this phase, all ideas go on the list and are assigned to be studied. Through multiple iterations, items are decided to be included for further exploration during design or are abandoned.

What is critical about this, is that all stakeholders attend and are encouraged to both propose and consider all ideas. This intentionality sets a positive atmosphere for synergies to emerge but can maximize efficiencies to support decision making. This activity, happening before design starts, ensures all design disciplines act with focus and clear direction to support the project goals and visions.

The output of this process is often documented as the Owner's Project Requirements (OPR). This is a living document that is reviewed and updated by the sustainability professional through all phases of the project. The document becomes the guidepost for all project decision making and can be reviewed to ensure submittals and request for design substitutions uphold the goals of the project.

Green Certification

It is during the sustainability charrette, that a Green Building system should be identified for adoption. Most systems require documentation of the Integrative Process as a pre-requisite for certification.

The various certification systems ensure buildings meet measurably high standards for environmental impact, resource efficiency, and occupant wellbeing. Understanding these certifications can help in developing buildings that are both eco-friendly and beneficial to their occupants:

- <u>iPHA (Passive House)</u> A Global building standard focused on design for passive heating and cooling, requiring building air tightness, resulting in low energy use and high thermal comfort
- <u>BREEAM</u> International Standard espousing a holistic approach to sustainable building, adaptation to climate change, ecological value and biodiversity protection. BREEAM uses licensed assessors that examine the building's performance against credit criteria Global
- <u>LEED</u> Globally recognized green building rating system focused on the categories of
 equitable development, land protection, sustainable sites, water and energy savings,
 materials and resources and indoor environmental quality. LEED requires commissioning of
 all systems to verify design Global / USA
 - LEED also offers multiple versions based on project type:
 - LEED for Building Design and Construction (BD&C)
 - LEED for Interior Design and Construction (ID&C)
 - LEED for Building Operations and Maintenance (O&M) This rating system is ideal for an existing building operator that wants to evaluate and improve the performance of an existing building.
- <u>WELL</u> Focus on the health and wellbeing of building occupants, integrates with LEED / BREEAM – Global



Selection of Sites

When selecting a site for new construction, it is important to consider a variety of factors that can significantly impact the environmental, social, and economic aspects of sustainability.

Here are some key topics to consider:

- Brownfield vs. Greenfield Sites It is advised to prioritize brownfield sites (previously developed land) over greenfield sites where possible to help preserve natural landscapes.
 Keep in mind that brownfield sites may have environmental concerns due to past use, that may pose risk unless remediated, and this should be considered in the evaluation process.
- **Existing Infrastructure** Prioritize sites with existing infrastructure (roads, utilities) to minimize the environmental impact of new construction.
- Biodiversity Protection Consider choosing sites that that minimize disruption to local ecosystems and wildlife, avoiding deforestation, habitat destruction, and locations near protected, conserved, or key biodiversity areas.
- **Soil Health** Assess and enhance soil quality, considering sites with significant contamination if remediation is feasible.
- **Solar Access** Optimize site orientation for natural light and passive solar heating to reduce energy consumption.
- Renewable Energy Potential Evaluate the potential for on-site renewable energy generation, such as solar or wind power.
- Access to PPA/VPPA Power Plansⁱ Consider sites with potential for Power Purchase Agreements (PPA) or Virtual Power Purchase Agreements (VPPA) with renewable energy providers.
- **Proximity to Public Transport** It is advised to select sites near public transportation to facilitate low-emission commuting for staff.
- Accessible Outdoor Spaces Create outdoor open space that encourages interaction with the environment and celebrate the community served.
- **Heat Island Reduction** Implement strategies that minimize temperature disparity between urban and rural areas, primarily through increasing green spaces, installing cool roofs, and using light-coloured pavement. The goal is to minimize inequitable effects on microclimates and human, especially frontline communities, and wildlife habitats.



DESIGN PHASE

Although many of the ideas listed in the design phase may be required by building codes, depending on the site location, they are all included to demonstrate the range of requirements and can be considered strategies for improving existing buildings.

Low CO2e embodied materials

The use of low CO2e embodied materials is crucial in reducing the carbon footprint of new constructions. Selecting materials with lower embodied carbon can significantly diminish the environmental impact of projects, contributing to a more sustainable future.

- Certified Sustainable Wood A natural, renewable material with minimal processing emissions.
- **Cross-Laminated Timber (CLT)** Engineered wood panels that provide strength, sustainability, and potentially reduced construction times.
- Alternative Bricks Bricks made from recycled or alternative materials, offering a lower carbon footprint e.g. Fly Ash, Compressed Stabilized Earth Blocks, Recycled Plastic Bricks, Hempcrete Blocks, Papercrete Bricks, Aerated Autoclaved Concrete Blocks, Straw Bale Bricks etc
- **Sustainable concrete** Concrete that is designed, produced, and used in ways that minimize its environmental impact throughout its lifecycle.
- Reclaimed materials Reusing existing resources is more sustainable and environmentally responsible than relying on virgin materials.
- Local materials Materials sourced locally, reducing transportation emissions.

As normal practice, it is recommended to avoid materials such as asbestos, lead-based paints, formaldehyde, and PVC where possible due to potential health risks and environmental impact. Safer alternatives are recommended, such as fibreglass (asbestos alternative), lead-free paints, soy-based resins (formaldehyde alternative) & polypropylene (PVC alternative).

Bio-Climatic Design

Bio-climatic design is an approach to architecture and urban planning that takes into account the local climate and environmental conditions to create buildings and spaces that are comfortable, energy-efficient, and sustainable.

- Climate Consideration It may be beneficial to analyse the local climate, including temperature, humidity, wind patterns, and solar radiation, to inform design decisions.
 Positioning buildings to optimize exposure to natural light and ventilation can help minimize the need for artificial heating, cooling, and lighting.
- Passive Design Strategies Consider designing buildings to maximize airflow and natural
 ventilation, potentially reducing reliance on mechanical systems. Using materials with high
 thermal mass to absorb, store, and release heat can help stabilize indoor temperatures.
 Employing effective insulation could reduce heat loss in winter and heat gain in summer.
- Solar Design Utilizing natural light through the strategic placement of windows and skylights might reduce artificial lighting needs as well as enhance employee wellbeing.
- Water Management Collecting and storing rainwater for non-potable uses, such as irrigation and flushing toilets.
- Integration with Nature Incorporating green roofs, walls, and native landscaping to enhance biodiversity and improve air quality.



Energy Efficiency & Managementⁱⁱ

Energy efficiency is crucial in new buildings for several reasons. Not only does it reduce operational costs, but it also minimizes environmental impact and contributes to overall sustainability goals.

- **Energy Consultant** Consider hiring an energy consultant to evaluate and identify the most suitable energy solutions for your needs. An energy consultant will conduct a comprehensive assessment of various energy options, including renewable sources, efficiency improvements, and cost-effective strategies, to help you achieve optimal performance.
- Assess Energy Sources Conduct a thorough evaluation of potential energy sources, considering the specific characteristics of your location. Analyse renewable options like solar, wind, and biomass, as well as traditional sources. Consider geographic suitability, local climate, and resource availability, alongside cost, environmental impact, and long-term sustainability, to make informed energy decisions.
- Minimise Natural Gas Usage Minimizing natural gas usage is one of the most effective strategies for reducing Scope 1 emissions. Frequently, equipment that operates on natural gas can be electrified to run on (renewable) electricity. Examples include but are not limited to; boilers for space heating, heat pumps, water heaters, kilns/ovens, fork-lift trucks, compressors, dryers, steam boilers and HVAC chillers.
- **Biogas** For applications requiring gas, consider using biogas. Biogas is derived from the anaerobic digestion of organic materials. However, not all biogas sources are carbon neutral. It is advisable to verify the carbon footprint and sustainability of the biogas source.
- **Energy Source** Where possible, consider using on-site renewable energy or entering into PPAs or VPPAs to help reduce Scope 2 emissions.
- Aggregate Provision Explore the option of entering into an PPA to meet your energy requirements. Aggregated PPAs allow multiple organizations to combine their energy demand and negotiate collectively with renewable energy providers. This approach can result in more favourable pricing, increased access to renewable energy sources, and shared benefits such as cost savings and reduced carbon footprints, particularly advantageous for smaller entities or those in rural areas.
- **Electric Vehicle Charging** Explore the feasibility of installing electric vehicle charging stations to support employee and business needs.
- Automatic Lighting Controls Installing automatic lighting controls, such as motion sensors, time controls, or dimmable lights, can help reduce energy consumption and enhance sustainability. These systems can ensure that lights are only used, when necessary, thereby lowering energy costs and reducing the building's environmental footprint.
- Smart Appliances Can be programmed and monitored for optimal energy use.
- **CO2 Sensors** To adjust ventilation rates based on occupancy levels, ensuring efficient air exchange without wasting energy
- **Energy-Efficient Lighting** LED lighting and other energy-efficient fixtures to reduce consumption.
- **Sub-Meters** Explore the implementation of sub-metering across all energy streams to facilitate better energy consumption monitoring and control.
- Building Management System (BMS) with integrated energy metering Could provide valuable real-time data on energy consumption, including peak usage and potential leaks.
- Air-Cooled Cooling Towers Compare the energy efficiency and environmental impact of aircooled cooling towers with alternative options to inform future cooling infrastructure decisions.



Water Efficiency & Managementiii

Improving water efficiency is an essential aspect of sustainable facility management, beginning with an understanding of local water stress and expanding into a range of practical strategies to reduce consumption, reuse water, and optimize overall water performance.

- **Be Aware of Water-Stressed Areas** Identifying if your building site is in a water-stressed area can influence water usage strategies and conservation efforts.
- Water Management Plan If located in a water-stressed area, consider developing and implementing a comprehensive water management plan to ensure sustainable water use, minimize waste, and address potential shortages. This proactive approach helps conserve water resources and maintain business continuity.
- Water Metering Install water meters within the site, especially at high water using operations. Metering water usage and regular monitoring allows for a quicker response to leaks and increased usage, as well as enables setting reduction goals.
- Hire a Water Consultant Consider hiring a water consultant to provide expert advice on water efficiency strategies. A consultant can help identify opportunities for conservation, develop tailored management plans, and ensure compliance with relevant regulations, ultimately supporting your sustainability goals.
- Rainwater Harvesting Incorporating rainwater harvesting systems to collect and store rainwater for non-potable uses such as irrigation, cooling towers, vehicle cleaning and toilet flushing can reduce freshwater withdrawals.
- **Greywater Recycling** Installing greywater recycling systems to reuse water from sinks and showers for irrigation and toilet flushing can help reduce the demand for fresh water.
- **Leak Detection Systems** Using leak detection systems to monitor and quickly repair leaks can prevent water loss and damage.
- **Low-Flow Fixtures** Installing low-flow faucets and toilets can reduce water consumption without compromising performance.
- Water-Efficient Landscaping Designing landscaping with native and drought-tolerant plants that require less water, and using mulch to retain soil moisture, can improve water efficiency.
- **Efficient Cooling Towers** Optimizing cooling towers with water-efficient technologies and regular maintenance can help minimize water use while maintaining performance.
- Onsite Wastewater Treatment Implementing onsite wastewater treatment systems to treat and reuse wastewater for non-potable applications can reduce reliance on municipal water supplies.
- **Utilize porous pavement** Using porous pavement in parking lots and walkways can allow rainwater to seep through and recharge groundwater. This reduces runoff and helps manage stormwater more effectively, contributing to overall water efficiency.
- Utilize bioswales Incorporating bioswales in landscaping can filter and direct stormwater
 runoff into the ground. Bioswales are vegetated, shallow, landscaped depressions that can
 help manage water runoff, improve water quality, and enhance the aesthetic appeal of the
 property. These can also reduce storm surges, when can positively impact local rivers and
 stormwater conveyance systems.
- Increase Use of Alternative Water Sources Aiming to increase the year-over-year
 percentage of alternative water use, such as rainwater, wastewater from other organizations,
 and seawater, can promote the utilization of diverse water sources, reducing dependence on
 municipal water supplies and enhancing overall water efficiency.



Biodiversity^{iv}

Incorporating biodiversity into the design and construction of a new commercial production building not only enhances ecological balance but also supports local wildlife and promotes a healthier environment. These areas can also be used to educate employees and promote replication at their homes.

- Conduct an Ecological Study Performing an ecological study before construction to assess
 existing wildlife and habitats, can ensure that the building design and landscaping plans
 support and enhance local biodiversity.
- Biodiversity Performance Indicators Setting specific biodiversity indicators to monitor
 performance, such as the number of native species planted, the health of habitats, and
 wildlife sightings, can help measure the effectiveness of your initiatives.
- Consideration for Sensitive Ecological Areas It is strongly advised to avoid constructing new
 facilities in key ecological areas, national forests, or protected lands. Preserving these
 sensitive environments can help maintain biodiversity, protect wildlife habitats, and uphold
 the ecological integrity of these critical areas.
- **Native Plant Landscaping** Using native plants in landscaping can support local wildlife and create a resilient, low-maintenance ecosystem that thrives in the local climate.
- Deforestation Mitigation The best way to mitigate deforestation is to avoid it altogether.
 However, if deforestation does occur, consider planting more native trees to restore the
 ecosystem. This proactive approach can help mitigate the impact on local habitats and
 support biodiversity.
- **Green Roofs** Installing green roofs can provide habitat for birds and insects, improve air quality, and reduce the building's heat island effect.
- **Bird-Friendly Building Design** Incorporating bird-friendly design features, such as glass treatments and reduced night lighting, can help prevent bird collisions and support avian life.
- Minimization of Soil Impact Implementing practices to minimize the impact on soils during construction and landscaping, such as erosion control measures and soil compaction prevention, can help maintain healthy soil ecosystems.
- **Biotope Coefficient** Utilizing the biotope coefficient approach to ensure that a significant portion of the site is dedicated to natural or semi-natural habitats can enhance biodiversity and ecological value.
- Prioritize Pollinator Habitats^v Instead of using turf grass, gravel, asphalt, and concrete, prioritize creating pollinator habitats with diverse flowering plants to support bees, butterflies, and other pollinators. Opting for natural ground covers and plants creates a more welcoming environment for pollinators, improves soil health, and reduces surface runoff. This approach not only bolsters pollinator populations but also enriches the overall biodiversity of the area.
- Screening with Native Trees and Vegetation (vegetative buffers) Creating screens at
 property lines using native trees and vegetation can filter air, reduce noise, and provide a
 natural buffer that shields neighbouring communities from onsite operations.
- Impact Mitigation for Construction Activities If any environmental impacts from construction are identified, consider taking steps to address them. This might involve rehoming affected wildlife or implementing mitigation measures in line with best practices to minimize disruption and ensure compliance with environmental standards.



Air & Water Quality

Ensuring good air and water quality is crucial for the health and well-being of both the environment and the people who work in and around a commercial building. By implementing effective pollution control measures, businesses can contribute to a cleaner, safer, and more sustainable future.

- Advanced Ventilation Systems Consider installing state-of-the-art ventilation systems with high-efficiency particulate air (HEPA) filters to ensure continuous circulation of clean air and removal of pollutants.
- Air Quality Monitoring It is recommended to implement real-time indoor air quality
 monitoring systems to detect and address any pollutants or harmful substances immediately,
 ensuring a safe working environment.
- Emission Control Technologies Investing in advanced emission control technologies, such
 as scrubbers and catalytic converters, may help reduce the release of harmful gases and
 particulates from production processes. Look at hierarchy to reduce or eliminate factors that
 produce emissions or toxics and then seek to apply emission control technologies where
 needed.
- Wastewater Treatment Systems It may be beneficial to install onsite wastewater treatment systems to effectively treat and manage industrial effluents before they are discharged, helping to ensure compliance with environmental regulations and promoting water sustainability.
- Water Quality Monitoring Consider implementing continuous water quality monitoring systems to detect contaminants and help ensure that water used in processes meets safety and sustainability standards.
- Construct Stormwater Management Systems Construct stormwater management systems, such as retention ponds and permeable pavements, during the building phase can control runoff and prevent pollutants from entering water bodies, promoting sustainable water practices.



Indoor Environmental Quality

Ensuring the environment is safe from environmental toxins is the primary goal of this focus. This begins with a full-building flush out of all dust and debris from the air and ventilation system after construction and extends to considerations for acoustics and daylighting.

- Ventilation design Find best practices for measuring and delivering cleaner indoor air;
 balance optimal balance of fresh outdoor air that also considers the supplemental heating or cooling of the air. Fresh air improves occupant well-being and productivity.
- Materials selection selecting low VOC materials limits off-gassing and that "new building smell" which are pollutants.
- **Air Filtration** proper HVAC filtration helps support healthy indoor air quality to support management of wildfire smoke and respiratory diseases.
- **Green Cleaning** Selecting easy to maintain finishes and cleaning with green cleaning products reduces the release of harsh chemicals into the indoor environment. Commercial janitorial services often have janitorial cleaning certification. Environmentally sensitive pest control can also help prevent the release of toxins into the environment.
- **Smoking** Prohibit smoking inside the building and move outdoor smoking areas to be a minimum of 25 ft away from entries, outdoor air intakes and operable windows.
- Occupant experience Survey your building occupants to grasp their experience of the space. They're the best people to help you fine tune your space.
- **Acoustics** Environmental comfort depends on good acoustics in the space. Different spaces require different acoustic treatments for occupant comfort and productivity.



Circular Economy

Embracing a circular economy approach and planning for the end-of-life of construction projects ensures that materials are reused, recycled, or repurposed, minimizing waste and maximizing sustainability. This forward-thinking strategy promotes environmental responsibility and long-term resource efficiency.

- **Design for Disassembly** Planning and designing building components to be easily disassembled can allow materials to be reused or recycled at the end of the building's life, reducing waste and promoting sustainability.
- Use Recyclable and Reusable Materials Selecting construction materials that can be recycled or reused, such as steel, glass, and certain plastics, can help ensure that they can enter a new lifecycle after the building is decommissioned.
- Adaptive Reuse Designing buildings with the flexibility to be adapted for different uses over time can extend their lifespan and reduce the need for new construction.
- Deconstruction Over Demolition Prioritizing deconstruction methods over traditional demolition can allow for the careful dismantling of building components so that materials can be salvaged and repurposed.
- Restoration of Land At the end of a building's life, after deconstruction or demolition, consider returning the land to an untouched condition, complete with native plants. This process can involve removing any remaining construction materials, remediating the soil, and planting native vegetation to restore the area's natural state. The goal is to ensure that the land is restored to its original condition, as it was before construction started, promoting a healthy ecosystem and supporting local biodiversity.



CONSTRUCTION PHASE

Running an environmentally conscious construction project requires more than just picking sustainable materials. Those materials need to be combined with sustainable construction practices.

- **Energy Efficiency** Energy-efficient and electric machinery for construction equipment and vehicles can result in reduced fuel consumption.
- Alternative Energy Sources Consider using renewable energy sources such as solar panels to power construction activities.
- **Energy Management** Implementing energy-saving practices, such as turning off equipment when not in use and using energy-efficient lighting can reduce energy consumption.
- Efficient Water Management Utilizing water-saving fixtures and practices might help reduce water consumption on-site.
- Rainwater Harvesting Collecting and using rainwater for non-potable purposes, such as dust suppression and equipment cleaning, can reduce freshwater withdrawals.
- **Dust Control** Implementing dust control measures, such as water spraying and covering materials can reduce air pollution.
- **Low-Emission Equipment** Using low-emission construction equipment and vehicles could help minimize air pollution.
- **Minimizing Land Disturbance** Planning construction activities to minimize land disturbance and protect existing vegetation and wildlife habitats is advisable.
- **Erosion Control** Implementing erosion control measures, such as silt fences and sediment traps, can help prevent soil erosion and water pollution.
- **Training** Providing training on sustainable practices and safety protocols is recommended, as it can enhance employee awareness and competence, leading to safer operations and more environmentally responsible practices.
- **Performance Tracking** Monitoring and reporting on sustainability metrics, such as energy use, water consumption, and waste generation, could help ensure continuous improvement.

Reducing waste and conserving natural resources can help limit your impact on the planet. Understanding which materials can be recycled and repurposed is important. Where possible, consider using recycled resources instead of raw materials.

- **Recycle and Reuse** It is suggested to set up on-site recycling stations for materials like metal, wood, and concrete, and reuse materials whenever possible.
- **Reduce Waste** Implementing waste reduction practices, such as modular construction and prefabrication, can help minimize offcuts and excess materials.
- **Composting** Organic waste, such as food scraps and plant waste, can be composted and used as a fertilizer.
- **Reduction of packing waste**^{vi} Striving to procure materials that feature minimal packaging and eliminating the use of single-use plastics can reduce waste to landfill.

New Building Recommendations for Suppliers SP Guidance Document June 2025



Commissioning or Measurement and Verification

In accordance with goals set in the OPR, commissioning is the activity of measuring and verifying that all building systems are operating as designed. Commissioning is executed by a professional.

The building commissioning entity should be identified no later than the end of the design development phase so they can guide the design and construction teams through all aspects of mechanical, electrical and plumbing (MEP) systems and building envelope systems.

Commissioning can validate all energy-using systems withing the project boundary including the building envelope, HVAC, service water heating, power, lighting, on-site renewable energy, energy monitoring systems, refrigeration equipment, energy storage systems, load management systems.

PROJECT OPERATIONS

Hooray - You've built an amazing project! Now what?

It is now the building operator's mission to ensure the building is operating as designed. Many building systems are now required by code to include metering and building management systems to monitor the performance of building systems. Ongoing monitoring, maintenance, and occupant engagement are essential to realizing the full sustainability, efficiency, and performance benefits envisioned in the project's design.

Resources for More Information

ⁱ See <u>Transform: Auto</u> for additional information on location-specific renewable energy opportunities in North America.

[&]quot;See <u>SP Energy Optimization Playbook</u> and <u>GM Energy Treasure Maps</u> toolkit for additional information on energy efficiency opportunities.

iii See SP publications <u>Water Stewardship Action Matrix</u>, <u>Water Stewardship Strategy Framework</u> and <u>Core Water Metrics</u> for more information on water stewardship opportunities.

^{iv} See SP publications <u>Nature-based Solutions to Prevent Pollution and Support Biodiversity</u> and <u>Using the</u> Power of Nature to Prevent Pollution for additional information on nature-based solutions.

^v See <u>SP / WHC Pollinator Toolkit</u> for guidance on designing and implementing pollinator projects.

vi See <u>SP Sustainable Packaging Guidance</u> for more information on reducing packaging waste.