PSPC REAL PROPERTY SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL STRATEGY

JUNE 2018

THIS DOCUMENT WAS PREPARED FOR PUBLIC
SERVICES AND PROCUREMENT CANADA BY WSP

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1.0 Introduction

The Government of Canada (GC) is committed to minimizing the environmental footprint of more than 28,000 of its owned or leased buildings across Canada. The Real Property Services (RPS) within Public Services and Procurement Canada (PSPC) provides accommodation to parliamentarians and more than 257,000 public employees in approximately 6,930,000m^2 rental space in approximately 1,600 locations across Canada.

As one of the largest custodians of federal real property and as a leader in sustainable buildings, RPS is committed to operating within the principles of sustainable development.

Sustainable development is a key priority and has been emphasized in the Speech from the Throne (2015–2016), Blueprint 2020, Federal Sustainable Development Strategy 2016–2019, the Real Property Services 2016–2019 Business Plan, Treasury Boards' Greening Government Strategy (December 2017), as well as the Deputy Minister's three departmental priorities: greening the way we work, changing the way we work and changing the way we deliver services.

RPS has responded by initiating the development of the Sustainable Development and Environmental Strategy (the Strategy), which embraces the Government's sustainability direction in a holistic manner. The Strategy identifies long-term strategic goals that explicitly address all three pillars of sustainability: the environment, the economy, and the society.

For the Strategy, RPS has adopted the definition of sustainable development from the United Nations World Commission on Environment and Development report entitled *Our Common Future*[1] . In the report, sustainable development is defined as '*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*.'

Our Common Future also emphasized the three pillars of sustainable development: the environment, the economy and society. These pillars form the foundation of the RPS Strategy.

For RPS, sustainable development is the bridge that connects it to a future where its assets and leases are models of sustainable performance; it is a trusted partner in the communities in which it operates; it is an employer of choice for top talent, and its clients are served with excellence. This Strategy demonstrates the long-term sustainable future RPS is determined to achieve by year 2050. As a companion document to the Strategy, a strategy implementation plan will be developed and will outline the short-, medium- and long-term initiatives to guide how RPS will meet its goals.

2.0 Purpose

Sustainability has had a place within Real Property Services (RPS) for several decades and as it evolves into an increasingly integral part of RPS, a document that provides strategic guidance is required.

The Strategy is a significant step in establishing that sustainability principle to become 'simply the way things are done within RPS'. Additionally, enriching RPS with long-term strategic goals will ensure the change is sustained over the long-term.

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[1] *Our Common Future* is also known as the Brundtland Report

RPS' existing sustainability practices are focused primarily on obtaining industry recognized third party green building certifications. As such, this effort emphasizes some areas of sustainability while overlooking other key areas. For example, when pursuing a green building certification, projects take into account the implementation of sustainable performance initiatives (i.e. reduction of energy and water consumptions) but will not address social and economic initiatives (e.g. being an employer of choice and integrating with local communities).

While green building certification can help in many ways, the absence of an overarching sustainability strategy will limit RPS from addressing all three pillars of sustainability: the environment, the economy, and society.

The Strategy will enable RPS to:

- have a powerful and a systematic tool that is uniquely designed to address challenges within RPS;
- drive a holistic, sustainable change within RPS and maintain the change over the long-term; and
- encourage deeper and transparent engagement with all Canadians.

The Strategy is an overarching strategic document that provides a roadmap to guide RPS to its desired future. The ultimately it formulates long-term strategic goals that frame where RPS wants to be.

For the Strategy to be embedded, deployed and transitioned into effective operational procedures within RPS, an implementation plan will be developed as a subsequent phase. The Implementation Plan's purpose is to frame how RPS will achieve its long-term strategic Goals. It will support the Strategy by breaking each long-term strategic goal into identifiable steps, assign steps to teams, set timelines and identify the resources.

RPS will know the Strategy is being successfully implemented when the long-term strategic goals are effectively integrated into plans, policies, procedures and decision-making processes.

3.0 Approach

The Strategy was developed drawing on research of various international and national corporations and levels of government.

Extensive stakeholder consultation was also conducted including a visioning session with the Real Property Services (RPS) Professional Technical Services senior management. Numerous engagement sessions were also held with participants from every RPS service line and sector, the Public Services and Procurement Canada (PSPC) regions, the Parliamentary Precinct Branch, Brookfield Global Integrated Solutions (BGIS) and the Centre for Greening Government of the Treasury Board of Canada Secretariat.

Developing the Strategy was guided by the desire to define a robust sustainable future in which RPS is a recognized leader in sustainable development. In crafting this future, a systematic process was designed to address the requirements of RPS and included the following steps:

- **Visioning session** with senior leadership to establish long-term strategic goals:
  Senior leadership was engaged in developing the four long-term strategic goals. These goals formalize sustainability aspirations in a clear message to internal employees and external stakeholders.

- **Expert opinion** of sustainability consultants to provide feedback and insight:
  Sustainability experts from WSP Canada Inc. and The Natural Step Canada ensured the long-term strategic goals were rigorous and market-relevant.

- **Engagement sessions** to contribute to each long-term strategic goal:

Multiple engagement sessions and workshops were used to involve RPS employees and stakeholders. Sessions were comprised of group and one-on-one meetings consisting of sustainability consultants and RPS service lines. These sessions were guided by the four long-term strategic goals and identified areas of focus and action items.

- **Market research** to understand the sustainability strategies of similar organizations:
  Sustainability strategies of corporations, non-governmental organizations and other governments were reviewed by sustainability professionals. This research identified industry best practices, lessons learned and trends to consider when developing the Strategy. For more details on the research completed please refer to **Appendix A.**

- **Documentation review** of RPS' policies, plans and procedures:
  Reviewing RPS' policies, plans and procedures helped to obtain information on the existing sustainability status of RPS. This task enabled a comprehensive understanding of the history, philosophy, and operation of sustainability initiatives within RPS.

4.0 The Strategy structure: Goals, focus areas and action items

The long-term strategic goals were designed using an amalgamation of existing and anticipated industry trends. These long-term strategic Goals are uniquely designed to address Real Property Services' (RPS) specific internal operations, external services as well as their presence within their communities. The goals are consistent with what other sustainability leaders are implementing globally and will allow RPS to position itself as a leader in sustainable development. The long-term strategic Goals are as follows:

Goal 1: Sustainable Performance - Mission Zero
RPS buildings, leases and other assets are models of sustainable performance due to their management of GHGs, transition to renewable energy, preference of sustainable materials, elimination of waste, and significant reduction of water consumption.

Goal 2: Community Integration
RPS will be a trusted partner in the communities where it operates. Leadership in this area will contribute to the international recognition of RPS' approach to sustainable development.

Goal 3: Thriving Culture
RPS is recognized as an employer of choice that attracts, engages and retains talented people who contribute to our success. It provides healthy workplaces conducive to individual fulfillment and creates a culture of respect, inclusion, health, safety, and equal opportunity.

Goal 4: Client Service Excellence
RPS will be recognized for providing our clients and communities with industry-leading strategies that work and are informed by our commitment to sustainability.

Each long-term strategic goal is subdivided into focus areas and subsequently into action items. Action items will later be incorporated into elements of the Implementation Plan. The Strategy is organized according to the following hierarchy for each goal:

-Goals
   └ Focus areas
      └ Action items
         └ **Elements of implementation plan (not part of this strategy document)**

Focus areas are the foundation for each long-term strategic goal. They provide structure and expand each goal into distinctive concentration areas that encompass all aspects of the goal.

Action items are specific sustainability initiatives that RPS aspires to implement in day-to-day operations. These initiatives will be developed in the future implementation plan. Each action item is categorized by one of the following three levels:

> **Fundamental action items** are high priority and relatively simple to implement. These items are identified as essential to ensuring sustainability in the daily operations. Fundamental actions are often pre-requisites for the implementation of value-added and stretch action items.

> **Value-added action items** are complex activities that may only be applicable to unique instances across the RPS portfolio.

> **Stretch action items** are an array of agile sustainability initiatives envisioned to become feasible in time. They are part of the RPS commitment to emerging initiatives.

5.0 RPS Sustainable Development and Environmental Strategy

The Strategy chart shown in Figure 1 below identifies the long-term strategic goals and focus areas of the Strategy. The four primary quadrants of the Strategy Chart represent the long-term strategic goals. The outer-most section identifies the focus areas for each goal. Action items are identified in separate tables for each focus area.

The following sections introduce each long-term strategic goal, focus area and action item in detail, beginning with Sustainable Performance: Mission Zero, and moving clockwise through each of the four long-term strategic goals set out in Figure 1 above. Applicable focus areas are introduced after each goal, followed by tables that itemize the associated action items.

Pages containing action items identify the applicable long-term strategic goal and focus area in the corner of each page to help readers orient themselves in the document.

Goal 1: Sustainable Performance – Mission Zero

RPS buildings and other assets are models of sustainable performance due to their management of GHGs, transition to renewable energy, preference of sustainable materials, elimination of waste, and significant reduction of water consumption

Achieving sustainable performance requires monitoring environmental metrics and tracking the progress of initiatives. This Goal is supported by focus areas which consolidate key sustainability metrics for Carbon, Water, Waste, Materials and Positive Site Impact initiatives. This goal aspires to eliminate the negative impacts of operations and construction on human health and the environment as much as possible.

The circular chart below in Figure 2 highlights the focus areas for Goal 1: Sustainable Performance – Mission Zero. Each focus area is supported by action items as identified in the tables on the following pages.

Figure 2: Goal 1 Sustainable Performance - Mission Zero
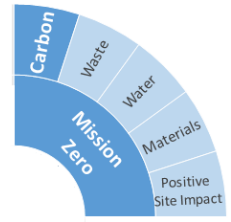
Why is Carbon a focus area? Carbon dioxide (CO_2) and other GHGs (measured as CO_2 equivalents or eCO_2) are fundamental sustainability metrics, which are simple conveyed. Most sustainability management systems across the world have committed to managing carbon emissions and the action items below provide programmatic and technological solutions for reducing carbon emissions associated with our buildings.

FUNDAMENTAL

Action Item	Intent
Benchmark, track and influence energy use	Benchmark emissions and energy use of buildings will serve as a basis for tracking and prioritizing carbon reduction initiatives. Provide building occupants with data and feedback to influence behavioral change.
Deep energy retrofits	Conduct deep energy retrofits of building systems across aging assets to increase energy efficiency and decrease carbon footprint.
Supporting the conversion of fleet and private vehicles to electric	Supply fast-charging electric vehicle charging stations with the objective to support the conversion of fleet and private vehicles from gas to electric.
Environmentally friendly refrigerants	Phase out fluorinated gases and replace them with non-hazardous, non-GHG and non-ozone depleting refrigerants.
Integrated building analytics	Integrate analytics software to automatically analyze building energy usage and equipment; and identify issues and opportunities for improved performance.
Manage scope 1, 2 and 3 GHGs	Manage scope 1 and 2 GHGs in accordance with the provisions and expectations provided in the PSPC Carbon Neutral Plan. Design a unique management plan for scope 3 GHG, as applicable to operations.
Ongoing commissioning	Optimize the performance of building subsystems by conducting ongoing commissioning, following a regular and timely service schedule.
Smart submetering	Incorporate smart submeters into buildings to provide data on the real-time energy consumption of individual tenants, systems and floors.

VALUE ADDED

Action Item	Intent
Minimize embodied GHG	Use products, materials and construction methods that produce fewer GHG emissions during their life cycle than alternative conventional products.
Renewable energy	Incorporate renewable energy generation technologies in accordance with the PSPC's Carbon Neutral Plan.
Smart buildings	Integrate sensors, actuators and data logging to collect data and manage infrastructure associated with business functions and services (i.e. building comfort and energy use).

STRETCH

Action Item	Intent
Net-positive buildings	Design, construct and operate buildings that contribute more energy to the grid than what is consumed from the grid.
Grid independent buildings	Design, construct and operate buildings to be grid independent.

Waste
Action Items

Why is Waste a focus area? Waste materials directly impact communities worldwide by contributing to landfills and creating increased demands for resources. Responsibly of managing the materials that leave our buildings and construction sites is a fundamental component of limiting our impact on the environment. The action items below include programmatic and technological solutions for managing waste generation and disposal.

FUNDAMENTAL

Action Item	Intent
Benchmark, track and influence waste diversion	Benchmark waste diversion rates of all project and operation streams will serve as a basis for tracking and prioritizing waste reduction initiatives. Data from these initiatives must be shared with occupants through engagement campaigns to help them improve their waste diversion rates.
Waste diversion management program	Develop a multi-material waste management program that includes construction, demolition and operational waste. Include methods for diverting recyclable material, furniture, electronic, and biological or other waste appropriately. Report and verify performance at the building level. Programs should include strategies that help reduce waste, such as reusing material, minimizing resources associated with construction, and purchasing products with minimal packaging.

VALUE ADDED

Action Item	Intent
On-site composting program	Develop on-site composting programs that feed on-site or local community gardens and energy generation systems.

STRETCH

Action Item	Intent
On-site recycling and reusing technology	Future technologies may generate opportunities for the on-site recycling of paper, plastic and organic material. These materials may transformed on-site into new products and contribute to input streams for 3D-printed materials.

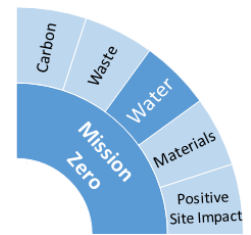|	
On-site bioreactors	Incorporate blackwater and other organic waste streams as feeds for on-site power generation systems. By-products such as combustible gas and fertilizer can then be reused on-site or by third parties.

Water

Action Items

Why is Water a focus area? Water is a precious and limited resource that we consume daily. Responsibly managing water consumption reduces the risk of negative environmental effects and lessens burdens on local water systems. The action items below include programmatic and technological solutions to reduce potable water use, manage rainwater and reuse greywater in our buildings.

FUNDAMENTAL

Action Item	Intent
Adaptive landscaping	Develop a landscaping management plan that includes the use of adaptive landscaping and other strategies to reduce the amount of irrigation required. This plan should be developed in conjunction with low-impact products and techniques identified as the green landscape plan action item under the Positive Site Impacts focus area.
Benchmark, track and influence water use	Benchmark water consumption of all operational end-uses will serve as a basis for tracking and prioritizing water use reduction initiatives. Provide occupants with feedback to influence behavioral changes.
Water management program	Develop a program that identifies reduction targets for each water end-use. Include opportunities to use materials that have less embodied water than conventional alternatives. Identify streamlined retrofits and procedural standards to meet targets.
Stormwater erosion and sedimentation management	Develop stormwater, erosion and sedimentation management plans. Management techniques should reduce the amount of suspended solids and total quantity of run-off leaving site after storm, heavy rainfall, and snowmelt events.

VALUE ADDED

Action Item	Intent
Greywater, rainwater and blackwater re-use	Develop blackwater, greywater or rainwater infrastructure for applications, such as toilets, urinals and process water.

STRETCH

Action Item	Intent
On-site water treatment	Treat water effluent on site before discharging to local water systems or re-using on site.

Why are materials a focus area? Manufacturing industries are becoming more transparent with respect to the environmental impacts of their products. This new trend provides tools to manage the health and ecological impacts of the products we use. Responsible materials can greatly reduce human exposure to harmful chemicals as well as reduce burdens on ecosystems worldwide. The action items below include programmatic and technological solutions to manage the environmental and health impacts of the materials we purchase.

FUNDAMENTAL

Action Item	Intent
Eco-friendly product and material procurement	Purchase products and materials that demonstrate responsible land stewardship, resource management, ethical employment and animal treatment. Develop a plan to help prioritize purchases based on environmental performance as elaborated in the Expertise Focus Area under Goal 4: Client Service Excellence.
Green housekeeping	Develop a green housekeeping program that identifies minimum standards for cleaning practices, training, auditing and product use. Cleaning products should be replaced with zero-VOC alternatives to the greatest extent possible.

VALUE ADDED

Action Item	Intent
Third party certifications	Specify products which meet the third-party certification requirements to demonstrate environmental performance. Identify methods for comparing and prioritizing certifications to advise procurement.

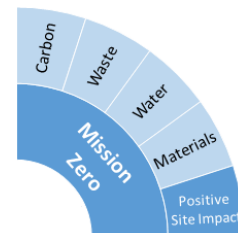| STRETCH	
Action Item	**Intent**
3D printing	Incorporate 3D printing technology for materials and products when there is a demand and a resource-efficiency benefit.
Next generation building materials	Specify materials that incorporate nanotechnology, biomimicry and multifunctional components. Examples of existing technology include window integrated solar panels, self-regulating materials for temperature control, self-repairing concrete and masonry and lightweight composites.

Why is Positive Site Impact a focus area? Our sites physically connect us to our community and provide us with an opportunity to showcase our commitment to sustainability. Responsible development and management processes can positively impact local ecology and human experience. The action items below include programmatic and technological solutions to reduce the impacts our sites have on the environment, while improving usability and reducing negative site impacts.

FUNDAMENTAL

Action Item	Intent
Manage heat island effect	Incorporate materials that reflect low levels solar radiation (low albedo) and other heat island reducing strategies.
Landscape management	Develop landscape management plans that identify low-impact lawn care products and least-toxic pesticides. This plan should be developed in conjunction with the adaptive species selection techniques identified as action items under the water focus area.
Promote habitat for native and endangered species	Develop programs for safeguarding space, habitat and ecological conditions for native and endangered species.
Light pollution reduction	Incorporate materials and lighting that minimize the amount of light entering the building and site, reduce sky-glow to increase night sky access, reduce glare to improve nighttime visibility and reduce development impact from lighting on nocturnal environments.

VALUE ADDED

Action Item	Intent
Mixed use sites	Incorporate a diverse array of space uses and functions within each building.
Site selection	Incorporate site selection criteria into accommodation decision making processes which increase the social value of our sites. Examples include: proximity to public transit and alternative transit infrastructure, sports fields, greenspace, community and wellness centres and other amenities.

STRETCH

Action Item	Intent
Eco districts	Incorporate elements such as district energy systems, transit oriented developments and service nodes to clients and community partners.
Ecological service programs	Promote programs which go beyond providing and safeguarding space for native and endangered species. These services can vary from transforming underused bridges and roadways to wildlife corridors; developing on-site apiary and pollinator projects; creating bird and bat habitat; restoring natural habitats; increasing community, urban, and rural agriculture opportunities or even green pasture space for local farmers.

Goal 2: Community Integration

RPS will be an international leader and trusted partner in the communities where we operate.

As the lead organization of one of Canada's largest and most diverse real property portfolios, RPS cannot afford to sit on the sidelines while communities across the country take on challenges related to sustainability. Two focus areas have been identified to encapsulate the tools and resources we can use to help. The first focus area identifies initiatives that nurture partnerships and identify needs within our communities. The second focus area identifies methods that adapt our assets and programs to meet community needs. Enabling community members to leverage our assets and programs will provide RPS with a unique opportunity to lead initiatives in our communities.

The circular chart below (Figure 3) highlights the focus areas for Goal 2: Community Integration. Each focus area is supported by one or more action items identified in tables on the following pages.

Figure 3: Goal 2 Community Integration

Assets and Programs
Action Items

Why are Partnerships a focus area? Fostering community partnerships inherently demonstrates our commitment to sustainability to a larger audience. Engaging our communities, which include other federal departments, provincial, territorial, municipal governments, indigenous people, industry, academia, non-profits etc., also provides insight into opportunities to meet the unique needs of our communities. The Action Items below identify opportunities to engage our communities and make positive environmental impacts outside of the typical day-to-day operations.

FUNDAMENTAL

Action Item	Intent
Community integration programs and feedback channels	Develop a community integration program that addresses the priorities of each Public Services and Procurement Canada (PSPC) Community Based Investment Strategy and incorporates plans to integrate communities and local planning priorities into projects and existing buildings. Focus on establishing strong communication channels, feedback mechanisms, networks and links to strengthen community engagement mechanisms and tools.

VALUE ADDED

Action Item	Intent
Existing community programs	Participate in community initiatives.

STRETCH

Action Item	Intent
Community sustainability education	Provide community stakeholders with sustainability, education programs, materials, and tours to help develop industry understanding of sustainability initiatives, challenges and opportunities.

Why is Assets and Programs a focus area? Assets and Programs encompasses all of the tools that can be used to support local non-government and PSPC communities. The action items below aspire to create symbiotic relationships wherein the general public and other PSPC communities are able to leverage programs and assets provided by RPS.

FUNDAMENTAL

Action Item	Intent
Surplus and decommission sites	Include the consideration of community stakeholders and partners when planning disposal of buildings and sites. Consideration should be given to a site's value to a community. Identify underused assets and develop a plan on how best to repurpose space. This plan should take into consideration community and municipality needs, government initiatives such as the Affordable Housing Initiative and other similar programs.

VALUE ADDED

Action Item	Intent
Shared paces plan	Identify and promote space sharing opportunities in buildings or outdoor spaces for community group events.
GC remote work opportunity and national workforce	Provide non-geographically constrained or site specific remote work opportunities for Government of Canada (GC) employees where feasible.
Heritage management program	Integrate existing heritage management programs and plans to ensure heritage features in buildings are evaluated and integrated into project design and are managed appropriately.

STRETCH	
Action Item	**Intent**
GC decentralized work hubs	Designate non-assigned activity-based workplaces where any government employee can access a variety of work hubs. Work hubs constitute buildings in which any GC employee can access a site, work from a non-assigned activity-based workplace and have access to government networks and facilities.

Goal 3: Thriving Culture

RPS recognized as an employer of choice that attracts, engages and retains talented people who contribute to our success. We provide a healthy workplace conducive to individual fulfillment and create a culture of respect, inclusion, health, safety, and equal opportunity.

RPS must create an appealing work environment by adopting and improving upon the best practices of other leaders in the industry. Employers of choice offer flexible work programs such as mobile and flexible work locations and hours of work, as well as efficient technology and modern infrastructure that appeals to employees. Initiating the action items within these focus areas will enable improved mentorship, knowledge transfer and feedback mechanisms to foster a successful and thriving culture. The circular chart below (Figure 4) highlights the focus areas for Goal 3: Thriving Culture. Each focus area is supported by one or more action items, as identified in the tables on the following pages.

Figure 4: Goal 3 Thriving Culture

Why is Technology a focus area? We must use technology to connect our staff to our infrastructure and improve the usability of our programs. Incorporating new technology into our systems provides an opportunity to increase productivity and reduce the complexity of tasks. The action items below identify technologies that must be incorporated into daily operations.

FUNDAMENTAL

Action Item	Intent
Digital signatures	Reduce the need for hand-written signatures by integrating digital signatures into organizational processes.
Communications technology	Integrate the use of videoconferencing, teleconferencing, Instant Messaging, and knowledge sharing application such as GCdocs and GCconnex into day-to-day operations to provide seamless connectivity to colleagues and clients.

VALUE ADDED

Action Item	Intent
Alternative transportation technology	Identify or develop online tools to help building occupants organize carpooling, bike groups, car-sharing and other alternative transportation.

## STRETCH

Action Item	Intent
Augmented and virtual reality integration	Incorporate augmented reality and virtual reality technologies to conceptualize projects in real-time, work remotely via virtual-presence and improve efficiency in other aspects of operations.
Internet of things analytics	Integrate data from the internet of things to advise and refine processes related to smart appliances, energy meters, wearable devices, cars, and other monitors to improve efficiency and comfort.

Infrastructure

Action Items
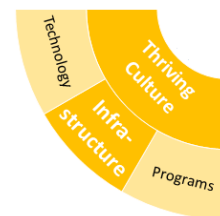
Why is Infrastructure a focus area? RPS must provide staff with physical infrastructure that promotes usability of our programs and technology. Installing infrastructure that promotes green lifestyles and comfortable environments can help improve productivity and reduce resource use.
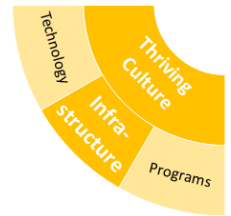
FUNDAMENTAL

Action Item	Intent
Alternative transportation infrastructure	Integrate opportunities to promote and increase use of alternative transportation such as electric car charging stations, bicycle storage, etc.
Sustainability data feedback	Provide feedback mechanisms that are engaging, interactive and educational, to promote and validate green behavior.
Inclusivity	Design work environments that incorporate local heritage and universal design principles that anticipate new standards of human diversity.
Individual thermal light management	Allow employees to manage the temperature and lighting levels of their work environment.
Water quality	Promote and provide staff with high-quality water.
Indoor air quality	Implement air filtration systems and management strategies to reduce contaminant levels and manage CO_2 levels in building spaces.

VALUE ADDED

Action Item	Intent
Active workstations	Encourage physical activity at workstations.
Bring your own recycling	Encourage and enable those who do not have composting, e-waste or other diversion programs at home to bring the materials to work.
Nature-connected spaces	Provide spaces that incorporate natural aesthetic elements such as green walls, indoor gardens, and other biophilic design principles.
On-site food / tea gardens	Encourage and enable teams to grow food on-site by identifying underused space and negotiating terms for use with landlords or the surrounding community.

| STRETCH	
Action Item	**Intent**
Comfort adaptable architecture and interiors	Integrate occupant-controlled design elements such as operable windows, seasonal building solar shading, modular furniture, adjustable radiative technology in furniture for thermal comfort, and ventilation distribution systems that that employees can use to manage changes in space layout.
Provision of healthy living infrastructure and/or incentives	Provide showers and lockers in support of employees who cycle, walk or jog, and who have a membership at local fitness facilities.
On-site healthy / local cafeterias	Provide employees with access to delivery programs and cafeterias on-site that serve healthy and local in-season food.
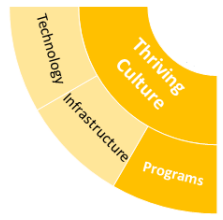
Why are Programs a focus area? RPS must develop formal programs that manage our people, technology and infrastructure to guide the development of initiatives. Committing to the implementation of green, educational, lifestyle, and feedback programs can help create a sense of community and improve participation.

FUNDAMENTAL

Action Item	Intent
Building-level sustainability teams	Identify interdisciplinary groups of employees responsible for green outcomes and on-site cultural events and education. Responsibilities may include items such as education on waste streams, local transit, local food programs, and other components of this strategy.
Comfort surveys	Monitor, maintain and improve satisfaction related to comfort, building conditions, cleanliness, lighting and other factors related to human experience.
Designated noise zones	Identify quiet and collaborative areas for employee use.
Employee on-boarding and on-going engagement	Develop an employee engagement program in buildings to drive sustainability through behaviour change.

The program should include engagement initiatives on human resources, information technology, digital communications, security, facilities, interior design, health, transportation, community partnerships, energy, water, waste reduction and other elements of this strategy.

The program should include initiatives for engaging each tenant through employee committees, awareness sessions, educational materials, social networking, data sharing, incentives and other programs.

The program will be on-going and updated via feedback collected from participants. |
Knowledge retention	Document employee knowledge prior to departure through exit interviews, succession planning, contribution to knowledge databases and other techniques.
Flexible hours	Provide flexible working schedules.
Flexible workplace options	Provide options to work from home, different buildings or spaces within a building.
HR/IT mentorship and hotline	Expedite human resources and information technology complaints, concerns and suggestions.

|	
Third-party green standard certification	Incorporate third-party green standards used by industry into project and building requirements.
Mental health resources	Provide resources and accommodations for employees to manage and monitor mental health and wellness. Resources may include third party consultants, outreach programs, or programs that assess impacts on employee work-life balance.
Occupant comfort hotlines	Expedite occupant comfort complaints through designated channels.
'TED' Talks knowledge sharing	Encourage knowledge sharing through participation in presentations.
Volunteering	Encourage and enable teams to participate in volunteering/fundraising.

VALUE ADDED

Action Item	Intent
Campus oriented departments	Identify buildings and areas for departments with similar specialisations, to encourage collaboration.
Gamification of green recognition programs	Identify employees, buildings and service lines/sectors who reduce their resource and energy use, and their miles traveled. Employ gamification elements such as using points, avatars, teams, timelines and other game-like feedback mechanisms to promote usability and encourage friendly competition.
Inter-office health and wellness	Promote and endorse activities that promote networking, sports and recreational activities between offices.
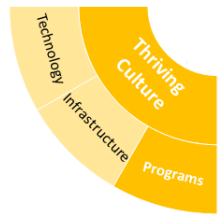
STRETCH	
Action Item	**Intent**
Financial incentives for green performance	Provide teams with financial incentive for meeting or exceeding sustainability criteria.
Designated temperature zones	Identify warmer and cooler areas or floors for employees to use.

Goal 4: Client Service Excellence

RPS will be recognized for providing our clients and communities with industry-leading strategies that work and are informed by our commitment to sustainability.

Client management, industry management and education have been identified as the focus areas for this goal. Action items for this goal are intended to leverage our expertise to influence and transform the markets in which we operate, while providing enjoyable experiences for clients.

The circular chart below (Figure 5) highlights the focus areas for Goal 4: Client Service Excellence. Each focus area is supported by one or more action items identified in the tables on the following pages.

Figure 5: Goal 4 Client Service Excellence

Why is Education a focus area? Solving problems for our clients and staff has allowed us to accumulate a vast knowledge of solutions to common problems. Sharing these solutions will enable us to stand out as a valued leader among our clients and community.

FUNDAMENTAL

Action Item	Intent
Occupant on-boarding and on-going engagement	Develop an occupant engagement program in buildings to drive sustainability through behaviour change. The program should include engagement initiatives around human resources, information technology, digital communications, security, facilities, interior design, health, transportation, community partnerships, energy, water, waste reduction and other elements of this strategy. The program should include initiatives for engaging each tenant through occupant committees, awareness sessions, educational materials, social networking, data sharing, incentives and other programs. The program will be on-going and will be updated based on feedback collected from participants.
Stakeholder education sessions to advise design	Educate clients and landlords on environmental and social sustainability. Provide strategic advice and guidance on appropriate design decisions to create an integrated sustainable design solution. Outcomes should promote low-carbon infrastructure, life cycle assessment of material options, incorporation of RPS' own green programs and other project-specific sustainability considerations.

VALUE ADDED

Action Item	Intent
Public green awareness platform	Provide the public with quantifiable and clear information about PSPC's green initiatives and sustainability performance through a single platform.
Share our infrastructure and programs	Share our infrastructure and programs with other government departments.

STRETCH

Action Item	Intent
Green helpline for OGDs	Provide resources to allow Other Governmental Departments (OGDs) to seek for advice on green initiatives.

Why is Expertise a focus area? We are the bridge between our clients and many different industries. Leveraging our understanding and relationships with these industries is a core component of the value we provide to our clients. Demonstrating expertise will result in responsibly procured materials, attraction of outside talent and new opportunities to investigate and implement sustainability.

FUNDAMENTAL

Action Item	Intent
Industry expertise	Leverage industry expertise in the area of sustainability.
Green leases	Develop a green leasing action plan to incorporate sustainability clauses in new and renewed leases.
Sustainable procurement	Review and update PSPC's Policy on Green Procurement, programs and processes to incorporate action items from the implementation plan and other industry best practices. This procurement strategy should identify a method for prioritizing product selection based on environmental performance. The environmental impact of procurement should be analyzed through life cycle cost analysis, cradle-to-cradle assessments, environmental product declarations, supply chain management, and third-party environmental certifications. Products should demonstrate considerable reduction than conventional alternatives in energy, water, and resource consumption, as well as an improved stewardship of workforces and environments.
Measured and verified key performance indicators and feedback mechanisms	Identify programs that provide clients and project teams with meaningful performance indictors and ongoing feedback mechanisms for code compliance and satisfaction.
Post-occupancy surveys and tests	Conduct post-occupancy surveys and tests (e.g. comfort, satisfaction) and incorporate lessons learned into future project delivery programs. Tests should be used to confirm that spaces are healthier, based on the VOC, CO_2 and other indoor air quality parameters relevant to the materials used in those spaces.

VALUE ADDED

Action Item	Intent
Life cycle analysis of assets and leases	Review the life cycle costs and sustainability impacts of current leases and owned buildings. Review opportunities to move away from poor performing buildings which are owned or have long-term leases.

STRETCH

Action Item	Intent
Industry research partnerships	Engage industry and educational leaders to research new technologies, identify community needs and identify solutions to workplace design and operational issues.
Dynamic project management	Implement management processes that leverage new technologies and elements of this strategy to quickly adjust to dynamically changing internal and external factors.

6.0 Core Recommendations

This section of the Strategy provides core recommendations that are essential to support the implementation plan. The core recommendations shall remain applicable and in effect for the entire time the Strategy is in use.

1. **Appoint a sustainability officer:**
   - A senior leadership role; director general under Real Property Services (RPS) or an assistant deputy minister for Public Services and Procurement Canada.
   - Has authority and influence, similar to other decision makers.
   - Has resources to implement the sustainability agenda.

2. **Measure, verify, track and report:**
   - Continuous benchmark to track progress.
   - Create monitoring tools to collect data.
   - Have internal audit process to measure performance with timeframes and frequencies.
   - Have third-party auditors to conduct performance verification.
   - Continuous assessment of RPS' strengths and weaknesses.
   - Implement sustainability reporting system, external and internal.
   - Report progress on previously set goals and future plans and commitments.

3. **Educate**:
   - Keep your employees engaged, informed and stimulated.
   - Encourage sustainability behaviours.
   - Encourage employees to carry the organizational sustainability messages to their communities.
   - Create cross-functional teams to work on sustainability issues.
   - Make use of the diversity of talents and ideas across RPS.
   - Communicate with external stakeholders, communities and clients.

4. **Train:**
   - Train managers in ethical and sustainable decision-making, consistent with Public Services and Procurement Canada's mission, Goals and objectives.
   - Train employees to implement and operate sustainability management systems.
   - Provide regular training updates to keep sustainability at the forefront of peoples' thoughts.

5. **Reflect:**
   - Carefully consider what RPS is doing.
   - Set regular opportunities to reflect on priorities.
   - Stand back and assess the macro perspective.
   - Observe organizational trends and ensure they are consistent with sustainability values.
   - Take a holistic view and be aware of RPS' surroundings.
   - Develop a process for making recommendations for improvement.
   - Take advantage of failures and see them as opportunities for significant transformational and sustainable change.

Appendix A: Market research summary

A research was conducted about sustainability initiatives undertaken throughout industry and service sectors around the world. The research was categorized into government, countries, cities, public organizations and private organizations. The purpose of the research was to understand industry best practices and formulate lessons learned and trends to consider for the Strategy.

The research focused on the following research criteria:

- Trends and best practices: What are the trends, programs and vision statements which set the company apart from typical standard operating procedures?
- Outcomes: What are the measurable outcomes of the trends, best practices, leadership, services and culture?
- Governance and Leadership: ways in which the organization shares power, makes decisions, manages knowledge and succession.
- Voice, brand and communications.
- Services and operations: ways in which the company runs its business and how it creates value for clients.
- Culture: the personality of the organization and the ways in which this is shared and maintained.

The research focused on the following organizations:

1. General Services Administration
2. Carbon Neutral Cities Alliance
3. Urban Sustainable Directors Network
4. Real Pac
5. Skanska
6. Oxford
7. Province of British Columbia
8. New York City
9. Bentall Kennedy LP
10. Walmart

The outcomes of the research are as follows:

Common trends to avoid:
1) Adhering to LEED/BOMA and not promoting or tracking outcomes transparently at the building-level.
2) Failing to focus on big-picture global sustainability (e.g. promoting buying local, yet local products are not as efficient/sustainable as international products).
3) Lack of consistent and customized knowledge sharing, training and reporting tools.
4) Media silence regarding stakeholder engagement, programs and outcomes.
5) Decentralizing and creating non-dedicated sustainability teams and boards.
6) Conducting stakeholder engagement without developing meaningful programs, reporting mechanisms and quality assurance.
7) Not developing performance baselines nor collecting relevant baseline data.
8) Using third-party certifications (i.e. LEED, BOMA, and Green Globes) without having overarching guiding strategies in place.

Common leadership trends to consider:
1) Accurate, automated and consistent energy, water and waste reporting across portfolios.
2) Specialized internal training programs led by dedicated sustainability teams on sustainability topics.
3) Customized internal tools for sustainable procurement, asset management and operations.
4) Contractual requirements with stakeholders for sustainability outcomes.
5) Stakeholder engagement on sustainability topics, with transparent goals, reporting and media updates.
6) Lifecycle analysis, analyzing first-cost versus life-cycle costs as a prerequisite to conducting business.
7) Adhering to LEED and BOMA requirements while having overarching guiding strategies in place.
8) Commitment to net zero and 100% renewable energy use within next 20 years.

Potential future leadership trends to consider:
1) Sustainable procurement of paper (North American bamboo, hemp) and re-usable notebooks (e.g. rocket book wave). Supporting the growth of Canadian bamboo farms also decreases soil erosion, sequesters more CO_2 than conventional trees and is rapidly renewable, unlike wood.
2) In-office connectivity to community programs (rentable or free space after hours for community use, promotion of local programs in-office).
3) Local food delivery programs, partnerships with farmers' markets and vendors.
4) Specifying carbon-negative construction materials and re-usable/modular building design that reduce the use of concrete and steel, (hempcrete to replace concrete in many housing and infrastructure applications, and bamboo to replace steel in low-rise construction projects can reduce building costs).
5) Second-skin building envelopes to reduce heat gains/loss.
6) Regional 3D printing to reduce costly generation of prototypes and processes, which require high volume customized components.
7) On-site biofuel combined heat and power systems to supplement renewable photovoltaic/ wind systems to form micro-grids on campuses.
8) Focus on system regeneration and negative-carbon systems rather than doing less damage.
9) Achieving Living Building Challenge (banning harmful chemicals that are currently still legal: achieving net positive energy and water, promote off-hours use of buildings, and promoting occupant health and wellness

The outcomes of the research have guided and influenced the development of the Strategy.