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Second Party Opinion

PSP Investments' Green Bond Framework

Oct. 30, 2025

Location: Canada

Sector: Financial Services

Alignment Summary

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✕

✓ Green Bond Principles, ICMA, 2025

See [Alignment Assessment](#) for more detail.

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Medium green

Activities that represent significant steps towards a low-carbon climate resilient future but will require further improvements to be long-term low-carbon climate resilient solutions.

Our [Shades of Green Analytical Approach](#) >

Strengths

PSP Investments has a track record of sustainable investing, underpinned by active engagement with portfolio companies to promote sustainable business practices. As part of its Climate strategy, the issuer developed its own Green Asset taxonomy and has established short term targets. By executing its climate strategy, the issuer expects a 20-25% reduction in its overall portfolio emissions intensity.

Where feasible, the framework includes quantitative thresholds for project selection. These quantitative thresholds are guided by internationally recognized standards such as EU Taxonomy and Climate Bonds Initiative (CBI). The framework also adheres to the International Capital Market Association's (ICMA's) Green Enabling Projects Guidance.

Weaknesses

No weaknesses to report.

Areas to watch







Despite the framework's fossil fuel-related exclusion criteria, green bond proceeds could still be used to finance fossil-dependent assets and technologies. For example, fossil fuel-powered equipment used to support mining, agriculture, manufacturing, and construction. Some project categories lack specific emissions criteria to limit lifecycle emissions, while we note the issuer's policy is to engage with companies to align their business models with a net-zero transition.

PSP Investments' Green Asset Taxonomy has limited considerations for Scope 3 emissions. That limits comprehensiveness of climate risk management. However, the issuer has indicated that it intends to further improve emissions data collection and associated emission reduction targets for its investee companies.


Shades of Green Projects Assessment Summary

The issuer expects the majority of proceeds to be allocated to refinancing projects, while it did not provide a specific breakdown between refinanced and new projects.


Based on the project categories' Shades of Green detailed below, the expected allocation of proceeds, and consideration of environmental ambitions reflected in PSP Investments' Green Bond Framework, we assess the framework Medium green.

| | |
|--|---|
| Low carbon energy |  Medium to Light green |
| Renewable energy | |
| Nuclear energy | |
| Transmission and distribution | |
| Energy efficiency |  Medium to Light green |
| Built environment | |
| Data and telecommunications infrastructure | |
| Industry | |
| Energy infrastructure | |
| Pollution prevention and control |  Medium to Light green |
| Assets that involve products, technology or services that enable waste management projects | |
| Assets that involve products, technology, research, development or services that enable air emissions reduction projects | |
| Environmentally sustainable management of living resources and land use |  Light green |
| Assets that contribute to sustainable management of natural resources and land use, including certified sustainable timber, aquaculture, and agriculture production | |
| Climate change adaptation and resilience |  Medium green |
| Assets that involve the construction, development, operation, acquisition, maintenance, technology or equipment used for products that reduce climate change vulnerability or increase the adaptive capacity of assets and communities to physical climate hazards | |
| Sustainable water and wastewater management |  Light green |


Assets that involve the acquisition, operation, construction, and upgrades of projects that improve efficiency of water distribution networks and/or water recycling services

Circular economy adapted products, production technologies, and processes  Medium green

Assets that enable circular business models by reducing waste, improving resource efficiency, and/or extending product-life


Green buildings  Light green

Assets that have received, or expect to receive based on their design, construction and operation plans, certification according to third party verified building standards

Clean transportation  Medium to Light green

Assets that involve the construction, manufacturing, production, development, distribution, operation, acquisition, and maintenance or low-carbon transportation infrastructure such as:

- Passenger transportation
 - Freight transportation
 - Infrastructure
 - Shipping
-

Green enabling  Light green

Assets involved in activities that support the transition to a low-carbon economy by enabling other green projects or investments such as:

- Mining and metals
 - Specialized vehicles
 - Industrial parts and components
 - Building and construction supplies
 - Chemicals and specialty chemicals
-

See [Analysis Of Eligible Projects](#) for more detail.

Issuer Sustainability Context

This section provides an analysis of the issuer's sustainability management and the embeddedness of the financing framework within its overall strategy.

Company Description

Founded in 1999 and with its main business office in Montreal, Canada, the Public Sector Pension Investment Board (PSP) is a federal Crown corporation pension investor. The mandate of PSP is to manage amounts transferred to it by the Government of Canada under the superannuation acts of the pension funds of the federal Public Services, the Canadian Armed Forces, and the Royal Canadian Mounted Police. PSP manages a diversified global portfolio composed of investments in capital markets, private equity, real estate, infrastructure, natural resources, and credit investments. As of March 31, 2025, PSP had about C\$299.7 billion of net assets under management (AUM).

Material Sustainability Factors

Climate transition risk

Investment funds are exposed to climate transition risk through financing economic activities, which affects the environment. As one of the largest investors in the economy, stakeholders may pressure funds to promote decarbonization of the economy through investment policy while preserving their fiduciary duty to their clients. Thus, the sector can engage investees and other stakeholders to promote less carbon-intensive activities and greener business models. Policies and regulations to reduce emissions across high-emitting sectors such as oil and gas, metals and mining, real estate, or transportation could raise funds' exposure to counterparty, market, and liquidity risks as pressures mount to phase out carbon-intensive assets and technologies across the economy, which may affect fund performance. Still, as long-term investors, pension funds' diversified nature and opportunities to invest in the green economy can limit their exposure to climate transition risks when well managed.

Physical climate risk

Physical climate risks increasingly affect economic activity as climate change raises the frequency and severity of extreme weather events. Investment funds finance a wide array of business sectors that are exposed to physical climate risks, exposing funds to them through investing. However, as diversified investors, pension funds are positioned to manage their geographic exposures and, thus, partially mitigate exposure to weather events, which are typically localized. On the other hand, funds may contribute to mitigating the effects of physical climate risks by financing adaptation projects and climate-resilient infrastructure, as well as by investing in solutions that support business adaptation and continuity in exposed geographies.

Biodiversity and resource use

Investment funds contribute to significant resource use and biodiversity effect through investment activity. For example, the construction sector, a major recipient of capital markets financing, is a large consumer of raw materials such as steel and cement. Similarly, investments in agriculture can impair biodiversity. On the other hand, through stewardship, invested funds have the potential to promote sustainable business models and improve resource use through circular economy practices.

Water

Investment funds may be exposed to water-related risks through their investing activities. Such exposure is more relevant when investments exhibit an exposure to water-intensive sectors. For instance, water and wastewater utilities face various water supply and quality challenges depending on their location and role in the water lifecycle, and agriculture is responsible for over 70% of global freshwater withdrawals. One key risk is physical water scarcity, where water availability becomes limited due to factors like droughts, population growth, and climate change. This can cause supply chain interruptions, higher costs for companies that rely on water-intensive processes, and potential regulatory restrictions. Water pollution is another risk with significant ecological and societal impacts. Inadequate wastewater treatment can impact economic activity through reputational damage and litigation, among other business costs.

Pollution and Waste & Recycling

Pollution and waste management, including recycling, have become increasingly material sustainability factors for funds globally, as these issues have direct environmental, health-related and economic impacts. With pension funds collectively managing trillions of dollars in assets, their investment decisions influence industries responsible for significant pollution and waste generation, such as manufacturing, energy, and infrastructure. Globally, asset owners, including pension funds, are integrating nature-related risks—encompassing pollution and waste—into their sustainability strategies due to the clear financial materiality of these issues, such as supply chain vulnerabilities and regulatory risks linked to environmental degradation. Pension funds are uniquely positioned to mitigate these risks by reallocating capital toward companies and projects that prioritize waste reduction, circular economy practices, and pollution control, often through alternative investments like infrastructure and private equity that can deliver positive environmental impact. By engaging as active shareholders and lenders, pension funds can influence corporate behavior to improve environmental performance.

Issuer And Context Analysis

Eligible green project categories align directly with PSP Investments' approach to sustainable investing.

The framework's low-carbon energy, energy efficiency, green buildings, pollution prevention and control, clean transportation, and green enabling projects aim to address climate transition risk, which we view as its most material sustainability factor. In our view, physical climate risk is also relevant for the financing's eligible green projects, as severe weather events worldwide can affect all eligible green project categories. The framework supports projects promoting climate change adaptation and resilience of assets. Other projects such as environmentally sustainable management of living natural resources and land use, sustainable water and wastewater management, and circular economy projects address other sustainability risks such as biodiversity and resource use, water, and waste and recycling, which we consider material sustainability factors arising from PSP Investments' investing activities. The framework states that selected investments do not increase carbon lock-in or the use of fossil fuels and are on a pathway to reduce dependency on fossil fuels. PSP's mandate also drives its long-term thinking and investment strategies. It strives to balance prospective risk and reward, and to consider long-term trends and ESG factors to ensure the sustainability of our portfolio.

PSP Investments' policy on sustainable investing integrates material sustainability-related factors into its investment and asset management processes. The policy emphasizes assessing environmental, social, and governance (ESG) risks and opportunities across asset classes where these factors are financially material. PSP Investments seeks to embed sustainability considerations from initial investment analysis through ongoing asset management, encouraging portfolio companies to adopt ESG disclosure aligned with international standards such as the International Sustainability Standards Board (ISSB) IFRS Standards. PSP Investments also pursues active engagement, proxy voting, and collaboration to promote sustainable business practices and enhance portfolio resilience, with progress reported in annual disclosures. The policy includes PSP Investments' commitment to using its capital and influence to drive the transition to a low-carbon economy, guided by its bespoke Green Asset Taxonomy.

PSP Investments' climate transition strategy supports the global transition to net-zero greenhouse gas (GHG) emissions by 2050 by supporting portfolio companies in developing credible transition plans. We view PSP Investments' efforts in managing the climate transition risk favorably. The strategy is guided by a bespoke Green Asset Taxonomy and a Climate Strategy Roadmap focusing on five key areas: integrating climate risks into investment decisions, increasing investments in green and transition assets, reducing exposure to carbon-intensive holdings without credible transition plans, issuing debt in the sustainable financing market, and engaging portfolio companies to adopt science-based transition plans and improve climate disclosures aligned with the Task Force on Climate-related Financial Disclosures recommendations. PSP Investments has committed to growing its green assets to C\$70 billion by 2026, from C\$40.3 billion in 2021, and aims to reduce its carbon-intensive investments lacking transition plans by 50% within the same period. It is also targeting to have 50% of assets covered by science-based transition plans and a 20%-25% reduction in portfolio emissions intensity. As of March 31, 2025, the company had C\$75.5 billion investments in green assets and C\$11.5 billion in transition assets. While PSP Investments' approach toward scaling its climate investments is ambitious, it currently excludes Scope 3 emissions from its Green Asset Taxonomy, which limits comprehensive climate risk management.

PSP Investments' physical climate risk strategy is integrated within its broader climate strategy. The strategy involves assessing physical climate risks, such as extreme weather events and long-term climate impacts, by embedding climate risk analysis into investment decision-making and asset management through regular portfolio-level climate scenario analysis, stress-testing, and asset-level climate vulnerability studies. These assessments inform portfolio construction and risk management to mitigate impacts from extreme weather events and long-term climate shifts. The framework includes investments oriented toward mitigation and adaptation projects and an overall investment approach that integrates physical climate risk considerations and adaptation initiatives in decision-making.

PSP Investments has a track record of investments in projects oriented toward climate benefits, such as those in sustainable management of natural resources and land use. The company partners with local operators in agriculture and timber sectors globally. PSP Investments engaged a third-party consultant to develop a methodology to analyze the climate and environmental footprint of its natural resources portfolio, which spans millions of hectares and includes diverse agricultural and timber operations. Through active ownership and collaboration with portfolio companies, PSP Investments promotes sustainable land stewardship, biodiversity conservation, and efficient water and wastewater management practices, aim to enhance ecosystem health and long-term asset resilience. The green bond framework also includes criteria for projects that support sustainable water and wastewater management, circular economy, and green enabling, which support the climate transition with other climate and social benefits.

Alignment Assessment

This section provides an analysis of the framework's alignment to Green Bond principles.

Alignment Summary

Aligned = ✓

Conceptually aligned = ○

Not aligned = ✗

✓ Green Bond Principles, ICMA, 2025

✓ Use of proceeds

We assess all the framework's green project categories as having a green shade, and the issuer commits to allocating the net proceeds issued under the framework exclusively to eligible green projects. Please refer to the Analysis Of Eligible Projects section for more information on our analysis of the environmental benefits of the expected use of proceeds. PSP Investments commits to allocate an amount equal to the net proceeds of green financings issued under its green bond framework to fund low carbon energy, energy efficiency, pollution prevention and control, environmentally sustainable management of living resources and land use, climate change adaptation and resilience, sustainable water and wastewater management, circular economy adapted products, production technologies, and processes, green buildings, clean transportation, and green enabling projects. The eligible use of proceeds explicitly excludes any investment that increases the use of fossil fuels. For investments in companies under this framework, it applies a pure-play criteria, meaning eligible companies must derive at least 90% of their revenues from eligible green project categories. The issuer does not include a look-back period for refinancings in the framework.

✓ Process for project evaluation and selection

The framework clearly describes PSP Investments' project evaluation and selection process within the eligible green project categories. PSP Investments' Green Bond Working Group (GBWG) is responsible for approving eligible investments that have been assessed against the criteria outlined in the framework and its internal investment policies. The GBWG comprises representatives from the Treasury, Finance, Sustainable and Climate Innovation, and Legal Affairs groups, as well as various investments teams. The issuer evaluates all eligible green assets with reference to PSP Investments' risk management and policies to account for environmental and social risks.

✓ Management of proceeds

PSP Investments' Treasury group tracks the allocation of net proceeds from the issuance of any green bonds to eligible green assets via a green bond register. If any eligible green asset exits PSP Investments' portfolio or ceases to fulfill the eligibility criteria under the eligibility categories, the Green Bond Working Group will substitute the asset with a replacement eligible green asset that complies with this framework. On an annual basis, the GBWG reviews the green bond register to ensure that the eligible green assets continue to meet the eligibility criteria. PSP Investments aims to maintain an aggregate amount of eligible green assets that is at least equal to the aggregate net proceeds of all green bond issuances that are concurrently outstanding under the framework.

✓ Reporting

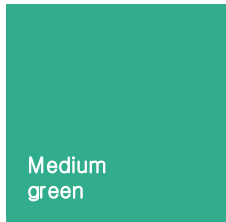
PSP Investments commits to providing a green bond report on an annual basis until full allocation. The issuer will make the report publicly available on its website. The report will include disclosure on both allocation and impact metrics. The annual green bond report will include a list of outstanding green bond issuances by PSP Investments under this framework, including issuance date, maturity date, size, currency, and format. The green bond report will include disclosure on the portfolio of outstanding eligible green assets within the green bond register, and qualitative and quantitative environmental performance indicators on eligible green assets, reported at the category level. Example metrics include GHG emissions avoided, installed low carbon energy capacity, and carbon intensity of assets.

Analysis Of Eligible Projects

This section provides details of our analysis of eligible projects, based on their environmental benefits and risks, using the "[Analytical Approach: Shades Of Green Assessments](#)".

Overall Shades of Green assessment

Based on the project category shades of green detailed below, the expected allocation of proceeds, and consideration of environmental ambitions reflected in PSP Investments' Green Bond Framework, we assign a Medium green shade to the framework.



Activities that represent significant steps towards a low-carbon climate resilient future but will require further improvements to be long-term low-carbon climate resilient solutions.

Our [Shades of Green Analytical Approach](#) >

Green project categories

Low carbon energy

Assessment

Medium to Light green

Description

Renewable energy

Assets that involve the construction, development, operation, acquisition, maintenance, distribution, and manufacturing of components and technologies, and refurbishment of the following renewable energy generation sources:

- Wind (onshore and offshore);
- Solar photovoltaic and concentrated solar power facilities;
- Geothermal;
- Tidal;
- Run-of-river and hydroelectricity;
- Biomass or renewable biofuels sourced from sustainable agriculture or waste wood feedstocks with at least an 80% reduction in GHG emissions relative to fossil fuel comparator;
- Green hydrogen achieving at least a 73.4% reduction in GHG emissions relative to a fossil fuel comparator.

To qualify under this category, operating renewable energy assets must demonstrate performance at or below 100g CO2e/kWh. Hydropower projects in operation before 2020 must have a power density of over 5 W/m2 or operate with lifecycle emissions below a threshold of 100g CO2e/kWh. Hydropower projects in operation in 2020 or after must have a power density of over 10 W/m2 or operate with lifecycle emissions below a threshold of 50g CO2e/kWh.

Nuclear energy

- Assets that involve the research, development, demonstration, construction, deployment, and safe operation of technologies that produce energy from nuclear processes with minimal waste

from the fuel cycle, for purposes of generating electricity or heat, including for hydrogen production. Allocation to nuclear will be disclosed at the time of issuance.

- Assets that involve the construction and safe operation of new nuclear power plants (including Small Modular Reactors (SMRs), for the generation of electricity and/or heat, including for hydrogen production. All nuclear power projects will be undertaken in jurisdictions that have regulations and regulatory enforcement mechanisms to address site selection, including the management of radioactive waste from nuclear power facilities, responsible sourcing of uranium, and the safe operation of nuclear power facilities in alignment with the standards of the International Atomic Energy Agency.
- Assets that involve operating life extension and/or efficiency enhancement of existing nuclear energy.

To qualify under this category, operating nuclear energy assets must demonstrate life-cycle GHG emissions from the generation of electricity of below 100g CO₂e/kWh.

Transmission and distribution

- Assets that involve the construction, operation, maintenance or refurbishment of electricity transmission and distribution (T&D) system with an average system grid emissions factor below the threshold of 100g CO₂e/kWh over a rolling five-year period.

Analytical considerations

- Renewable energy projects such as solar photovoltaic (PV) and concentrated solar power (CSP), wind, hydropower, and green hydrogen are key elements in limiting global warming to well-below 2°C, provided their negative impacts on the local environmental and physical risks are sufficiently mitigated.
- The company's investments in wind, solar, geothermal, tidal, hydropower, and green hydrogen support the Paris Agreement modelled pathways. These imply that almost all electricity is supplied from zero or low-carbon sources by 2050. PSP Investments considers physical risks and biodiversity as part of its investment process, where material. PSP Investments seeks to integrate climate-related risks and opportunities, both physical and transition, as factors in their investment activities. PSP Investments will evaluate all eligible green assets with reference to the broader suite of PSP Investments' existing sustainable investing, corporate governance, risk management, and policies. As a result, we assess these renewable energy projects as receiving a Dark green shade and the overall category as receiving a Medium to light green shade.
- The hydropower projects in operation before 2020 must have a power density above 5W/m² or operate with lifecycle emissions below a threshold of 100g CO₂e/kWh, and hydropower projects in operation in 2020 or after must have a power density of over 10 W/m² or operate with lifecycle emissions below a threshold of 50g CO₂e/kWh. New hydropower assets typically disrupt aquatic biodiversity and local habitats; the issuer does not expect to invest in new hydropower assets, while it expects all portfolio companies in which PSP Investments directly invests to follow applicable laws and ensure no conversion of sensitive habitats.
- There are carbon emission considerations at various steps of the lifecycle of renewable energy assets, which range from material sourcing, manufacturing, transportation, and equipment end-of-life management. All renewable energy projects, including wind, solar, geothermal, tidal, hydropower, and green hydrogen, will demonstrate performance at or below 100g CO₂e/kWh, which we view positively.
- Bioenergy derived from sustainably produced feedstocks can provide a lower emissions alternative to fossil fuels and a decarbonization pathway where electrification is not possible. At the same time, land use change and biodiversity risks related to feedstock production, transportation and processing emissions, and local pollution at combustion can undermine the climate and environmental benefits of bioenergy. The biomass or renewable biofuels projects will be sourced from sustainable agriculture or waste wood feedstocks with at least an 80% reduction in GHG emissions relative to a fossil fuel comparator. We assign these biomass and renewable biofuels projects a Light green shade.
- Green hydrogen is important for the transition to a low-carbon future due to its low emissions and potential applications in otherwise difficult to decarbonize industrial processes and transportation. However, since green hydrogen relies on electrolysis, water consumption needs to be carefully managed, while other environmental risks include potential end-uses that are polluting and impacts of leaked hydrogen on the atmosphere. As it is a nascent technology, such risks are not yet fully understood. The green hydrogen projects will achieve at least a 73.4% reduction in GHG emissions relative to a fossil fuel comparator, per EU taxonomy thresholds. We assign these green hydrogen projects a Dark green shade.

- Nuclear is a low-carbon electricity source with a smaller land-use footprint than most renewable energy sources. At the same time, nuclear has environmental impacts locally and in its value chain, particularly those associated with uranium mining and final waste management that need to be managed carefully. The nuclear projects may include nuclear energy assets for purposes of generating electricity or heat, including for hydrogen production. All nuclear power projects will be undertaken in jurisdictions that have regulations and regulatory enforcement mechanisms to address site selection including the management of radioactive waste from nuclear power facilities. We assign the nuclear projects a Medium green shade.
- Reliable and efficient electricity T&D networks are important in supporting electrification and achieving a low-carbon economy. Investments in making grids more flexible, strengthening their resilience to physical risks, and taking measures to reduce transmission losses are needed. At the same time, networks should be managed carefully to avoid disrupting habitats and harming biodiversity, particularly in areas of high ecological value. The framework has a threshold that T&D assets will have an average system grid emissions factor below the threshold of 100g CO2e/kWh over a rolling five-year period, or more than 67% of newly enabled generation capacity will be below the generation threshold value of 100g CO2e/kWh over a rolling five-year period. We assign these T&D projects that have an average system grid emissions factor below the 100g CO2e/kWh threshold over a rolling five-year period a Dark green shade. We assign the T&D projects with over 67% of newly enabled generation capacity below the generation threshold of 100g CO2e/kWh over a rolling five-year period a Medium green shade.

Energy efficiency

Assessment

 Medium to Light green

Description

Assets that involve products, technology, systems, or services that reduce energy consumption and/or mitigate associated GHG emissions by at least 30% while promoting alignment with science-based sector-specific decarbonization pathways (carbon lock-in risks and rebound effects will be considered) across a range of applications.

Built environment:

- Demand response technology
- District heating and cooling networks
- Building renovations achieving measurable improvements in energy efficiency (e.g. building envelope, HVAC, lighting). Energy performance of individual assets will be measured and compared with an appropriate benchmark from Carbon Risk Real Estate Monitor (“CRREM”). Asset energy intensity (i.e., MWh per sq. ft.) will be quantified and compared with a relevant baseline year to ensure at least a 10% year-on-year reduction can be demonstrated, or 30% over three years, pending data availability, or will comply with applicable energy performance improvement requirements for major renovations as set in applicable national and regional building regulations.

Data and telecommunications infrastructure:

- Broadband network using more energy-efficient technology such as a fixed-line fiber-optic connection instead of legacy technology;
- High-efficiency data centers with a Power Usage Effectiveness (PUE) below global average for existing and retrofitted infrastructure (currently at 1.4), and below 1.3 for newly constructed infrastructure.

Industry:

- Best-in-class industrial equipment such as electric motors or heaters, coupled with process integration options such as waste heat recovery.

Energy infrastructure:

- Assets that enable the integration of electricity across the economy (e.g., advanced metering infrastructure);
- Energy storage infrastructure (including batteries and pumped hydro storage), where the energy sourced complies with the criteria outlined in the Low carbon energy category.

In the absence of relevant sector-specific decarbonization information (i.e., Science-Based Target Initiative sector guidance), energy efficiency performance will be assessed on an absolute and like-for-like basis.

Analytical considerations

- Energy efficiency measures are necessary to transition to a low-carbon economy, but their climate benefits and risks vary. Exposure to climate risk arises for example, when these activities take place in high emitting sectors or lock in high-energy processes or fossil fuel use. We assign this energy efficiency category a Medium to Light green shade.
- Built environment projects such as demand response technology and building renovations are in scope. Demand response projects can reduce energy consumption during peak hours. Building renovation projects achieving measurable improvements in energy efficiency, such as in the building envelope, HVAC, or lighting, are in scope. For the building renovation projects, energy performance of individual assets will be measured and compared with an appropriate benchmark (CRREM). Asset energy intensity will be quantified and compared with a relevant baseline year to ensure at least a 10% year-on-year reduction can be demonstrated, or 30% over three years, pending data availability. Or these projects will comply with applicable energy performance improvement requirements for "major renovations" as set in applicable national and regional building regulations. We assign these projects on demand response technology and building renovations a Medium green shade.
- Efficient district heating systems can contribute to the transition toward a low-carbon, climate resilient future, though their sustainability benefits heavily depend on their energy inputs, which may be associated with significant emissions and varying sustainability credentials. The framework has an exclusion; any investment that increases the use of fossil fuels, including the exploration, processing and/or transportation of fossil fuels would not be considered a green investment under PSP Investments' Green Bond Pillars. PSP Investments also states in its framework that it will ensure selected investments will not increase carbon lock-in or the use of fossil fuels, but are on a pathway to reduce dependency on fossil fuels. We assign these district heating projects a Light green shade.
- The framework includes data and telecommunications infrastructure projects. Broadband network projects using more energy efficient technology are eligible. High-efficiency data centers with a maximum Power Usage Effectiveness (PUE) of 1.4 for existing assets or 1.3 or lower for newly built assets are also eligible. Data centers are an energy-intensive building type, and therefore achieving efficiency gains can have material positive climate impacts. We assign these data center and broadband network projects a Light green shade.
- Best-in class industrial equipment such as electric motors or heaters, coupled with process integrated options such as waste heat recovery is in scope. These assets must reduce energy consumption and/or mitigate associated GHG emissions by at least 30% while promoting alignment with science-based sector-specific decarbonization pathways. The issuer will consider carbon lock-in risks and rebound effects. We assign these projects a Light green shade.
- Assets that enable the integration of electricity across the economy, such as advanced metering infrastructure, are important for the net-zero transition. Advanced metering is key for improved energy demand management. We assign these projects a Light green shade.
- Energy storage plays a key role in net-zero energy systems by providing the necessary flexibility and adaptability to balance the intermittency of most renewable energy sources. Batteries require significant amounts of metals such as lithium, cobalt, or copper. The mining of these metals can harm the environment by disrupting natural habitats, causing pollution, and its water and energy intensive nature. The energy storage projects also include pumped hydropower storage. Investments in storage help bolster efficiency by storing the renewable energy surplus, curbing reliance on fossil fuels, tackling the intermittence of renewables, and ultimately cutting CO2

emissions. Hydropower assets typically disrupt aquatic biodiversity and local habitats. To mitigate these risks, the issuer expects all portfolio companies in which PSP Investments directly invests to follow applicable laws. PSP Investments will also ensure that there is not conversion of sensitive habitats, in accordance with applicable legislative requirements. We assign these energy storage projects a Dark green shade.

Pollution prevention and control

Assessment

 Medium to Light green

Description

Assets that involve products, technology or services that enable waste management projects:

- Collection, sorting, treatment and transportation of contaminated solid waste and waste materials;
- Recycling processes and infrastructure;
- Composting and anaerobic digestion;
- Thermal treatment with energy recovery of residual waste with an emissions threshold of less than 100g of CO2e per kWh.

Waste incineration facilities, which are mainly fueled by residues from households and/or commercial activities, are excluded.

Assets that involve products, technology, research, development or services that enable air emissions reduction projects. For example:

- Carbon capture, utilization and storage (CCUS) projects with a capture efficiency of 100%;
- Direct air capture and removal of CO2, CH4, N2O, HFCs, and other industrial gasses.

Enhanced Oil Recovery activities are excluded.

Analytical considerations

- Waste management is an important pollution prevention measure that can avert harm to human health and local ecosystems. Recycling, if done properly, increases the useful life of materials, thereby reducing carbon and other air pollutants' emissions, energy, and natural-resource use. Waste prevention and reuse solutions are the preferred solutions under the waste management hierarchy because they have the lowest negative environmental impact among waste management options, followed by recycling, energy recovery, and finally disposal. Waste collection and sorting projects can increase recycling and re-use rates, thus diverting waste from less environmentally beneficial disposal solutions.
- The waste management projects in this category include the collection, sorting, treatment, and transportation of contaminated solid waste and waste materials as well as recycling processes and infrastructure projects. Such pollution remediation projects have direct benefits to local biodiversity and human health by reducing air and soil pollutants' concentration. The treatment and recovery of contaminated soil and polluted water help to address past environmental damage and set the stage for long-term ecosystem recovery. We assign a Medium green shade to these waste management projects focused on the collecting, sorting, treatment, and transportation of contaminated solid waste and waste materials and projects on the recycling processes and its infrastructure. The waste management projects also include composting and anaerobic digestion projects. Composting and anaerobic digestion also have environmental benefits. We assign these composting and anaerobic digestion projects a Light green shade.
- Waste management is an important pollution prevention measure that can avoid harm to human health, the environment, and local ecosystems. Waste-to-energy (WtE) projects may provide a disposal solution for waste that cannot be recycled, reused, or avoided, and

is preferable to landfilling. Nevertheless, unabated waste-to-energy plants that incinerate municipal waste create significant carbon and other pollutant emissions and therefore represent near-term transition steps. Thermal treatment projects with energy recovery of residual waste will have an emissions threshold of less than 100g of CO₂e per kWh. We assign these projects a Medium green shade.

- Carbon capture, utilization, and storage (CCUS) is likely to play a critical role in the low carbon and climate resilient future. CO₂ may be directly removed from the air or captured at power generation and/or industrial facilities. Captured CO₂ is then transported to long-term geological storage (CCS) facilities or it can be used as an input in other industrial processes (CCU). However, potential negative impacts include: the risk of leaks during CO₂ transportation and storage, the level of permanence and potential for reversibility, and the energy-intensive nature of the process. Therefore, it is important for these projects to have adequate leakage monitoring and detection systems and to be subject to a comprehensive life cycle emissions assessment. The framework states that any investment that increases the use of fossil fuels, including the exploration, processing, and/or transportation of fossil fuels, would not be considered a green investment under their Green Bond Pillars. Additionally, PSP Investments will also ensure selected investments do not increase carbon lock-in or the use of fossil fuels. PSP Investments clarified that applications that directly or indirectly support fossil fuel production and use would not be eligible. Thus, advanced oil recovery is not expected as a potential application of captured carbon. We assign these CCUS projects a Light green shade.
- Direct air capture and removal of CO₂, CH₄, N₂O, HFCs, and other industrial gases has substantial climate mitigation potential due to their higher global warming potential. Measurement of GHG capture and monitoring of emissions to understand the extent of permanent sequestration is important. We assign these direct air capture projects a Dark green shade.

Environmentally sustainable management of living resources and land use

Assessment

 Light green

Description

Assets that contribute to sustainable management of natural resources and land use, including certified sustainable timber, aquaculture, and agriculture production. Eligible certifications include:

- Forest Stewardship Council (FSC);
- Program for the Endorsement of Forest Certification (PEFC);
- Sustainable Forestry Initiative (SFI);
- Responsible Wood Certification;
- Leading Harvest;
- California Certified Organic Farmers;
- Sustainable Agriculture Initiative (SAI) Platform;
- Best Aquaculture Practices (BAP) standard;
- Aquaculture Stewardship Council (ASC) standard;
- Global Good Agricultural Practices (GLOBALG.A.P.).

PSP Investments Investments evaluates certification schemes based on their compliance with national or international standards and regulations; independent validation and verification of their commitment to safety and quality; and high credibility and acceptance within the sub-industry, including that with asset managers, retailers, and consumers. Certification schemes must be outcomes-based, measurable with high-quality data, and aligned with general climate adaptation and mitigation objectives.

PSP Investments uses criteria informed by the Climate Bonds Initiative (CBI) to evaluate agricultural and nature-based assets eligible for Green Bond

financing. These criteria aim to ensure alignment with best practices in climate mitigation, adaptation, and environmental stewardship.

Agricultural assets are considered eligible when they demonstrate strong climate and environmental performance, including: (1) Avoiding deforestation and natural ecosystem conversion; (2) Using economically viable practices to reduce emissions of nitrous oxide (N₂O), methane (CH₄), and carbon dioxide (CO₂), and to promote carbon sequestration; (3) Adopting organic and regenerative agriculture practices, where applicable; (4) Implementing climate adaptation and resilience strategies; (5) Applying environmental and social safeguards to protect biodiversity, water resources, and the rights and well-being of local and Indigenous communities. Livestock will not be included in the list of Eligible Green Assets.

Forestry assets are considered eligible when they demonstrate strong climate and environmental performance, including: (1) Avoiding the conversion of natural landscape; (2) Maintaining carbon stocks through sustainable forest management practices and annual disclosure of GHG emissions; (3) Assessing climate change impacts on forests, land, and surrounding ecosystems, and implementing measures to improve resilience where feasible; and (4) Engaging in consultation with local and Indigenous communities.

Nature-based climate solutions—including the conservation, restoration, and sustainable management of forests, grasslands, and wetlands—are also considered eligible when they contribute to measurable climate benefits

Analytical considerations

- Sustainable agriculture, forestry, and avoidance of direct and indirect land use change and biodiversity impacts are critical. The shading of this project category as Light green reflects potential for investments in fossil fuel equipment on farms, forests, fossil fuel powered vessels in aquaculture, agricultural operations that use mineral fertilizers, potential gaps in deforestation safeguards in aquaculture feed standards, and variability in the rigor of third-party certification programs.
- PSP Investments has clarified that eligible assets must achieve one or more of the listed certification schemes, and agriculture/forestry projects must also meet the CBI requirements. Sustainability certification schemes may vary in scope, focus and credibility; we recommend use of multi-stakeholder, science-based schemes.
- According to PSP Investments, its investments do not involve land conversion and/or deforestation, and it will fully conduct due diligence in biodiversity impacts, including through use of external consultants if needed. Consideration beyond legally protected areas is encouraged, e.g. High Conservation Value Areas, High Carbon Stock Area, Key Biodiversity Areas, Ramsar Convention Wetlands, World Heritage sites, etc.
- The FSC, PEFC, SFI and Responsible Wood standards set requirements for reducing environmental impacts of forestry management, including safeguards against deforestation and conserving old growth forests. FSC is considered very stringent, while PEFC does not cover all aspects of sustainable forestry. PEFC is an umbrella organization including SFI and Responsible Wood. We shade the forestry-related projects as Light green.
- Farmed fish is a protein source with low carbon footprint compared to red meat. However, there is a risk that fish feed may contain deforestation-linked soy and palm oil; other adverse environmental impacts include escapes, effluent and wastewater discharge, antibiotic use, chemicals use, overexploitation of wild fish stocks and other marine ingredients for feed, and sea lice. The ASC and BAP standards safeguard against these risks to varying extents, with the former having stricter safeguards against deforestation in feed. For

example, ASC's salmon farm standard requires 100% of soy inputs to be certified under the Round Table for Responsible Soy (RTRS) standard, whereas this requirement is only at least 50% for BAP. Due to the above rationale, we shade these projects as Light green.

- Leading Harvest addresses 13 sustainability principles, including sustainable agriculture, energy use and climate change, and waste and material management; CCOF certification means crops are organically grown without sewage sludge, GMOs, ionizing radiation, and most synthetic pesticides and fertilizers.
- In general, agricultural practices that maintain long-term soil health and biodiversity, e.g., precision fertilizer application, low/no-tillage, integrated pest management etc. are likely to be most beneficial for both climate mitigation and resilience. Organic farming may have many positive environmental features, but its variety of different goals (health, animal welfare, environment, climate) is too complex to allow an overarching assessment of its climate benefits versus conventional production modes. The issuer notes that livestock are not within the scope of the framework. As a result of the above considerations, we shade agriculture-related projects as Light green.

Climate change adaptation and resilience

Assessment

 Medium green

Description

Assets that involve the construction, development, operation, acquisition, maintenance, technology or equipment used for projects that reduce climate change vulnerability, or increase the adaptive capacity of assets and communities to physical climate hazards including:

Adapting measures or enabling activities for resilient infrastructure, agri-food systems, cities and settlements, health systems, industry and commerce, and natural systems such as wildfire mitigation, flood prevention, flood defense or storm water management infrastructure, and early warning systems.

Analytical considerations

- Climate adaptation and resilience projects are a key element of achieving the 2050 climate agenda and protecting vulnerable populations. Climate impacts, which are already occurring, can derail transition and long-term mitigation efforts by damaging renewable energy and low-carbon infrastructure, disrupting supply chains, and affecting land use change, among other impacts.
- By eliminating or reducing damage to infrastructure and natural systems, adaptation projects can help maintain carbon sinks and reduce the need for reconstruction of damaged assets, which can result in high emissions.
- Per PSP Investments' sustainable investing guidelines, there are limited risks that adaptation measures would benefit high-emitting industries. The issuer also confirmed that no adaptation measures dedicated to the fossil fuel industry are eligible.
- Adaptation investments may sometimes require significant new construction, such as for flood and coastal defense infrastructure. This can lead to climate impacts during the construction phase, where fossil fuel-powered equipment is typically used. Additionally, embodied emissions related to heavy materials such as cement can significantly increase the climate impact of such projects. PSP Investments does not have specific requirements on how to manage such emissions. Considering the potential for such emissions, we consider these types of adaptation and resilience investments as Medium green.
- Early warning systems provide real-time data on extreme weather events, allowing communities to respond more effectively. These systems, including climate observation networks and flood detection technologies, allow for early action and enhance preparedness. We assess these projects as Dark green. Continuous investment in maintaining and upgrading such systems is necessary to ensure they remain effective as climate risks evolve.
- PSP Investments' projects are underpinned by the CBI resilience taxonomy, which provides guidance for alignment with a 1.5°C pathway, screening for GHG intensity, maladaptation provisions, and provisions for mitigating environmental and social externalities, and criteria for key sectors including water infrastructure, transportation, and buildings. The taxonomy excludes adaptation of carbon-intensive infrastructure including oil and gas extraction, coal mining, and gas-fired power generation, as well as unsustainable land use. We view this alignment with a science-based external classification system as a strength.
- Given that Medium green infrastructure investments are likely to constitute the majority of proceeds allocated to the climate adaptation and resilience category, we shade the overall category as Medium green.

Sustainable water and wastewater management

Assessment

 Light green

Description

Assets that involve the acquisition, operation, construction, and upgrades of projects that improve efficiency of water distribution networks and/or water recycling services. For example:

- Collection, treatment, recycling, storage or reuse of water, rainwater, or wastewater; and tail water recovery systems that collect runoff water from fields that is then recycled for agricultural production. For additional clarity, any water-related agricultural projects would adhere to relevant criteria as outlined in the Environmentally sustainable management of living natural resources and land use category.

Analytical considerations

- Efficient water and wastewater activities, in terms of both energy and water, are generally positive from a climate resilience and pollution prevention perspective. In addition, stormwater management projects play an important role in protecting infrastructure against physical climate risks.
- These sustainable water projects have environmental benefits, such as improving water quality, water efficiency, or climate change resilience. Water and wastewater projects are expected to use operational metrics to monitor energy performance improvements and operational efficiency improvements such as water loss and leakage rates. While projects would likely comply with regional regulations, the framework does not have criteria related to final waste disposal management, or resource recovery practices of the water and wastewater systems.
- Construction and upgrade projects to infrastructure typically result in GHG emissions from equipment and embodied emissions in materials, for which there are no abatement criteria in the framework. PSP Investments informed that these projects would aim to reduce dependency on use of fossil fuel in these systems and there are operational metrics in place to monitor energy performance improvements and operational efficiency improvements such as water loss and leakage rates. PSP Investments confirmed that existing assets in this category cannot be powered by fossil fuels. Wastewater treatment can also be associated with generation of GHGs, e.g. nitrous oxides and methane, depending on conditions and capture technology. According to PSP Investments, sludge will be managed according to national regulations and methane leaks will be monitored where regulatory requirements exist. Nature-based solutions and green infrastructure should be considered wherever possible. These considerations, combined with the wide range of possible project types, results in a Light green assessment.
- Robust environmental impact and watershed analysis will be critical to avoid adverse impacts on surface and groundwater hydrology and freshwater ecosystems. Resilience assessments are also needed to avoid lock in of water-dependent development in vulnerable areas.
- PSP Investments indicated that portfolio companies will be required to implement water conservation/management plans. Alignment with water stewardship principles is encouraged to ensure such plans incorporate considerations for governance and other water users in the basin in addition to internal water efficiency. PSP Investments also indicated that investments in this category that support mining or other heavy industries are ineligible.

Circular economy adapted products, production technologies, and processes

Assessment

 Medium green

Description

Assets that enable circular business models by reducing waste, improving resource efficiency, and/or extending product-life. For example:

- Waste management activities such as waste prevention, waste reduction and closed-loop waste recycling;
- Projects that promote the substitution of virgin raw materials with 100% secondary (recycled or reused waste) materials (e.g., fabrics, metals, fibers, wood, and mechanically recycled plastics) in manufacturing and industrial processes content;

- Projects that promote bio-based materials that are Roundtable on Sustainable Biomaterials-certified;
- Projects that promote zero-waste or improve the usable life of reparability of products, technologies, or services;
- Production of products that can be recycled or composted where the input feedstock is from recycled/reused waste.

Waste incineration activities will be excluded.

Analytical considerations

- The sourcing of materials and energy use related to the production of goods, and their final disposal is estimated to account for two-thirds of global GHG emissions, in addition to having other negative environmental impacts, such as land and water pollution. We believe goods produced in energy-efficient ways that also seek to limit the resource use, including through long lasting design, use of recycled materials, resource efficient, or re-use can contribute to significant emissions savings. However, recycling of certain materials, especially plastics, still entails dependence on fossil fuels.
- While the framework criteria are broad and could cover a wide range of project types, with no quantifiable thresholds or further details on eligibility criteria, the issuer confirmed that these projects would follow the waste hierarchy, and the due diligence process would include consideration for lifecycle emissions, including scope 3 emissions, such that the risk of carbon lock-in is avoided. Our shading assessments also consider the breadth of the category, and the potential environmental impacts associated with the activities described, including use of fossil fuels during production.
- Projects focused on collecting, sorting, treating, recycling, or reusing waste encompass waste streams from different sources, including plastic, biodegradable, and hazardous waste. These projects help reduce the amount of waste that is sent to landfills and avoid related environmental issues such as air pollution, water contamination, and soil degradation. We view these as Medium green.
- We view projects that promote zero-waste or improve the usable life of reparability of products, technologies, or services as Dark green due to their focus on zero waste production.
- Projects that promote bio-based materials that are Roundtable on Sustainable Biomaterials-certified is important for avoiding substitution effects and implementing the waste management hierarchy. We consider such certified materials Medium green.
- Projects relating to the production of products that can be recycled or composted where the input feedstock is primarily from recycled/reused waste are a key part of completing the circular product journey. We view these activities as Medium green.

Green buildings

Assessment

 Light green

Description

Assets that have received, or expect to receive based on their design, construction and operation plans, certification according to third-party verified building standards, including:

- Global: LEED Gold or Platinum;
- North America; BOMA Best Gold or Platinum;
- Europe: BREEAM Excellent; or Outstanding, HQE Excellent or Exceptional, DGNB Gold or Platinum;
- Australia/New Zealand: Green Star 5 or 6 Rating, NABERS 5 Star or 6 Star;
- Asia: China Three Star or 3 Star Level, Japan CASBEE;
- Superior (S), Singapore BCA Green Mark GoldPLUS or Platinum.

In addition to the above criteria on building certification, operating assets must achieve better than or equal to performance as outlined in the Carbon Risk Real Estate Monitor's (CRREM) 1.5° C pathways to be eligible for green bond issuance.

Analytical considerations

- The IEA emphasizes that reaching net-zero emissions in buildings demands major energy efficiency strides and fossil fuel abandonment. All properties must achieve high energy performance. New properties should additionally cut emissions from building materials and construction. Additionally, addressing physical climate risks is crucial for strengthening climate resilience across all buildings.
- Due to the global nature of PSP Investments' assets, there are significant variations in building regulations, highlighting the importance of considering ambition and environmental performance within each jurisdictional context. Renovation projects are required to meet green building certification requirements, including compliance with CRREM 1.5°C pathway and energy improvement thresholds, which we view positively.
- For new and existing buildings, PSP Investments will use green building certifications to identify eligible buildings. Green building certifications cover a broad set of environmental issues. However, they differ considerably in their requirements for energy efficiency, embodied emissions of construction materials, and climate resilience. Often their point-based systems do not guarantee low-carbon new construction or highly energy efficient existing buildings. Their robustness depends on a variety of factors, such as levels achieved and the type of certification.
- Indirect support for fossil fuels is possible due to their use in the construction phase and in building heating and cooling technologies (e.g. gas boilers), potential for underlying grids to be fossil fuel intensive, possible dependence on fossil fuels from district heating, and if buildings generate additional trips in fossil fuel-based transportation. This consideration, combined with the variability of building certification systems, drives our overall assessment of Light green for this category.
- PSP Investments confirmed that its sustainable development framework includes key consideration for embodied emissions, which all new construction projects need to comply with, which we view as a strength of issuer's due diligence process.
- While PSP Investments may finance building renovation projects that may still be using fossil fuel, the issuer confirmed that projects where fossil fuel usage can either be reduced or replaced by low-carbon alternatives will be prioritized. Renovation projects also need to comply with CRREM 1.5°C pathway, including improvement in energy performance of at least 30% measured against CRREM or national standards.
- Both new and existing properties are exposed to physical climate risks. PSP Investments has a process for assessing the vulnerability of its projects to extreme weather events, outlined in its climate strategy roadmap. According to PSP Investments, it will also conduct physical climate risk assessment, collect and monitor asset-level energy consumption (i.e., energy intensity), collect scope 1 and scope 2 GHG data (i.e., GHG intensity), renewable energy, waste and water consumption.
- Assets eligible under this framework will be required to maintain their emissions intensity and energy efficiency in line or below CRREM's. PSP Investments confirmed that if a project cannot achieve performance improvements consistent with the pathway, but was previously considered green investment, it would be replaced by another eligible green building project.

Clean transportation

Assessment

 Medium to Light green

Description

Assets that involve the construction, manufacturing, production, development, distribution, operation, acquisition, and maintenance of low-carbon transportation infrastructure such as:

Passenger transportation

- Electric, hydrogen or other zero-direct emissions transport (including private vehicles, public transport vehicles, passenger trains).

Freight transportation

- Road freight vehicles with direct emissions less than 25gCO₂e/km;
- Electric or hydrogen freight rail, for which <25% of its freight is fossil fuels.

Infrastructure

- Electric charging and hydrogen fuel infrastructure;

- Public walking and bicycle infrastructure;
- Transportation infrastructure, including expansions and capacity improvements of metro/train networks and station upgrades;
- Zero direct-emission ground service equipment and associated infrastructure that supports the decarbonization of transportation facilities such as airports, ports, and logistics terminals.

Shipping

- Zero emission vessels that do not transport fossil fuels or vessels with emissions intensity thresholds below those outlined in the Climate Bonds Initiatives' shipping criteria.

Analytical considerations

- Mitigating GHG emissions from transportation will be crucial to meeting global decarbonization goals, as the transport sector accounts for 23% of global energy-related GHG emissions, according to the Intergovernmental Panel on Climate Change (IPCC). Fossil fuel-powered vehicles and vessels also create air pollution, such as nitrogen oxides and sulfur oxides. Electric road and rail transportation are key to decarbonizing land transportation. The decarbonization of all modes of transport will require a significant expansion of low-carbon transport infrastructure. In infrastructure projects, value chain emissions and environmental impacts can be significant and should be carefully managed--for example, by choosing low-carbon construction materials. Physical climate risks also are a material consideration for all infrastructure projects.
- Electrification and supporting infrastructure have a key role in decarbonizing the transport sector and align with a low-carbon climate-resilient future. We view electric vehicles, low-carbon fuel transport such as using hydrogen fuel cell technology, electrified public transport and related infrastructure as aligned with a Dark green shade. However, we assess the overall category as Medium to Light green given the relevant role of freight transport, which may include the usage and the transport of fossil fuel, albeit having quantitative thresholds. We believe freight transportation poses emissions lock-in risk associated with use of fossil fuel. Shipping projects are likely to contribute rather slowly to the decarbonization of the sector compared to road transport, due to unavailability of commercially viable zero-emissions solutions. The shade also reflects limited visibility into PSP Investments' projected allocation of resources within the category.
- While hybrid vehicles used for freight transport are more climate-friendly than conventional fossil-fuel alternatives, they are considered a short-term solution that supports our Light green assessment. The eligible projects must comply with emission thresholds for freight vehicles (25g CO2e/km), which we view positively. While electric and hydrogen powered rail freight projects will not be dedicated for the transport of fossil fuel, it still allows transporting of up to 25% of its freight as fossil fuel, which limits assessment of such projects to Light green.
- Our assessment of projects financing electric and other low-carbon transportation infrastructure, such as charging stations, hydrogen fuel stations, public walkways, bike infrastructure, infrastructure that improves electrified public transport such as trains and metro is Dark green. Such infrastructure improves climate impact by facilitating adoption of electric mobility, though it also introduces the risk of such infrastructure drawing electricity from grids that may be fossil-fuel intensive. The issuer informed that these projects would only be considered if they are public infrastructure, fully electrified, and with no risk of emissions lock-in.
- The decarbonization of shipping is likely to occur more slowly than that of land transport. As electrification at scale is challenging, the use of low-carbon fuels and energy-efficiency measures have a role to play in achieving lower emissions. The use of CBI's intensity criteria to identify assets can help ensure a pathway to zero emissions by 2050. The use of biofuels and synthetic fuels may also contribute to lower emissions, if climate and environmental risks such as feedstock sourcing, direct and indirect land-use change, and the energy intensity of production are effectively mitigated.

Green enabling

Assessment

 Light green

Description

Assets involved in activities that support the transition to a low-carbon economy by enabling other green projects or investments such as:

Mining and metals

- Projects involved in the development, construction, extraction and processing of critical minerals and/or metals (e.g., lithium, silicon metal) used as inputs to manufacture battery energy storage systems and/or renewable energy generation

Specialized vehicles

- Projects involved in the manufacturing, operation and maintenance of enabling vehicles (e.g., specialized boats) used for building offshore wind turbines.

Industrial parts and components

- Projects involved in the manufacturing, assembly, development, installation and maintenance of industrial parts and components (e.g., anemometer, advanced meters, sensors) used as inputs to the deployment or manufacturing of wind turbines, solar panels, electricity grids, telecommunication networks and/or smart grids.

Building and construction supplies

- Projects involved in the development, manufacturing and maintenance of building and construction supplies when used to limit air emissions.

Chemicals and specialty chemicals

- Projects involved in the development, research, and manufacturing of chemicals and specialty chemicals when used for the purpose of manufacturing green products (e.g. insulation materials used for green buildings).

Note that all Green Enabling Projects are subject to the demonstration of alignment against specific criteria set out in GEPG, or other industry guidance, as may be updated from time to time.













Analytical considerations

- Green enabling projects are upstream and midstream activities that support green infrastructure and are a critical aspect of the transition to a low-carbon climate-resilient (LCCR) future. While enabling activities themselves may not be green and may have adverse social externalities, we view them as necessary to accelerate the global transition to lower-carbon energy, infrastructure, and other economic activities to limit global temperature increases and climate impacts.
- The framework supports downstream renewable energy development and energy storage, building energy efficiency, and reduced air emissions. These activities are a core part of achieving 2050 climate objectives as energy production and the built environment are among the top contributors to global GHG emissions.
- We view positively that PSP Investments' projects adhere to the ICMA Green Enabling Projects Guidance, which states projects must have demonstrated support for downstream green activities, no lock-in of high GHG activities, quantifiable and attributable environmental benefits, and environmental and social risk mitigation. Such principles are key to mitigating adverse externalities associated with potentially harmful activities. While the guidance is high-level currently, the ICMA is expected in the future to provide sector-level guidance and technical screening criteria for highly relevant sectors.
- Given the potential for externalities associated with enabling projects, it is critical that issuers have a screening process for project selection and follow up to ensure investments provide enabling benefits. PSP Investments' track record and strong internal sustainable investment policies and governance provide an important degree of oversight of project selection for this category.
- The enabling project activities described, particularly in metals mining and building and construction supply and specialty chemicals manufacturing, can result in air and GHG emissions, waste and pollution, or harmful land use impacts. Manufacturing activities typically

utilize fossil fuel energy as an input, and generate some pollution, even if mitigated per regulatory requirements or voluntary efforts. Mining activities are also linked with land use change and hazardous waste generation, which can harm local ecosystems, if not properly mitigated and remediated.

- PSP Investments currently does not provide specific criteria for emissions intensity or environmental and social impact performance for its investments in lieu of external guidance. The risk of unintended adverse environmental or social impacts from enabling projects could be higher without thresholds or technical screening criteria. Given this uncertainty and the potential for environmental impacts, we assign the overall category a Light green shade.
- Some of PSP Investments' enabling investments could also support activities not aligned with an LCCR future, including high-carbon emitting sectors. While PSP Investments intends to support green enabling projects, investee firms may also sell products to companies engaged in non-enabling activities.

S&P Global Ratings' Shades of Green

| Assessments | | | | | |
|--|---|---|--|---|--|
|  Dark green |  Medium green |  Light green |  Yellow |  Orange |  Red |
| Description | | | | | |
| Activities that correspond to the long-term vision of an LCCR future. | Activities that represent significant steps toward an LCCR future but will require further improvements to be long-term LCCR solutions. | Activities representing transition steps in the near-term that avoid emissions lock-in but do not represent long-term LCCR solutions. | Activities that do not have a material impact on the transition to an LCCR future, or, Activities that have some potential inconsistency with the transition to an LCCR future, albeit tempered by existing transition measures. | Activities that are not currently consistent with the transition to an LCCR future. These include activities with moderate potential for emissions lock-in and risk of stranded assets. | Activities that are inconsistent with, and likely to impede, the transition required to achieve the long-term LCCR future. These activities have the highest emissions intensity, with the most potential for emissions lock-in and risk of stranded assets. |
| Example projects | | | | | |
|  Solar power plants |  Energy efficient buildings |  Hybrid road vehicles |  Health care services |  Conventional steel production |  New oil exploration |

Note: For us to consider use of proceeds aligned with ICMA Principles for a green project, we require project categories directly funded by the financing to be assigned one of the three green Shades.

LCCR--Low-carbon climate resilient. An LCCR future is a future aligned with the Paris Agreement; where the global average temperature increase is held below 2 degrees Celsius (2 C), with efforts to limit it to 1.5 C, above pre-industrial levels, while building resilience to the adverse impact of climate change and achieving sustainable outcomes across both climate and non-climate environmental objectives. Long term and near term--For the purpose of this analysis, we consider the long term to be beyond the middle of the 21st century and the near term to be within the next decade. Emissions lock-in--Where an activity delays or prevents the transition to low-carbon alternatives by perpetuating assets or processes (often fossil fuel use and its corresponding greenhouse gas emissions) that are not aligned with, or cannot adapt to, an LCCR future. Stranded assets--Assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities (as defined by the University of Oxford).

Related Research

- [Analytical Approach: Second Party Opinions](#), March 6, 2025
- [FAQ: Applying Our Integrated Analytical Approach For Second Party Opinions](#), March 6, 2025
- [Analytical Approach: Shades Of Green Assessments](#), July 27, 2023

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Second Party Opinion: PSP Investments' Green Bond Framework

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