OVERVIEW OF PROVINCIAL, NATIONAL, AND INTERNATIONAL GHG LEGISLATION, POLICY PROGRAMS, AND DATA

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1.0. PREAMBLE

The following document provides Engineers and Geoscientists in British Columbia with an overview of the legislation and policy landscape surrounding the topics of climate change and greenhouse gas (GHG) mitigation. To facilitate navigation, the document has been arranged into the following five sections:

- 1. Legislation & Regulations;
- 2. Plans & Programs;
- 3. Reports, Methodologies and Data Sources;
- 4. Incentives, Grants & Other Financial Supports; and
- 5. Industry Associations.

Within each section, there are subsections to further break down the resources provided according to provincial, national, or international contexts.

This document was developed and authored with the support of the organization's Climate Change Advisory Group and consultants with expertise in climate action and is intended to be a living document that is to be revised and updated as required in the future, to reflect the evolution of legislation, policy and data related to GHG mitigation.

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2.0. LEGISLATION & REGULATIONS

2.1. BRITISH COLUMBIA

2.1.1. CLIMATE ACTION LEGISLATION

- <u>Climate Action and Accountability</u>- B.C. is committed to reducing GHG emissions by 16% below 2007 levels by 2025, 40% by 2030, 60% by 2040, and 80% by 2050.
 - Sectoral Emissions Targets
 - Transportation 27-32%
 - Industry 38-43%
 - Oil & Gas 33-38%
 - Buildings and Communities 59-64%
- <u>Climate Action</u>

- <u>Carbon Tax Act 2008</u>- Implements BC's carbon tax; see rates, updates, and links to carbon tax programs.
 - As of April 1, 2022, B.C.'s carbon tax rate is \$50 per tonne of carbon dioxide equivalent (CO₂e), the minimum required by the federal Government of Canada. (CleanBC Program for Industry aims to help avoid carbon leakage by supporting industrial competitiveness and facilitating emissions reductions).
 - Carbon Tax Regulation (regulation) (last amended March 11, 2021)
- <u>Climate Change Accountability Act 2007</u> (legislation)- Formerly titled Greenhouse Gas Reduction Targets Act, this regulation sets emissions reduction targets and allows Minister of Environment and Climate Change to establish sector-specific targets.
 - <u>Carbon Neutral Government Regulation</u> (regulation)- Requires provincial public sector organizations to achieve carbon neutrality every year and gives government the ability to set targets and requirements for provincial public sector buildings, fleets and fuels.
 - Carbon Neutral Government program requirements
- <u>Environmental Management Act 2003</u> (legislation)- Establishes provisions to reduce emissions from fuels and their combustion, manage GHGs at waste management facilities, set emissions standards for thermal treatment facilities and allow the regional district of Metro Vancouver to regulate air pollution.
 - Landfills
 - Landfill Gas Management Regulation 2009 (regulation)
- <u>Greenhouse Gas Reduction (Emissions Standards) Statutes Amendment Act 2008</u> (legislation)- Requires waste management operations to reduce or capture emissions and enables regulation of zero GHG emissions for electricity generation.
- <u>Renewable and Low Carbon Fuel Requirements Regulation (regulation)</u>- Applies to fuel suppliers who produce more than 75 million litres of gasoline/diesel; sets targets for reduction of carbon intensity of fuel.

2.1.2. INDUSTRY SPECIFIC LEGISLATION

- <u>Greenhouse Gas Industrial Reporting and Control Act 2016</u> (legislation)- Established GHG emissions reporting requirements and enabled the ability for standards to be developed for industrial facilities or sectors, including a compliance and enforcement regime. Three regulations exist under the Act:
 - <u>Greenhouse Gas Emission Reporting Regulation</u> (regulation)- Industrial facilities that emit over 10,000 tonnes of GHG emissions per year must report their emissions annually; operations emitting over 25,000 tonnes (not including CO₂ from woody biomass, fugitive CH₄ from open pit coal mining, or transportation emissions) must have emissions independently verified.
 - Applies to linear facilities operation (e.g., oil and gas extraction), single facility operation (e.g., mining), electricity import operation.
 - Part 2 goes over verification (with respect to project reports).
 - <u>Greenhouse Gas Emission Control Regulation</u> (regulation)- Enables monitoring of compliance; allows for those who exceed emissions limits to purchase or earn offsets.
 - Part 5 is about verification.
 - <u>Greenhouse Gas Emission Administrative Penalties and Appeals Regulation</u> (regulation)- Outlines administrative penalties for non-compliance.

- <u>Oil and Gas Activities Act</u> (legislation)- Relates to applications for industry activity, and ensuring compliance with provincial legislation (includes compliance with the Environmental Management Act, Water Discharge Regulation, Wildfire Act).
 - <u>Drilling and Production Regulation</u> (regulation)- Addresses well permits, well spacing, well abandonment, pollution prevention, etc. BC Oil & Gas Commission has amended and claims that the new measures within will reduce methane emissions in line with CleanBC plan (45% reduction by 2025 relative to 2014 levels). More information is available in the relevant <u>BC Oil and Gas Commission</u> <u>Information Bulletin</u>.
 - <u>Methane Research Collaborative (MERC)</u>- Facilitates methane research and reduction initiatives from oil & gas operations.
 - <u>Oil and Gas Waste Regulation</u> (regulation)- Regulates permits for discharge of waste (including emissions).

2.1.3. TRANSPORTATION SPECIFIC LEGISLATION

- <u>Zero-Emissions Vehicles Act</u>- Requires automakers to meet an escalating annual percentage of new light-duty zero-emission vehicle (ZEV) sales and leases, reaching: 10% of light-duty vehicle sales by 2025, 30% by 2030 and 100% by 2040. Manufacturers who do not comply must purchase offset credits.
 - o Zero-Emissions Vehicles Act 2019 (legislation)
 - <u>B.C. Zero-Emission Vehicles Act & Regulation Guidance Document</u>- This document provides an overview of B.C.'s Zero-Emission Vehicles (ZEV) Act and Regulation.

2.1.4. ELECTRICITY SPECIFIC LEGISLATION

- <u>Clean Energy Act 2010</u> (legislation)- Outlines various mechanisms and energy objectives, including achieving energy self-sufficiency by 2016; generating at least 93% of electricity from clean or renewable sources; conserving energy, improving efficiencies, and reducing the province's GHG emissions; and to be a net exporter of clean or renewable energy.
 - o <u>Greenhouse Gas Reduction Regulation</u> (regulation)
 - o <u>Improvement Financing Regulation</u> (regulation)
 - <u>Energy Efficiency Standards Regulation</u> (regulation)- Classifies renewable sources of energy (natural gas, when used to power LNG plants, is renewable under this act.
- <u>Utilities Commission Amendment Act 2008</u> (legislation)- Encourages public utilities to reduce greenhouse gas emissions, take demand-side measures, and produce, generate, and acquire electricity from clean or renewable sources. It provided authority for the Demand-Side Measures Regulation (2008), which sets out rules to be used by the BC Utilities Commission when assessing proposals from utilities to modify consumer electricity use, such as a tiered rate structure to encourage conservation during peak hours.
 - Owner or operator of a pipeline or gas processing plant is a public utility under Utilities Commission Act if facility in question provides services under a tolling or other fee-for-service structure, meaning that they are subject to a comprehensive scheme of facility, financial and rate regulation by the British Columbia Utilities Commission.
 - <u>Demand-Side Measures Regulation</u> (regulation)

- <u>British Columbia Utilities Commission (BCUC)</u>- Independent agency of the Government of British Columbia responsible for regulating British Columbia's energy utilities, the Insurance Corporation of BC's (ICBC) basic automobile insurance rates, common carrier pipelines, and the reliability of the electrical transmission grid.
- <u>Fuel Price Transparency Act 2019</u> (legislation)- Named BCUC administrator in March 2020.

2.1.5. BUILDING SPECIFIC LEGISLATION

- <u>Building Act General Regulation</u> (regulation)- Allows local authorities to enact building requirements that reduce greenhouse gas emissions using the B.C. Energy Step Code.
- <u>B.C. Energy Step Code</u>- A voluntary provincial standard for use by local governments to achieve more energy-efficient buildings beyond the requirements of the base BC Building Code.
 - It establishes a series of measurable, performance-based energy-efficiency requirements for construction that buildings can choose to build to, and communities may voluntarily choose to adopt in bylaws and policies.
 - o Local Government Adoption Updates
- <u>B.C. Building Code 2018</u>- In December 2014, the B.C. Building Code introduced new energy-efficiency requirements for houses and small buildings. These include the Solar Hot Water Ready requirement, a provincial regulation that communities can voluntarily adopt. It requires new single-family homes in adoptive communities to be built to accommodate installation of solar hot water systems.
- <u>Energy Efficiency Act 1996</u> (legislation)- Sets energy performance standards for devices that use, control, or affect the use of energy, such as household appliances, heating and cooling systems, lighting, and some industrial equipment.

2.1.6. LOCAL GOVERNMENT SECTOR SPECIFIC LEGISLATION

 Local Government (Green Communities) Statutes Amendment Act 2008 (legislation)-Supports local governments in reducing GHG emissions, conserving energy, and working towards creating more compact and sustainable communities. The amendments require GHG emission reduction targets in local Official Community Plans and Regional Growth Strategies and supporting policies and actions.

2.1.7. GENERAL ENVIRONMENTAL LEGISLATION

- <u>Water Sustainability Act 2016</u> (legislation) Governs licensing of surface and sub-surface water use, which may be required for drilling activities.
 - Water Sustainability Act
 - <u>Water Sustainability Regulation</u> (regulation)
 - <u>Groundwater Protection Regulation</u> (regulation)
 - <u>Dam Safety Regulation</u> (regulation)
 - Water Sustainability Fees, Rentals and Charges Tariff (regulation)
 - <u>Water District Regulation</u> (regulation)
- <u>Water Protection Act 1996</u> (legislation)
- <u>Riparian Areas Protection Act 1997</u> (legislation) Formerly Fish Protection Act.

- <u>Environmental Assessment Act 1994/2002</u> (legislation)- If a pipeline project meets thresholds set out in the Projects Regulation, a provincial Environmental Assessment is triggered.
 - <u>Heritage Conservation Act 1996 (legislation)</u>- Requirements come into play in an environmental assessment.
 - o Environmental Assessment Act
- <u>Net Zero Deforestation Act</u> (First reading 2010)

2.1.8. NATIONAL AGREEMENTS

• <u>Canada-British Columbia equivalency agreement respecting the release of methane from</u> <u>the oil and gas sector 2020</u>- Aligns BC with federal methane regulations which aim to reduce emissions from oil & gas by 45% between 2012 to 2025.

2.2. CANADA

2.2.1. CLIMATE ACTION LEGISLATION

- <u>Canadian Net-Zero Emissions by 2050</u>- Canada's commitment to achieve net-zero emissions by 2050.
 - o Canadian Net-Zero Emissions Accountability Act 2021 (legislation)
 - <u>Greenhouse Gas Pollution Pricing Act 2018</u> (legislation)- Federal carbon pollution pricing system (applies charges on various fuels and combustible waste and introduces output-based pricing system for industrial emitters).
 - Provinces must meet minimum federal pricing and emissions reduction targets, whether they implement a carbon pollution price or cap-and-trade system.
 - <u>Fuel charge</u>- Information on the fuel charge under the Act.
 - Output-Based Pricing System
 - Carbon polluting pricing what you need to know
 - Which facilities are required to register?
 - Facilities that have reported 50,000 tonnes of yearly CO₂e or more since 2014 must pay a carbon price.
 - <u>Voluntary participation policy for Output-Based Pricing System</u>-Facilities that emit less than 50,000 tonnes of yearly CO₂e may participate voluntarily.
 - <u>Registration Notice Establishing Criteria Respecting Facilities and</u>
 <u>Persons and Publishing Measures: SOR/2018-213</u>- Outlines
 criteria for determining which facilities must register.
 - <u>Registering a facility to the Output-Based Pricing System</u>-Registration instructions.
- <u>Canadian Energy Regulator Act 2019</u> (legislation)- Establishes the Canadian Energy Regulator.
- <u>Canadian Environmental Protection Act 1999</u> (legislation)- Requires facilities engaged in carbon capture, transport, and storage to report GHG emissions annually, regardless of GHG emissions.

- <u>Equivalency Agreements</u>- Minimizes duplication of environmental regulation (under the Canadian Environmental Protection Act) in the provinces.
- <u>Antarctic Environmental Protection Act 2003</u> (legislation)- The purpose of this Act is to protect the Antarctic environment from potential negative environmental effects resulting from Canadian activities in the region.
 - o The Antarctic Environmental Protection Act
- <u>Acts administered by Environment and Climate Change Canada</u>- Includes links to acts related to environmental protection, pollution prevention, biodiversity and conservation, sustainable development, and other significant acts.
- <u>Impact Assessment Act 2019</u> (legislation)- Replaced the Canadian Environmental Assessment Act (CEAA 2012) in 2019.
 - <u>Canadian Environmental Assessment Act 2012</u> (legislation)- Currently under transitional provisions to the Impact Assessment Act; regulations under CEAA 2012 continue to apply to projects being completed under CEAA 2012.
 - <u>Basics of Environmental Assessment under CEAA 2012</u>- An environmental assessment can take place when a company or organization (referred to as "the proponent") seeks to carry out a certain type of project. More specifically, under CEAA 2012, environmental assessments may be required for "designated projects".
 - <u>Regulations Designating Physical Activities</u> (regulation) Examples of such projects include:
 - The construction of a mine;
 - The development of a large new marine terminal;
 - The extension of a highway;
 - The construction of new waterways; and
 - The development of a liquefied natural gas (LNG) facility.

2.2.2. FUEL STANDARDS

- <u>Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations</u> (regulation)- Consumer vehicles.
- <u>Heavy-Duty Vehicle and Engine Greenhouse Gas Emission Regulations</u> (regulation)-Industrial vehicles.
- <u>Renewable Fuels Regulations</u> (regulation) Minimum standards for renewable fuel content in gasoline, diesel, and heating fuels.
 - <u>Renewable Fuel Regulations</u>- More information on regulations.

2.2.3. LEGISLATION SPECIFIC TO HEAVY INDUSTRY

- <u>Fisheries Act 1985/2019</u> (legislation)- Plays a major role in protecting the quality of the natural environment.
 - Permits may be required for activities associated with drilling under federal legislation (e.g., Navigation Protection Act approvals, disposal permits under Canadian Environmental Protection Act).
- <u>Species at Risk Act 2002</u> (legislation)- One of the Canadian government's main conservation tools to protect species at risk, maintain healthy ecosystems and preserve Canada's natural heritage.

- Permits may be required for activities associated with drilling under federal legislation.
- <u>National Energy Board Act 1985/2019</u> (legislation)- Interprovincial pipelines fall under purview of National Energy Board.
 - Major facility projects require issuance of Certificate of Public Convenience and Necessity.
- <u>Pipeline Safety Act 2015</u> (legislation)- Sets out stringent damage prevention provisions.
 - Pipeline safety is also affected by National Energy Board Pipeline Damage Prevention Regulations, National Energy Board Onshore Pipeline Regulations, Administrative Monetary Penalties Regulations (National Energy Board).
- <u>Canadian Marine Act 1998</u> (legislation)- Affects federal ports exporting LNG (the <u>Technical</u> Reports, Permits and Research page provides an oviewview of LNG Canada's <u>Technical</u> Review Process of Marine Terminal Systems and Transshipment Sites).
- <u>Multi-Sector Air Pollutants Regulations (regulation)</u>- Limits the amount of nitrogen oxides released from gas-fired non-utility boilers, heaters, stationary spark-ignition gas-fired engines, and cement kiln.
 - o Frequently asked questions
- <u>Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic</u> <u>Compounds (Upstream Oil and Gas Sector)</u> (regulation)- Requires reduction through venting requirements, equipment inspections and repairs.
 - Currently in force, except for sections 26, 27, 37, 38, 39, 40, 41 (in force in 2023).
 - Imposes requirements on oil and gas sector.
 - <u>Technical Backgrounder: Federal methane regulations for the upstream oil and</u> <u>gas sectors</u>- More federal requirements coming into force in 2023 (will affect pneumatic controllers, and facility vented volumes).
- <u>Extractive Sector Transparency Measures Act 2014</u> (legislation)- Helps the Government of Canada deter corruption in the extractive sector. Under the ESTMA, extractive entities that are active in Canada must publicly disclose, on an annual basis, certain types of payments made to governments in Canada and abroad.
 - About the Extractive Sector Transparency Measures Act.

2.2.4. ELECTRICITY SPECIFIC LEGISLATION

- <u>Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity</u> <u>Regulations</u> (regulation)
 - Limit of 420 tonnes of CO₂ per gigawatt-hour of electricity produced from coal per year.
 - Compliance for most coal plants required immediately.
 - See also <u>Regulations Amending</u> the Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations intended to phase out conventional coal by 2030.
- <u>Regulations Limiting Carbon Dioxide Emissions from Natural Gas-fired Generation of</u> <u>Electricity</u> (regulation)
 - Impose CO₂e intensity-based limits on new and modified natural gas-fired electricity generating units.
 - See more about <u>Reducing greenhouse gas emissions from electricity generation</u>.

2.2.5. INDIGENOUS RELATIONS

- <u>Aboriginal Consultation and Accommodation 2011</u>- Updated Guidelines for Federal Officials to Fulfill the Duty to Consult.
 - Where major resource projects take place in BC and across Canada, there is a duty to consult in good faith with stakeholders, including Aboriginal groups (may also be triggered by Environmental Assessment review process).

2.3. OTHER PROVINCES

2.3.1. ALBERTA

- <u>Oil Sands Emissions Limit Act 2016</u> (legislation)- Establishes a 100 megatonne limit for GHG emissions from all oil sands sites; the Act also provides authority to make regulations to implement the limit.
- <u>Emissions Management and Climate Resilience Act 2003</u> (legislation)- Addresses carbon dioxide, methane and other specified gas emissions that contribute to climate change.
- <u>Environmental Protection and Enhancement Act 2000</u> (legislation)- The primary act in Alberta through which regulatory requirements for air, water, land, and biodiversity are managed. The Act supports and promotes the protection, enhancement, and wise use of the environment by designating proposed activities for which an approval or registration is required.
 - <u>Methane Emission Reduction Regulation</u> (regulation)- Alberta Energy Regulator Directive 017 & 060 (requires upstream oil and gas facilities to comply with fugitive methane emissions management requirements).

2.3.2. SASKATCHEWAN

- <u>Management and Reduction of Greenhouse Gases Act 2010</u> (legislation)- An act respecting the Management and Reduction of Greenhouse Gases and Adaptation to Climate Change.
 - Management and Reduction of Greenhouse Gases (<u>Reporting and General</u>) Regulations, M-2.01 Reg 2 (regulation)
 - Management and Reduction of Greenhouse Gases (<u>Standards and Compliance</u>) Regulations, M-2.01 Reg 3 (regulation)

2.3.3. ONTARIO

- Environmental Protection Act 1990
 - <u>GHG Emissions: Quantification, Reporting and Verification regulation (O. Reg</u> <u>390/18)</u> (regulation)
 - <u>Guideline for Quantification, Reporting and Verification of Greenhouse</u>
 <u>Gas Emissions 2020</u>
- <u>Energy and Water Reporting and Benchmarking</u>- Requires large buildings over 100,000 ft² to report annual energy and water consumption via Energy Star Portfolio Manager by July 1st. In 2023, this regulation will be extended to all buildings over 50,000 ft².

2.4. INTERNATIONAL

2.4.1. UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

- <u>UN Framework Convention on Climate Change (UNFCCC)</u>- Sets out the basic legal framework and principles for international climate change cooperation with the aim of stabilizing atmospheric concentrations of GHGs to avoid "dangerous anthropogenic interference with the climate system."
 - <u>Paris Agreement</u>- Legally binding international treaty with the goal of limiting global warming to 1.5°C compared to pre-industrial levels.
 - Paris Agreement 2015 (legislation)

2.4.2. KIGALI AMENDMENT

- Kigali Amendment (treaty)
- <u>Kigali Amendment 2017</u>- Canada is now among the first countries to ratify the Kigali Amendment to the Montreal Protocol, which will phase down powerful GHGs.
 - o The Kigali Amendment to the Montreal Protocol: HFC Phase-down Fact Sheet

2.4.3. RWANDA

• <u>Memorandum of Understanding with Rwanda 2017</u>- Seeks to enhance cooperation between Canada and Rwanda in five areas: climate change, the green economy, environmental compliance and enforcement, sustainable urban wetland management, and other environmental issues of mutual interest.

2.4.4. CONVENTION ON BIOLOGICAL DIVERSITY

- <u>Convention of Biological Diversity</u>- Ratified in 1992. Aims to conserve nature, ensure nature is used sustainably and that the benefits to people from the use of genetic diversity are shared fairly. 3 objectives of this agreement are:
 - The conservation of biological diversity;
 - \circ The sustainable use of the components of biological diversity; and
 - The fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

2.4.5. TRANSBOUNDARY AIR

• <u>Transboundary air: Canada-US air quality agreement</u>- Agreement between the Government of Canada and the Government of the United States of America on air quality.

3.0. PLANS & PROGRAMS

3.1. BRITISH COLUMBIA

3.1.1. BRITISH COLUMBIA GOVEERNMENT WEBSITE ON CLIMATE CHANGE

- <u>Climate Change</u>- B.C. is committed to reducing GHG emissions by 16% below 2007 levels by 2025, 40% by 2030, 60% by 2040, and 80% by 2050. Main page includes general information on:
 - o Buildings & communities;
 - <u>Clean economy</u>;
 - <u>Cleaner industry;</u>
 - o <u>Clean transportation;</u>
 - o Climate preparedness and adaptation;
 - Provincial public sector organizations;
 - o Data and inventories; and
 - o Local government collaboration.

3.1.2. CLEANBC

- <u>CleanBC</u>- Sets goals for buildings, cars, natural gas consumption, methane emissions in oil and gas, and clean electricity. Aims to meet 75% of BC's GHG reductions commitment by 2035; remaining 25% will be in a Phase 2 update to be released.
 - o CleanBC Strategy
 - o Roadmap to 2030
 - o <u>CleanBC Industrial Incentive Program resources and links</u>

3.1.3. CLIMATE SOLUTIONS COUNCIL

- <u>Climate Solutions Council</u>- Provides strategic advice to government on climate action and clean economic growth.
 - It includes members from First Nations, environmental organizations, industry, academia, youth, labour, and local government.
 - o Climate Preparedness and Adaptation Strategy (2022)

3.1.4. BC ASSEMBLY OF FIRST NATIONS CLIMATE ACTION

- Declaration of Climate Emergency and Priority Areas
 - Includes the <u>First Nations Climate Change Strategy and Action Plan</u>, endorsed by First Nations Leadership Council in 2022.

3.1.5. LOCAL GOVERNMENT COLLABORATION

• <u>BC Climate Action Charter</u>- Voluntary agreement between the B.C. government, Union of B.C. Municipalities, and each local government signatory to take action on climate change.

- Local Government Collaboration- Summarizes programs for local government.
 - o <u>CleanBC Communities Fund</u>
 - o Local Government Climate Action Program
 - o Community Climate Funding Guide
 - <u>Climate action resources for local government</u>
- Public Sector Climate Change Accountability Reports
- Becoming Carbon Neutral: A Guidebook for Local Governments in British Columbia
- <u>Carbon Neutral Workbook: Helping Local Governments Understand How to be Carbon</u> Neutral in their Corporate Operations

3.1.6. VANCOUVER

- <u>Vancouver Climate Emergency Action Plan 2020</u>- Approved in November 2020, this plan put Vancouver on track to reduce its carbon pollution by 50% by 2030, in alignment with the findings of the United Nations IPCC to limit global warming to 1.5°C.
- <u>Metro Vancouver Clean Air Plan 2021</u>- Plan to reduce GHG emissions by 45% (2010 to 2030) and improve air quality. Focuses on buildings, transportation, industry, waste, and agriculture sector.
- <u>Vancouver Zero Emissions Building Plan</u>- All new buildings to be zero emissions by 2030, through progressive phase in of emissions/energy limits.
- <u>Vancouver Climate Change Adaptation Strategy</u>- Strategy to ensure Vancouver is prepared for the impacts of a changing global climate.

3.1.7. VICTORIA

- <u>City of Victoria Climate Action</u>- Overview page of the city's efforts to achieve net-zero carbon emissions, including climate strategies and plans, rebates and resources, GHG reporting and data, active initiatives, and external resources.
- <u>City of Victoria Climate Leadership Plan</u>

3.1.8. KELOWNA

- <u>Kelowna's Climate Action</u>- Details Kelowna's efforts to reduce GHG emissions, with links to the Community Climate Action Plan, the Corporate Energy and GHG emissions Plan, Energy Step Code requirements, the Official Community Plan update, and other relevant initiatives.
- <u>Kelowna's Community Climate Action Plan (2018)</u>

3.2. CANADA

3.2.1. GOVERNMENT OF CANADA PLANS

- <u>Government of Canada Climate Change Hub</u>- Canada's action, climate future, partnerships, adaptation, health, science, emissions reporting.
- Canada's Climate Plan- Resource hub.

- <u>Net-Zero Emissions by 2050</u>- Resource hub.
- <u>Canada's National Adaptation Strategy (coming end of 2022)</u>- The Strategy will outline how the Canadian economy and society can be more resilient and prepared for the impacts of climate change.
 - Opportunity to unite all orders of government through shared priorities, cohesive action, and a whole-of-society approach.
- <u>Canada's 2030 Emissions Reduction Plan (2022)</u>- An ambitious and achievable roadmap that outlines a sector-by-sector path for Canada to reach its emissions reduction target of 40 percent below 2005 levels by 2030 and net-zero emissions by 2050.
 - o <u>Backgrounder</u>
 - o <u>Report</u>
- <u>Net-Zero Advisory Body</u>- Launched in February 2021, asked to provide advice on guiding principles to inform the development of quantitative five-year targets for caps on emissions from the oil and gas sector.
- <u>A Healthy Environment and a Healthy Economy (2020)</u>- Plan that achieves both our environmental goals and our economic hopes: clean air, clean water, and long-term secure jobs.
- <u>Pan-Canadian Framework on Clean Growth and Climate Change (2016)</u>- Canada's plan to address climate change and grow the economy.
 - Commitments to phasing out coal by 2030, improving building codes, developing a clean fuel standard based on lifecycle analysis, phasing down hydrofluorocarbons, reducing methane emissions, and reducing federal government GHG emissions.

3.2.2. GOVERNMENT OF CANADA REPORTS

- <u>Canada's Changing Climate Report</u>
 - <u>Canada's Changing Climate Report (CCCR) (2019</u>)- Assessed the state of knowledge on how and why Canada's climate has changed and what changes are projected for the future. The report is national in scope and provides the Canadian context to the issue of global-scale climate change. The CCCR builds on information from Intergovernmental Panel on Climate Change (IPCC) assessments available at the time.
 - <u>Canada's Changing Climate Report in Light of the Latest Global Science</u> <u>Assessment (2022)</u>- This new report is a supplement to the 2019 Canada's Changing Climate Report. It provides some perspectives on the implications of the findings of the recently completed IPCC report Climate Change 2021: The Physical Science Basis for the conclusions of the 2019 Canada's Changing Climate Report.

3.3. OTHER PROVINCES

3.3.1. ALBERTA

- <u>Advanced Methane Detection</u>, <u>Analytics and Mitigation Project</u>- AB & SK collaboration to focus on major sources of methane, using technology for detection, measurement, and mitigation.
- <u>Alberta Carbon Conversion Technology Centre</u>- Facility for technology developers to test GHG reduction technologies.

- <u>Technology, Innovation and Emissions Reduction System</u>- Helps industrial innovations reduce emissions and invest in clean technology.
 - <u>TIER Innovation and Emissions Reduction Regulation</u>- Provides information for industry to reduce emissions.
 - <u>TIER Conventional Oil & Gas</u>- Provides information for conventional oil & gas industry to opt in.
 - <u>Alberta Emission Offset System</u>- Provides Emission Offset System to enable compliance flexibility.

3.3.2. SASKATCHEWAN

- <u>A Made-in-Saskatchewan Climate Change Strategy</u>- Province is making over 40 commitments to address climate change; more than 70 companies are part of the provinces plan and there are 25 indicators to help prepare for a changing climate.
 - \circ $\;$ Hub with links to resilience, guidance, emissions reduction, legislation, etc.

3.3.3. ONTARIO

• <u>Made-in-Ontario Environment Plan (2018)</u>- Considers the province's specific priorities, challenges, and opportunities, and commits to reducing our emissions to 30 per cent below 2005 levels by 2030 to align with Canada's Paris commitments.

3.3.4. QUÉBEC

- <u>2030 Plan for a Green Economy</u>- (Replaces the 2013-2020 Climate Change Action Plan) The 2030 Plan for a Green Economy is the first electrification and climate change policy framework.
- <u>Québec Carbon Market</u>- Distributors are required to cover the GHG emissions resulting from the products they distribute. Requiring these companies to be subject to the C&T system ensures coverage of approximately 80% of GHGs emitted in Québec.

3.3.5. NEWFOUNDLAND / LABRADOR

 <u>Environment and Climate Change Strategic Plan (2021-2023)</u>- Discusses collaboration efforts, education, and different sectors.

3.3.6. NORTHWEST TERRITORIES

 <u>Climate Emergency: Getting the NWT off Diesel (2020)</u>- Examines a strategy for quickly reducing GHG emissions in the NWT by 50% by 2030 or sooner. A 50% reduction is estimated to be 600 kilotonnes of annual avoided CO₂e emissions.

3.3.7. YUKON

 <u>Our Clean Future (2019)</u>- Actions the Government of Yukon will take to address the impacts of climate change while building a green economy and ensuring Yukoners can access reliable, affordable, and renewable energy. Includes target of reducing GHG emissions by 30% below 2010 levels.

3.4. INTERNATIONAL

3.4.1. UNITED NATIONS

- <u>Sustainable Development Goals</u> (UNSDG's)- Launched in 2015, the Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace, and justice.
 - 17 goals and 232 indicators;
 - Adopted by all 193 UN member states; and
 - Canada's <u>commitment</u> to the UNSDG's.
- <u>Sendai Framework for Disaster Risk Reduction</u>- Encourages cooperative efforts to better predict, prepare for and recover from natural disasters, including those related to climate change.
- <u>Powering Past Coal Alliance</u>- Coalition of national and subnational governments, businesses and organisations working to advance the transition from unabated coal power generation to clean energy.
 - 48 national governments, 48 subnational governments and 70 organizations have signed on as members including, Canada, British Columbia, Alberta, and Vancouver.
- <u>Climate & Clean Air Coalition</u>- International coalition to reduce methane, black carbon, and HFCs.
- <u>Global Methane Challenge</u>- International campaign to promote innovation in technology and policy regarding reduction in methane emissions.

4.0. REPORTS, METHODOLOGIES & DATA SOURCES

4.1. BRITISH COLUMBIA

4.1.1. BRITISH COLUMBIA GHG EMISSIONS DATA & INVENTORIES

- <u>BC Methodological Guidance for Quantifying Greenhouse Gas Emissions (2018)</u>- For public sector organizations, local governments, and community emissions.
 - <u>Quantification Methods for Industrial GHG Emissions</u>- Lists a number of sources for different industries, all relating to <u>Western Climate Initiative 2011</u> quantification methods, with <u>2012</u> and <u>2013</u> amendments.
- <u>CleanBC Sectoral GHG Targets Modelling Methodology (2021)</u>

- <u>Verification of Industrial GHG Emissions Overview</u>- BC facilities with over 25,000 tonnes of attributable emissions must have emissions reports verified by an accredited third party. Includes overview of key elements of verification.
- <u>Greenhouse Gas emissions data and inventories</u>- B.C. publishes a provincial GHG emissions inventory annually.
 - <u>Provincial greenhouse gas emissions inventory</u>- B.C.'s Provincial Inventory reports the GHG emissions included in the province's legislated emissions reduction targets. It also reports emissions from changes in land use and forest management for information purposes only.
 - Industrial facility greenhouse gas emissions- B.C. requires industrial facilities that emit 10,000 tonnes or more of CO₂e per year and electricity import operations to report their emissions to government, as per the Greenhouse Gas Emission Reporting Regulation.
 - <u>Community Energy and Emissions Inventory</u>- Energy and emissions data at the community level to support local governments and others in addressing climate change. Includes:
 - Recent building and solid waste data: 2012-2018, 2010, 2007; and
 - Historic Community Energy and Emissions Inventories (CEEI) data below (2012, 2010, 2007).
- <u>CleanBC Industry Incentive Resources and Link</u>- Detailed sector-specific guidance has been developed to outline how emissions, fuels and production data should be calculated and reported for CIIP purposes.

4.1.2. B.C. CARBON REGISTRY

- <u>BC Carbon Registry</u>- Enables issuance, transfer, and retirement of compliance units, including offset units. These may be used by regulated operations to meet requirement or by the B.C. government to satisfy its carbon neutral commitments.
 - o BC Carbon Registry Public View
 - o BC Carbon Registry Terms and Conditions
- BC Carbon Registry Contacts
 - <u>environmental@markit.com-</u> For questions about the registry account application information requirements, contact the BC Carbon Registry Service Provider.
 - <u>GHGRegulator@gov.bc.ca</u>- For questions about the registry account application review process or regulatory requirements contact regulatory requirements.
 - <u>climateinvestmentbranch@gov.bc.ca</u>- For questions about selling offsets to the province contact the climate investment branch.

4.1.3. CLIMATE CHANGE ACCOUNTABILITY REPORTS (CCAR)

- <u>Public Sector Climate Change Accountability Reports</u>- (previously Carbon Neutral Action *Reports*) Reports through which all public sector organizations (PSOs) publicly disclose details related to their achievement of carbon neutrality.
 - o Annual Reports and CCARs table

4.1.4. NATIONAL AGREEMENTS

- British Columbia equivalency with federal methane regulations: emissions reduction estimation- Provides information on emissions estimation methodology and emission reductions estimates.
 - Federal regulations do not apply in BC, and BC's regulations are weaker, so federal guidance is valuable here for emissions reduction.
 BC Oil & Gas Commission publication.
- Federal Methane Regulations for the Upstream Oil and Gas Sector- More federal requirements coming into force in 2023 (will affect pneumatic controllers, and facility vented volumes).

4.1.5. OTHER ORGANIZATIONS

- BC Oil & Gas Commission
 - <u>Fugitive Emissions Management Guideline (2019)</u>- Provincial guideline on fugitive emissions management.
 - FracFocus Chemical Disclosure Registry- BC Oil & Gas Commission requires disclosure of hydraulic fracturing liquids by extraction companies to reveal the additives used in fracking operations.
- Clean Energy BC
 - <u>2018 White Paper</u> on the Electrification of British Columbia: Assessing the Economic and Environmental Benefits of Extensive Electrification in BC. Discusses reducing by 72% GHG emissions associated with converting natural gas into LNG.
- <u>BC Climate Action Toolkit</u>- Provides numerous resources helping local governments achieve carbon neutrality, which includes advice on data collection.

4.2. CANADA

4.2.1. CARBON POLLUTION PRICING

- How Carbon Pricing Works
 - <u>Pan-Canadian Approach to Pricing Carbon Pollution</u>- (Updated for 2023-2030) Carbon price increases of \$15/tonne of CO₂e GHG emissions from 2023-2030.
 - o Pan-Canadian Greenhouse Gas Offsets Framework (2018)
 - o Carbon Pollution Pricing Systems Across Canada

4.2.2. GREENHOUSE GAS INVENTORY, PROJECTIONS & REPORTING

- <u>Canada's Official Greenhouse Gas Inventory</u>- Every year, Canada prepares and submits a national GHG inventory to the United Nations Framework Convention on Climate Change (UNFCCC) covering emission estimates back to 1990.
 - o Greenhouse gas sources and sinks in Canada: executive summary 2022
- <u>Greenhouse Gas Emissions Projections</u>- Canada prepares GHG emissions projections to 2030. These projections help with measuring progress in reducing GHG emissions and combating climate change.

- <u>Greenhouse Gas Reporting: Facilities</u>- Facilities that emit 10,000 tonnes or more of CO₂e must report to the Greenhouse Gas Reporting Program (GHGRP).
 - <u>Reporting greenhouse gas emissions</u>
 - Questions and answers
 - Specified sectors must report GHG per Canada's <u>Greenhouse Gas</u> Quantification Requirements, otherwise use <u>2006 IPCC Guidelines for</u> National Greenhouse Gas Inventories.
 - <u>Greenhouse Gas Reporting Program data search</u>- Search tool for data from facilities in Canada.
- <u>Output-Based Pricing System</u>- Under the Greenhouse Gas Pollution Pricing Act, the federal carbon pollution pricing system has two parts: a regulatory charge on fuel (federal fuel charge) and a regulatory trading system for industry the federal Output-Based Pricing System (OBPS). See how to submit an annual report under "Quantification, Reporting and Verification Tab" on link.
 - <u>Overview</u>- Provides information on who is subject to regulations, compliance periods, limits, quantification methods, reporting requirements and deadlines, and other FAQ's.
 - <u>OBPS Quick Reference Guide</u>- Regulatory requirements for certain sectors.
 - o Quantification Guidance for the Output-Based Pricing System Regulations
- <u>Technical Guidance on Reporting Greenhouse Gas Emissions (2019)</u>- Document providing guidance to potential reporting companies to help determine if they are required to submit reports (also includes information on methods and report formats).
- <u>Canada's Greenhouse Gas Quantification Requirements</u>- Outlines requirements for several industries including mining, electricity, and production of pulp & paper.
- <u>Reference Method for Source Testing: Quantification of Carbon Dioxide Releases by</u> <u>Continuous Emission Monitoring Systems from Thermal Power Generation</u>

4.2.3. FUEL STANDARDS

- <u>Clean Fuel Regulations</u>
 - <u>Clean Fuel Regulations Overview (2022)</u>- Drives investment and growth in Canada's clean fuel sector by increasing incentives for the development and adoption of clean fuels and technologies and processes.
 - The Clean Fuel Regulations require liquid fuel (gasoline and diesel) suppliers to gradually reduce the carbon intensity of the fuels they produce and sell for use in Canada. The carbon intensity reduction requirement will start at 3.5 g CO₂e/MJ in 2023 and will gradually increase over time reaching 14 gCO₂e/MJ in 2030.
 - <u>Clean Fuel Regulations</u>- (Canada Gazette, Part II, Volume 156, Number 14: Clean Fuel Regulations: SOR/2022-140)
 - Maritime Fuels
 - See International Maritime Organization for standards.
 - Aviation Fuels
 - See International Civil Aviation Organization for standards.
 - <u>Compliance with the Clean Fuel Regulations- Regulations and supporting</u> <u>documents</u>
 - Methods for Verification and Certification
 - Quantification Method Development Guidance Document
 - Quantification Method for Low Carbon-Intensity Electricity Integration

- Quantification Method for CO₂ Capture and Permanent Storage
- Fuel LCA Model Methodology
- Clean Fuel Standard Success Stories
- <u>Guidelines for the Reduction of Nitrogen Oxide Emissions from Natural Gas-fuelled</u> <u>Stationary Combustion Turbines</u>- Introduces a NOx emission limit that is up to 50% more stringent than previous limits for stationary combustion turbines.

4.2.4. OTHER

• <u>Climate Atlas of Canada</u>- Combines climate science, mapping, and storytelling together with Indigenous Knowledges and community-based research and video to inspire awareness and action.

4.3. OTHER PROVINCES

4.3.1. ALBERTA / SASKATCHEWAN

- <u>Carbon Offset Emissions Factors Handbook</u>- Contains common emission factors used in AB offset system, as well as common quantification methodologies.
- Quantification methodologies for the Carbon Competitiveness Incentive Regulation (CCIR) and the Specified Gas Reporting Regulation (SGRR)- This document provides quantification methodologies to facilities that are subject to the CCIR and SGRR. The objective of the quantification methodologies is to ensure accuracy and consistency across reporters and sectors regulated under the CCIR and SGRR.

4.4. INTERNATIONAL STANDARDS

4.4.1. UNITED NATIONS & INTERNATIONAL PANEL ON CLIMATE CHANGE (IPCC)

- <u>UN Emissions Gap Report</u>- Annual series that provides an overview of the difference between where GHG emissions are predicted to be in 2030 and where they should be to avert the worst impacts of climate change.
- Intergovernmental Panel on Climate Change (IPCC)- IPCC is the United Nations body for assessing the science related to climate change. The IPCC prepares comprehensive Assessment Reports about the state of scientific, technical, and socio-economic knowledge on climate change, its impacts and future risks, and options for reducing the rate at which climate change is taking place. It also produces Special Reports on topics agreed to by its member governments, as well as Methodology Reports that provide guidelines for the preparation of GHG inventories.
- <u>IPCC Guidelines for National Greenhouse Gas Inventories</u> (2019 Refinement)- General Guidance and Reporting, and specific volumes for different industries (energy, agriculture, waste, etc.).
 - Use in conjunction with 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

4.4.2. ENVIRONMENTAL PROTECTION AGENCY (EPA)

• <u>AP-42: Compilation of Air Emissions Factors</u>- Contains emissions factors and process information for more than 200 air pollution source categories.

4.4.3. INTERNATIONAL STANDARDS ORGANIZATION (ISO)

- <u>ISO 14064</u>- Standard that BC, Canada, and provinces adhere to for quantification (<u>Part 1</u>) and verification (<u>Part 3</u>) of GHG emissions and removals.
 - Part 2- Relevant to developing offset projects.
 - <u>Climate Change Mitigation</u>- Document summarizing ISO standards for assessing and verifying GHG emissions.
- <u>ISO 14065</u>- How bodies can become accredited verifiers of GHG assertions.
- ISO 31000- Risk management assessment.

4.5. GREENHOUSE GAS EQUIVALENCIES CALCULATORS

4.5.1. NATURAL RESOURCES CANADA (NRCAN)

 <u>NRCAN Greenhouse Gas Equivalencies Calculator</u>- Translates abstract measurements and emissions data into concrete terms, such as the annual emissions from cars or households.

4.5.2. US ENVIRONMENTAL PROTECTION AGENCY (EPA)

• <u>EPA Greenhouse Gas Equivalencies Calculator</u>- Translates abstract measurements and emissions data into concrete terms, such as the annual emissions from cars, households, or power plants.

4.6. OTHER ORGANIZATIONS

- <u>Western Climate Initiative: Final Essential Requirements of Mandatory Reporting (2012)</u>-Methodologies based on emission source types.
- <u>World Resources Institute's Mitigation Goal Standard</u>- An accounting and reporting standard for national and subnational GHG reduction goals.
- <u>GHGenius</u>- Free to download lifecycle analysis model with a primary focus on transportation fuels in Canada.
- <u>The GHG Protocol</u>- Provides standards, guidance, tools, and training to measure and manage climate-warming emissions.
 - <u>Standards</u>- Include the Corporate Standard, GHG Protocol for Cities, Mitigation Goal Standards, Scope 3 Standard, Policy and Action Standard, Product Standard, and the Project Protocol.
 - <u>Guidance</u>- Available for various contexts, including Scope 3, agriculture, potential emissions from fossil fuel reserves, land sector and removals.
 - <u>Calculation tools</u>- Designed to enable companies to develop comprehensive inventories of their emissions. Sector-specific and cross-sector tools target

subjects like Transportation or Mobile sources; refrigeration and air-conditioning equipment, combined heat and power plants, aluminum, ammonia, cement, iron and steel, nitric acid, pulp & paper, semiconductors, wood, and lime, among others.

 <u>Climate Action Tracker</u>- An independent scientific analysis produced by two research organisations tracking climate action since 2009. It tracks progress towards the globally agreed aim of holding warming well below 2°C, and pursuing efforts to limit warming to 1.5°C.

5.0. INCENTIVES, GRANTS & OTHER FINANCIAL SUPPORTS

5.1. BRITISH COLUMBIA

5.1.1. CLEANBC

- CleanBC Incentive Programs
 - <u>CleanBC Industrial Incentive Program (CIIP)</u> Encourages cleaner industrial operations by providing incentives to industrial operations that meet world-leading low-carbon emissions benchmarks in different industrial sectors.
 - <u>CleanBC Industry Fund</u>- Invests in GHG-reducing projects and increases opportunities for innovative clean technologies. Three different funding options are available to eligible industrial operators:
 - Emissions Performance;
 - Innovation Accelerator; and
 - Project Feasibility Studies.
- Greenhouse Carbon Tax Relief Grant
- <u>BC Community Funding Guide</u>- Offers a simpler way for local governments and Indigenous communities to find funding for their climate action projects, with a full list of programs available or a Funding Finder tool.

5.1.2. BC GOVERNMENT

- <u>Clean Growth Infrastructure Royalty Program (CGIRP)</u>- Oil & gas companies can apply for deductions to royalties they would otherwise pay to the province.
 - Projects can apply for up to 50% of capital costs that are reimbursed in the form of royalty deductions.
 - o 2022 Request for Application
- <u>Investing in Canada Infrastructure Program British Columbia</u>- Cost-shares infrastructure investments between the governments of Canada and British Columbia, local governments, and other partners.
 - \$3.197B to be invested in BC infrastructure over 10 years. Some key areas include green infrastructure (<u>CleanBC Communities Fund</u> and <u>Environmental Quality</u> <u>Program</u>) and public transit.

5.1.3. LOCAL GOVERNMENT CLIMATE ACTION PROGRAM (LGCAP)

• <u>The Local Government Climate Action Program</u>- Provides local governments and Modern Treaty Nations with predictable, stable funding to support local climate action.

5.2. CANADA

5.2.1. SUSTAINABLE DEVELOPMENT TECHNOLOGY CANADA (SDTC)

• <u>Clean Technology Innovation Funding Program</u>- SDTC provides funding to promising clean technology development and demonstration projects that are start-ups or scale-ups. For instance, when the technology itself is beyond proof-of-concept but is pre-commercial. The technology must demonstrate the potential for GHG emissions reductions, reductions in water consumption and/or the reduction of water, soil, or air contamination.

5.2.2. GOVERNMENT OF CANADA

- <u>Government of Canada Resources Hub</u>- Government of Canada is investing in programs and incentives to help Canadians take climate action.
- <u>Net-Zero Accelerator Initiative</u>- The Net Zero Accelerator (NZA) initiative supports Canada's net zero goals to help transform the economy for clean and long-term growth.
- <u>Low Carbon Economy Fund</u>- A funding program to support projects that help to reduce Canada's GHG emissions.
 - The Government of Canada <u>committed</u> to expanding the LCEF through a \$2.2 billion recapitalization over seven years, starting in 2022-23.
- <u>Energy Innovation Program</u>- Advances clean energy technologies that will help Canada meet its climate change targets, while supporting the transition to a low-carbon economy. It funds research, development and demonstration projects, and other related scientific activities.
- <u>Climate Action and Awareness Fund</u>- Will invest up to \$206 million over five years to support Canadian-made projects that help to reduce Canada's greenhouse gas emissions. The Climate Action and Awareness Fund is designed to support projects that can create middle class jobs for Canadians who work in science and technology, academia and at the grassroots community level.
- <u>Investing In Canada</u>- \$180+ billion infrastructure plan over 12 years available for projects including Green & Smart Cities Challenge.
 - o <u>Infographic</u>
 - Project Map- Highlights examples of approved projects.
 - To apply, must carry out a <u>Climate Lens</u> assessment.
 - Climate Lens has two components (mitigation & resilience), and proponents need to apply for one or both, depending on the project.
 - General Guidance
 - Refers reader to ISO 14064-2 (international standard for GHG project accounting), GHG Protocol for Project Accounting (includes case studies), and 2020 National Inventory Report by Climate Change and Environment Canada (detailed with emissions factors, etc.).
 - Climate Lens Frequently Asked Questions
- Large Employer Emergency Financing Facility
 - Part of Canada's COVID-19 Economic Response Plan.

- Available for minimum loan sizes of ~\$60M to employers with ~\$300M yearly revenue.
- While the loan is outstanding, borrower must publish an annual climate-related financial disclosure report regarding climate-related risks and opportunities. Borrower must also contribute to achieving Canada's commitments under Paris Agreement (see Covenant section in <u>Large Employer Emergency Financing Facility Factsheet</u>).

5.3. OTHER PROVINCES

5.3.1. ALBERTA

• <u>Emissions Reduction Alberta</u>- Source of investment in clean technology to help Alberta succeed in a lower carbon world.

6.0. INDUSTRY ASSOCIATIONS & ORGANIZATIOS

As of July 2022, the following Industry and Organizations provided resources related to climate change and GHG emissions on their websites.

6.1. TRANSPORTATION

- Railway Association of Canada
- <u>Canadian Business Aviation Association</u> (CBAA)
- International Air Transportation Association (IATA)

6.2. OIL, GAS & MINING

- <u>Canada's Oil Sands Innovation Alliance</u>
- <u>Canadian Association of Petroleum Producers</u>
- <u>Canadian Gas Association</u>
- <u>Canada West Foundation</u>- Compendium/overview of oil and gas regulations across Canada.
- <u>Clean Resource Innovation Network</u>- Oil & gas collaboration focused on innovation in oil & gas.
- <u>American Petroleum Institute</u> (API)
- International Association of Drilling Contractors (IADC)
- International Association of Oil & Gas Producers (IOGP)
- International Petroleum Industry Environmental Conservation Association (IPIECA)
- <u>Mining Association of Canada</u>
- <u>Mining Association of British Columbia</u>

6.3. PULP & PAPER

<u>Technical Association of the Pulp and Paper Industry</u> (TAPPI)
 TAPPI Pulping Engineering Environmental Recycling Sustainability (PEERS)

6.4. HEAVY INDUSTRY

- <u>Cement Association of Canada</u>
- Fertilizer Canada
- <u>Gypsum Association</u>
- International Fertilizer Association (IFA)

6.5. WASTE

- Solid Waste Association of North America (Pacific Chapter)
- Solid Waste Association of North America (SWANA)

6.6. FORESTRY

- BC Council of Forest Industries
- <u>Canadian Wood Council</u>
- Forest Products Association of Canada
- FP Innovations

6.7. ELECTRICITY

- <u>Clean Energy BC</u>
- BC Sustainable Energy Association (BCSEA)
- Electricity Canada
- Energy Council of Canada
- <u>Canadian Renewable Energy Association</u> (CanREA)
- Government of Canada's Canadian Centre for Energy Information
- <u>Community Energy Association</u>
- International Energy Association (IEA)
- Pembina Institute

6.8. BUILDINGS

- Building Officials Association of BC (BOABC)
- British Columbia Construction Association
- Canadian Home Builders' Association British Columbia (CHBABC)
- <u>Vancouver Regional Construction Association</u>
- <u>Canadian Home Builders' Association</u> (CHBA)

6.9. AGRICULTURE

- Canadian Federation of Agriculture
- <u>Canadian Biogas Association</u>

6.10. LIGHT MANUFACTURING & CONSTRUCTION

- National Association of Manufacturers
- Canadian Construction Association